

# 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 34

## 2.B.L. CHILDREN'S SESSION



*Aunt Willa*



*Uncle Bas.*



*Uncle Peter*



*Hector*



*Brutus*

## LOVE FROM ALL



*Cousin Marjorie*

Friday, December 14, 1928 Price Threepence



# USE CORRECT VALVE TYPES & IMPROVE YOUR RECEPTION

# 50%



## THE SECRET of "VALVING"!

THE reason why one receiver often outperforms many others of similar design is that in the one, the question of valves has been studied and each socket is filled with a tube that is suited for its job.

The other sets have been fitted haphazardly with valves and no care taken to study the requirements of the set.

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A415 Special Detector	..	..	15/-
B409 High Gain	..	..	15/-
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When jazz, such as only the city's star orchestra can play it, comes through your Philips "Baby Grand," you cannot resist the call of the dance.

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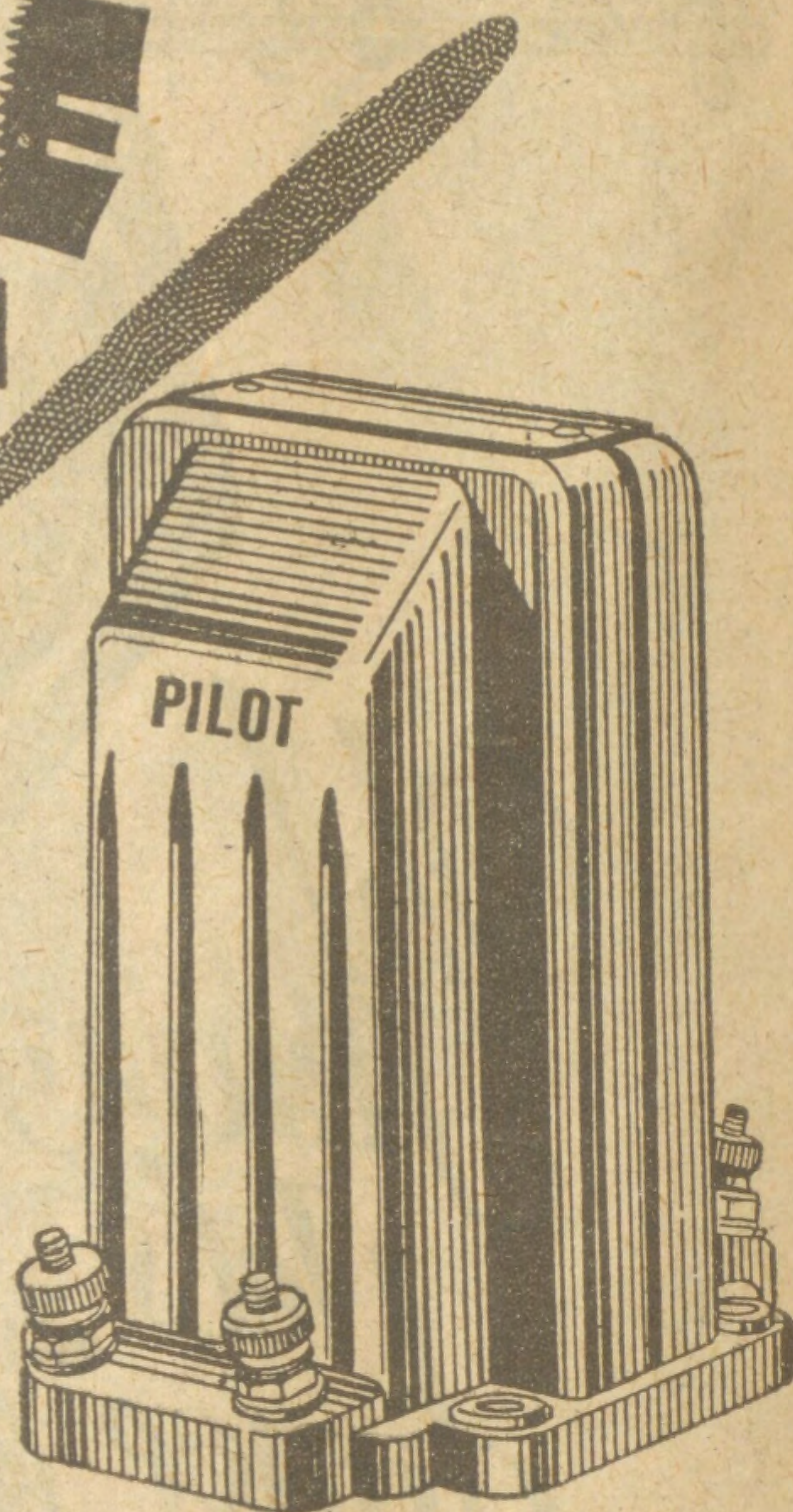
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No. 391

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3½ to 1 ratio

**A.F. Transformer**

**22/6**

The characteristics of the transformers match the response curves of good speakers, giving the best musical reproduction, without emphasizing the low notes. With dynamic speakers the quality is exceptionally fine.



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# WIRELESS WEEKLY

VOL. 12. No. 34.

FRIDAY, 14th DECEMBER, 1928.

## The Honourable Order of Oracles

*Ruth: Daddy, what did the Dead Sea die of?*

*Daddy: Oh, I don't know, child.*

*Ruth: Daddy, where do dreams go when you wake up?*

*Daddy: I don't know.*

*Ruth: Daddy, why did God put so many bones in fishes?*

*Daddy: I don't know that either.*

*Ruth: Goodness, Daddy, who made you an editor?*

WE feel very much in the position of the gentleman about whom the above was written, in opening a Radio Information Service. Even the highly-qualified and extensive knowledge of Mr. Ray Allsop and Mr. Don B. Knock is not likely to provide an answer for every question that listeners may ask about radio.

For instance, the naive query received not long ago: "I am very curious to know the true nature of electrical impulse, and its relation to the universe." Such a simple request, but one which a hundred years of research has failed to answer satisfactorily. We could fill "Wireless Weekly" by outlining all the various theories which have been advanced. In such a case, of course, our experts have to refer the reader to the well-known authorities.

Then what assistance can we hope to render to the reader who asks: "I have a three-valve set which will not work. Will you tell me why this is so?" Or of what use would our complex explanation be to a listener who reports: "Volume has suddenly decreased in my receiver, and I notice the filaments of the valves are almost out. What is the matter?"

However, to the majority of listeners, our query department, re-opened as the "'Wireless Weekly' Radio Information Service," will be of immense value. Every effort will be made to answer in the issue following the arrival of letters the reader's query. Every kind of assistance will be rendered to the troubled reader, and in many cases, where it will help, we will publish diagrams.

Unfortunately, the practice in the past of answering personally the letters of readers who enclosed stamps and addressed envelopes with their queries, will not be continued. Experience has shown that it is not possible, without engaging a large staff, to reply individually to each correspondent, and we believe that by publishing the question and answer as we now do, we are also assisting many other readers who may be experiencing similar difficulties.

We believe that a Service Department of this nature has been a pressing necessity for some time. The difficulties and troubles met with by listeners-in, especially those who are new to the game, are so numerous as to strike fright into the heart of the most courageous. Fortunately, most of these difficulties are easily overcome if you happen to have the right knowledge. That is the great thing, for there are so many different ways in which a radio receiver can go wrong. "Wireless Weekly" is here to help all listeners-in towards better reception—but please remember, that we do not belong to the Honorable Order of Oracles.



# BETWEEN YOU AND ME AND THE MICROPHONE

## Take Notice

MR. RAY ALLSOP threatens to send the next humorist who suggests that he put the "ray" in Radio on an extended (and downward) DX tour.

## Such is Fame

LAST week, an optimistic young listener, resident in a country district in New South Wales, wrote to Uncle Bass of 2BL. When sending the envelope he wrote upon it: "Uncle Bass," and then threw it in the post. It is evident that some of the postal authorities both in the country and in the city have more than a passing knowledge of the personalities in broadcasting, as the letter duly arrived at 2BL.

## My Hero

"UNCLE HELLO MAN" boasts a very big birthday list, a special section of which is devoted to his "Grandma" nieces, and in writing to 2FC to thank him for calling Granddaughter Dorothy, an old Pymble friend of his paid marked tribute to his valiance as radio announcer. "We think you are truly wonderful," she said. "No matter how badly some of the artists perform, you announce their next item with as much confidence as if they were GOOD ARTISTS! TRULY, YOU ANNOUNCERS ARE HEROES!"

## Belay There!

JOE is no ordinary common or garden "Cockie!" He is not even the average talkative, sociable bird, that says "Pretty Polly," and holds his poll conveniently for you to scratch. Joe is temperamental! He is of regal strain. He hates being addressed as if he were a public meeting.



Joe is in fact, a Fijian King Parrot, and his present abode is in a comfortable home overlooking Rose Bay. He lords it over a crowd of courtiers, chief among whom is his adoring and adored mistress. "One afternoon," she writes, "I had 2BL on, and a gentleman was reciting very dramatically. Joe was screaming 'Shut up, shut up!' I thought a strange cat was about, and came to investigate. Just then a foxtrot struck up. Joe then said comfortably, 'Everything's quite all right, now!' I couldn't get over it. I suppose you could scarcely credit it, but he is almost human." Of course there are lots of other things "Joe" says, and says heartily. He was once the property of a sailor man. But that, as Mr. Kipling would say, "is another story."

## We Beg Your Pardon

A CANDIDATE in the municipal elections wrote to 2BL requesting "Ten minutes or less on the wireless on Thursday evening, and what would be the cost?" 2BL was obliged by the regulations to answer that the candidate's opinions were not exactly the kind of things 2 B yelled.

## Nocturne

The golden sun has dropped below  
That block of flats a mile away,  
And, in the flooding afterglow,  
I see the blood of wounded day;  
And where the gentle waters flow  
A silence falls, the last bird sings—  
Hey, Jack; Turn on the Radio  
And let's forget the beastly things;  
—R. Mc.

## Unlucky Strike

RAY CARTER, 2HC, of Quirindi, N.S.W., writes to us with a tale of woe at the hands of the elements. He had taken his aerial down to make some alteration, and had to leave to draft cattle for a couple of days. On his return he found that a severe storm had occurred, and a lightning discharge struck his main mast, ran down one of the guy wires, burning it away, smashed all the aerial and guy insulators, and, not content with this, jumped across six feet to his Zeppelin aerial feeders, shattered the aerial, earth switch, and considerably damaged the transmitter and receiver.

## THE TEST

"I like your wireless," said McNabb  
To Sandy Scot, one day,  
"You seem to have it fixed so neat,  
In just the cutest way."  
"I'll call and see you," said McNabb.  
And Sandy Scot thought, "Oh,  
I wonder what's his little game,  
I'd really like to know."

Now, Sandy loved his wireless set;  
He'd bought it long ago,  
And daily he would listen in  
To Station 3LO.  
And old McNabb was cricket mad,  
He stood at Sandy's door  
And said, "I'd like to listen in;  
D'yer know the latest score?"

One pair of earphones Sandy had;  
It filled him with dismay;  
With indignation strong, he glared,  
And waved McNabb away.  
But, ah, that canny old McNabb  
Would give poor Scot no rest;  
So now, with one earphone apiece,  
They listen to "The Test."

—SONIA HARDIE.

## Good News.

A THANKFUL letter has been received by 2FC from a man for whom they broadcast an urgent message. The message found its mark in Wauchope, ten minutes after being broadcast.

## It Works

JONES: What's all the crowd for? And who's that chap they're cheering? BONES: Haven't you heard? That's the fellow who has invented the radio set that will work whether you have company or not.

## Final Judges

"FOR goodness' sake," says a letter to 2FC, "don't have women announcers! Your men are good; but we have heard of women! I think I would give up wireless then. I must not say what I really think about the darlings, as I am sure you would be shocked." This remonstrance gains authority from the fact that the writer is a woman. One gathers that, while garrulous men are tolerated on principle, women thinking of entering the talking business before an audience of their peers should really know better.

## The Convivial Band

SOME time ago, a group of artists was gathered round 2BL's Loud Speaker, listening to a broadcast of Tooth's Brewery Band. "Good liquid notes," remarked Mr. Moore McMahon. "Stout fellows," murmured Mr. Bryce Carter, looking carefully at the carpet. "They should excel in one thing," said Mr. Vern Barnett, the pianist. Someone suggested, "Drink to me only." Mr. Barnett looked reproachfully at the jester. "Not at all," he said. "I was referring to their Larga movements."

## Pipe the Man Down

WE were very surprised the other evening to hear Mr. Bryce Carter, on his way to the 2FC Studio lift, making noises strongly resembling squawks on a child's paper trumpet. After careful inspection and a good deal of questioning, we found that the eminent cellist was drawing the strange sounds from a perfectly ordinary pipe—the tobacco kind. It was perfectly ordinary because we made Mr. Carter blow through it. But we couldn't find out what made the noise, for Mr. Carter seems to be as proud of his accomplishment and his secret as he ought to be of his handling of the 'cello.





# Important Features of the Manipulation of MODERN RECEIVERS

By RAY ALLSOP  
(Associate Technical Editor)

**I**T is immaterial whether you constructed your own receiver from technical information in the columns of "Wireless Weekly," or whether you went along and bought the most expensive commercial instrument money can procure; the fact remains that there are a few all-important things you should know about its performance.

In the earlier days of broadcasting we were far from particular about the sounds issuing from the loud speaker. All one seemed to think about in those days was noise—and plenty of it. Mr. Simson had a three-valve arrangement with a speaker and used to put it on the back verandah (or even the front verandah), and let it go all out, much to the annoyance of Mr. Samson next door, who acquired a five-valve Neutrodyne, and proceeded to drown the noise from Simson's outfit with a louder noise, perhaps from a rival station.

Then the neighbors began to complain, and wireless suffered a bad name, with the result that many would-be listeners turned from the idea in disgust, and muttered something about Radio being "worse than a cheap gramophone."

Only a short space of time has elapsed, and not only are the gramophone and wireless set "brothers in hand," but Simson and Samson have "buried the hatchet," and talk glibly about "grid biasing," "transformer curves," "dynamic reproducers," and the like.

This is true of the majority, generally speaking, but there are still the initiates to be reckoned with. Everyone cannot blossom out as a reliable expert in five minutes. In most cases the commercial broadcast receiver is a "cut and dried" affair, and has reached a stage of standardisation which may be compared to the motor car. They are all good, and will behave properly if given the right treatment. The manufacturer stipulates certain valves, which are supplied. The battery connections are so simple that a child could hardly make a mistake, and perhaps a certain type of loud speaker is recommended as being suitable for use with the particular set.

The manufacturer has his reasons for this latter. His set uses a certain output valve or transformer, and the impedance of the speaker advised matches the circuit. In the case of the home constructor, he will

often (too often) deviate from the original description of a highly efficient receiver, and will substitute in correct apparatus for that specified. The valves may be used in entirely the wrong manner, and in all probability a loud speaker of the horn type is connected up to the result.

His next procedure is to write to a harassed technical editor and complain that "my set won't do what you say it will . . . why is this?"

Before going further, I do not wish to be misleading regarding the horn type speaker. There are recent horn speakers of the exponential horn type which have great advantages, in full scale reproduction.

Of these are the new Ferranti and the Western Electric types. Unfortunately one meets with a few unknown and cheap horn type speakers which are capable of making the noise that Simson and Samson once liked . . . but nothing else!

Turning to the set—the source of the impulse supplied to your speaker; its reproduction with regard to amplification should be such that it should be capable of delivering sufficient volume to bring the item rendered by the artiste to a level equal to the amount of volume originally delivered to the microphone in the studio. This is of paramount importance, and if the volume is reduced below this original amount it will be found that the high notes will predominate over the low notes. Similarly if the volume is increased above that of the original, the low notes will be brought out too prominently.

It must be understood that the receiver **MUST** be capable of giving undistorted energy, and this may only be done by scrupulous care. I will not say anything about transformers, but, taking it for granted they are good, the valves must be correctly biased. It is futile to expect pure, undistorted energy from the output of the receiver if regeneration in the detector is pushed to the limit. Keep as far off the point of oscillation as possible.

The control of volume is an important matter, and in the case of nine out of ten users is mishandled. Often I find that the operator of a receiver will decrease volume by detuning the receiver. This practice puts the tuning on to the side bands of the modulated carrier-wave, and distortion is bound to be present, if only slightly.



MR. ALLSOP.

The set should be tuned to the optimum, and then the volume controlled by a variable resistor in the form of a potentiometer across the secondary of the first audio transformer. It is permissible to control volume by the regulation of the R.F. amplifier, if one is included in the receiver, but the potentiometer control is the best method. It naturally follows that if the volume of the average five-valve type of receiver is too great, the detector valve is overloaded.

The most suitable type of loud speaker for an efficient receiver is either the cone or dynamic type. The latter will handle all the undistorted energy your receiver will deliver to it, but it requires more power to drive it. Here is an interesting point which will enable you to judge the tonal frequency of your receiver. At the hum at the point of optimum tuning becomes louder from the broadcasting station, your receiver is reproducing the lower frequencies. The very slight hum sometimes heard from the transmitter of the broadcasting station has a frequency of 50 cycles per second.

In the earlier days of broadcasting, no hum was heard from the transmitter for the simple reason that the receiver would not respond to the lower notes. It is a difficult matter to suppress entirely this residual hum from a powerful transmitting station; and to-day, one object of the broadcast engineer is to eliminate this power hum so that the clearest of reproduction may be obtained from bass notes produced by organs and orchestras. The difficulty of this will be appreciated when it is realised that the low notes of an organ are at a frequency of 50 cycles per second.



# The Safety Valve

Readers are urged to express their opinions 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.

## The Studio Service

Dear Sir,—As one living in the country, I would like to inform the New South Wales Broadcasting Company that it is with regret we in country places hear of their decision to broadcast services from the studio only, instead of from individual churches. It was, and is, a great pleasure for many thousands of listeners to hear a service direct from a church, and to broadcast from the studio is not and never can be on the same status; it will not be held in the same reverence or respect. I might add that if a referendum could be taken from listeners on this question, I feel sure an overwhelming majority would be found in favor of the old system. In voicing the feelings of many listeners, in the country at least, I trust the old order will be continued.

Yours, etc.,

"A COUNTRY RESIDENT."

Wingham.

## Wow!

Dear Sir,—This last few weeks I have listened to programmes from the different stations with a fair amount of martyrdom, but last Saturday night ended what was once a bore. A new announcer (or new to me) has sprung into being from 2BL, and he is certainly refreshing after the matter-of-fact type of announcer that is usually on. With his "Wow, baby," and his collegian way of explaining the situations in the fight, he's great. I only wish there were more like him to carry on the good work, and I certainly would like to hear him again.

Yours, etc.,

"JAM."

Chester Hill.

## Back Numbers

Dear Sir,—You will no doubt be pleased to learn that in response to my offer to dispose of back copies of "Wireless Weekly," I have had a very heavy mail each day. This is a fine tribute to the circulation of your valuable publication, as the requests come from all over the State. Many readers asked for the copy containing circuit of the "Marco Four." My own two copies I will send first, then borrowed ones from friends, yet there are a few readers not supplied. To those I am doing my best

from my friends who have copies for disposal, and when they locate the issues asked for I shall send along.

A few issues, containing excellent circuits, are still available, far too precious to burn, so that any reader wishing same, by sending stamp to cover postage, can have copies by return post.

It is very pleasing to know, by letters of thanks, that the offer was appreciated. The gratitude of many listeners is sent to the Editor of "Wireless Weekly" for bringing together enthusiasts whose feelings are mutual.

Yours, etc.,

ANDY E. BLACKADDEY.

38 Ritchie Street, Granville.

(Ed. Note.—We have sold out of the issues containing the circuits mentioned.)

## Sixty Answers

Dear Sir,—I posted a letter about a fortnight ago asking you to thank the listeners who had posted me "Wireless Weekly" of 30/12/27, in case they were not all returned. You must have got the letter mixed, as you reprinted the first par, asking for that number. As I had over 60 letters to answer, and fearing a renewal of the posting of books, I would be much obliged if you will correct that for me.

Yours, etc.,

S. J. GRICE.

12 Prospect Terrace, South Brisbane.

## RELIGIOUS BROADCASTING.

*Taking the article in this issue on Religious Broadcasting as a correct exposition of the N.S.W. Broadcasting Co.'s proposals regarding Sunday programmes, "Wireless Weekly" invites readers' opinions on this subject*

*The expression of your ideas will be an invaluable guide to the broadcasting companies, and only by airing all sides of the question will a favorable decision be arrived at.*

## 4QG, Blunders

Dear Sir,—On several occasions lately I have listened to the announcer at 4QG while he read the news from a morning paper, and I was interested to hear his pronunciation of the following words, viz:—

*Debry* for *Debris*.

*Melaneseea* for *Melanesia*.

*Distribute* for *Distribute*.

*Comment* for *Comment*.

*Manoov* for *Manoeuvre*.

*Elicted* for *Elicited*.

*Meag* for *Meagre*.

*Eyetalian* for *Italian*.

*Days* for *Dais*.

*Aquattics* for *Aquatics*.

*Anshises* for *Anchises*.

The syllables in italics are accented.)

From the same studio, a lady announcer talks of antipodean instead of antipodean; and, apparently under the impression that the word "ermine" is French, gives it the true Parisian sound of "ermong."

Similar gross blunders are perpetrated daily at 4QG, and it is about time that someone in authority took action.

Yours, etc.,

QUEENSLANDER.

Toowoomba.

## Uncles and Ads.

Dear Sir,—Talking about "Uncles," apparently Dad "Runnime" had little Willie's earphones on. The whole situation savors a little of the position one sees in the city daily during the month of December—juvenile adults flattening their noses against Christmas window displays originally and in spirit, of juvenile interest.

"Runnime" certainly does not offer this criticism against the "Children's Hour" of 2UW, for during the few short weeks "Uncle Jack" has been on the air in Sydney, broadcasting educational and interesting talks to children, the modicum of advertising matter sandwiched in has been practically negligible, and appears not as an anti-climax to delightful talks to children but as the sincerest, mildest, publicity matter yet presented.

Perhaps "Runnime" will tune in to wave-length 276, and then be kind enough to give a more detailed report on "how his adult temperament is affected."

Yours, etc.,

NEEDIRUN.

Fairyland.



# Can the Broadcasting of Church Services Be Improved by Experiment?

*The N.S.W. Broadcasting Co., contrary to several reports, does not intend to substitute drama for church services. We outline below the actual proposals of the Company, which are nothing more than an attempt to help the improvement of the present religious programmes.*

WIDESPREAD interest in the report of the N.S.W. Broadcasting Company on religious programmes last week has been evinced by listeners. The suggestions of the Broadcasting Co. have received a varied reception, mainly because of a false impression conveyed in some quarters, and because of a large misunderstanding regarding the present religious programmes. The Broadcasting Company's statement explained the new American Religious Dramas. We extract the main points:—

"The National Broadcasting Company of U.S.A. has just begun a new series of transmissions, to be known as 'National Religious Services.'

"The National Broadcasting Company is sending twelve religious dramas to the N.S.W. Broadcasting Company, and it is hoped at no late date to present the first of these in Australia."

The first of these extracts is a fact. The second indicates an intention, the only intention expressed in the whole statement. Yet, on seeing these, a section of the morning press, with an impetuosity which smacks of successful Voronoff treatment, castigated the N.S.W. Broadcasting Company for its attempt to substitute Drama for Religion.

Where the information that there is an intention to substitute "drama for a real church service" was obtained has not been disclosed. The intention is not expressed in the company's report. Indeed, the report says:—

"The National Broadcasting Company (of U.S.A.) points out that it is not intended that this national service is to be a substitute for the churches. On the contrary, it is expected that this will be a powerful stimulus in appealing for church support."

"Wireless Weekly" hastens to allay the fears of a large number of listeners in that the present broadcast church services will be suddenly and unreasonably substituted by a studio programmes. The company, in its report, advanced the idea that it was possible that the present broadcast religious services could be improved, mainly by a closer study of the peculiar requirements of the microphone at one end and the loud-speaker at the other.

In this it is felt that the Broad-

casting Company will have the support of the majority of listeners. There is always something lost in a church service broadcast and a church service as heard by the congregation. By experiment it may be possible to provide the listener with that missing quality. We have always believed in the experimenter. It is the experimenter who has made radio transmission technically practicable. But, while the technical side of radio has its hundreds and thousands of experimenters, the programme side of radio—the consideration of radio as a new medium for artistic and spiritual creation—has entered the heads of very, very few people.

We were recently entertained with broadcasts from the Sydney theatres. So far as engineering went, these were perfect and interesting. But no one will suggest that they contained the ultimate effects possible from the radio medium. The radio play is yet to come, and when it does come it will prove—it MUST prove—as perfect as our present plays seem, seen from within the theatre. The same complaint can be made against church services, as against broadcasts of theatre plays. They were not made for radio broadcasting. There is a new medium for our spiritual guides to master.

The religious drama and the national service are attempts to master the new medium. The drama is to make the Bible LIVE over the air. The national service is an attempt to grapple with the inevitable radio problem of mixed audiences.

Questions of public taste and opinion will be decided by public taste and public opinion. No broadcasting company in a democratic community can live against the public. It is an axiom. Therefore, the public must decide whether or not it will hear national services. The odds seem overwhelmingly in favor of an experiment with national services. The public must be the ultimate judge; but the public must first have a national service on which to sit in judgment.

It is difficult to take the criticism of the religious drama seriously. The radio drama must be a work of art—an oral work of art. The religious radio drama must obviously be an illustration of Christian religion, spoken through the air—through a new medium. It cannot be a substitute for

worship, because, as the same section of the morning press boldly affirms, it has nothing to do with worship.

An experiment cannot be damned until it is made. One cannot say, with the bevy of clergymen quoted, that the public will not like the experiment, until the public has heard the experiment.

And, finally, religious drama will not be a substitute for religious services until and unless the N.S.W. Broadcasting Company issues a new statement totally contradicting that from which we have quoted.

\* \* \*

## MUSICAL THERAPEUTICS.

ONCE upon a time there was an electrical engineer who worked around radio twenty-five hours a day, eight days a week for aeons and aeons (or should we say ions). Anyway he or his wife decided that he needed a vacation from his vocation. She picked out the north, because she had heard that the residents claimed it was inadequately served by broadcast stations.

On board the coast-wise steamer, a loud speaker blared and blared forth just outside their state-room door.

At their destination the new Northern Hotel, in an attempt to live up to its newness, entertained the visitor with a loud speaker.

In desperation, the electrical engineer hailed a taxicab and ordered the surprised custodian of the steering wheel to drive to Darwin or a hotter place.

"Yairs, son, I reckon all you want is a little aerial entertainment."

Forthwith a portable set on the driver's seat went into action with a salvo of jazz and a broadside of squeals. The electrical engineer went into uncontrollable oscillations, burst from the cab, and fell unconscious by the roadside.

When next he came to, a nurse was taking his specific gravity with a clinical hydrometer. The nurse saw that he was once more in tune with the finite, and, stepping to his head, fussed with some contraption out of sight. In soothing syllables she remarked, "Cheer up, this will make you feel better." Whereupon she slipped a pair of head-phones against his ears, and the hospital's new radio installation started function with a soprano gargling "Among my Souvenirs."



# PEOPLE *in the* PROGRAMMES

## Better Known as "Dismal"

ALLOW us to introduce Mr. G. W. Desmond . . . You don't recognise him? . . . Perhaps we had better introduce him as Dismal Desmond. You all know Dismal Desmond. The sad, quavering voice that breaks in a dozen places as it sobs out the troubles of a London charwoman, or discourses on the "Gravedigger's Wedding," or retails "My Favorite Fruit—the Onion," has made itself popular with listeners-in throughout Australia. Dismal Desmond, no less than Charles Chaplin, has created a type—not visual, but vocal, of the "Kicker"—the perpetual whiner. There are few men in Australia, excluding announcers, who have succeeded as well as he in establishing a distinct broadcasting personality.

Mr. Desmond has little of the breeziness of the usual comedian. He is a quiet little man, who has travelled extensively. His first visit to Australia was made in 1914, with the Sydney James Strollers, as an eccentric dancer. The company, with which Mr. Desmond danced over the globe, was a great success, and is remembered here to this day. Mr. Desmond's cheeriest memories of his travels go back to India and Africa. He was in India during the Prince of Wales' visit, and has vivid memories of the strikes organised by the notorious Ghandi. And he tells an interesting story of a visit to Zanzibar, where he had the honor of performing



Mr. G. W. DISMAL—excuse me—  
DESMOND.

before the Sultan—in the bath of the Sultan's Harem!

Three years ago, he made his first "appearance" as a broadcasting artist at 3LO. Since then he has performed for 2BL, 2FC, and 5CL. We have seen the artists at 2BL crowding round the loud speaker while Dismal Desmond held forth, and that one broadcasting artist will open his ears to another is a sign that the other is worth listening to.

Mr. Desmond's favorite station is 2BL. "They don't interrupt you there," he says, "and, besides, you can get right up close to the microphone." It was from 2BL that Mr. Desmond broadcast heel-and-toe dancing, on a platform in front of the microphone. It came through very clearly; but to some suspicious listeners-in it was very hard to prove that he was not fooling them with clappers.

We believe that some of his sad humorsities are to be recorded for the gramophone.

\* \* \*

## Character Student

MR. V. UPTON BROWNE, who knows more about the Farmyard Five than any other artist at 2FC,



is an accomplished student of character, and his ability for portraying types is limited only by the range of his observation. His campfire programmes and interpretations of the Australian poets have also been widely appreciated. He has a deep insight into the true feeling of poetry, which makes for sincerity, and compels attention. Congratulations came from all quarters of Australia for his Armistice Sunday programme.

\* \* \*

## A Poet at 2GB

MR. WILLIAM HEYTING, who won the Auckland University College prize for English poetical composition, will speak through Station 2GB for the next two months. Mr. Heyting has travelled through Europe, India, and New Zealand; and has lectured on Oriental Philosophy throughout some 40 of the 48 American States.



MISS KATHLEEN ROE.

## From Cork

KATHLEEN ROE, the brilliant young Irish pianist, is back in Sydney again after a trip to the country "to make her fortune." "And I very nearly did," she vowed, in her quick, curiously bird-like voice.

"I panned for gold—and found some—but not enough! We mustered cattle, and went wool gathering. I even undertook the job of shearers' cook. I'm a jolly good hand at cakes, anyway," and she nodded her head vehemently, as though to defy the unacknowledged failures.

Born in Cork, Miss Roe went to school in Scotland. "After I won a scholarship at the Royal Academy of Music, London, I worked jolly hard for six years: not only at the piano. Singing, violin composition—and such things," with characteristic gesture. "I got a dozen medals, one way and another," Miss Roe admitted, "and was made sub-Professor of Pianoforte at the Royal Academy."

"Why am I here? Well, I wanted to see the world, so I booked a trip to New Zealand. I took one look at Wellington—and caught a boat for Sydney. It's jolly nice here, but I'm going home shortly." Here a sigh. "And then?" we prompted. "Why, New York, and in February I am arranging a trip from Alaska to Cape Horn!" We fled from this breath-taking globe-trotter.

2FC have been fortunate in staying her travels, be it ever such a short time, and she will be heard regularly through both services. Miss Roe is perhaps one of the most gifted modern pianists in Sydney at the present time.



# Nilcost

By DON B. KNOCK (Associate Technical Editor)

*A small receiver---insignificant if you compare it with the super-screen-grid jobs---but one which really lives up to its name. If you have ever dabbled in set construction before you are sure to have all the parts and it will cost you nothing. Just the thing for a Christmas gift; saves you the trouble of thinking of a new one about Santa Claus*

## LIVES UP TO ITS NAME

Parts for Nilcost can be Collected from Nearest Junk Pile

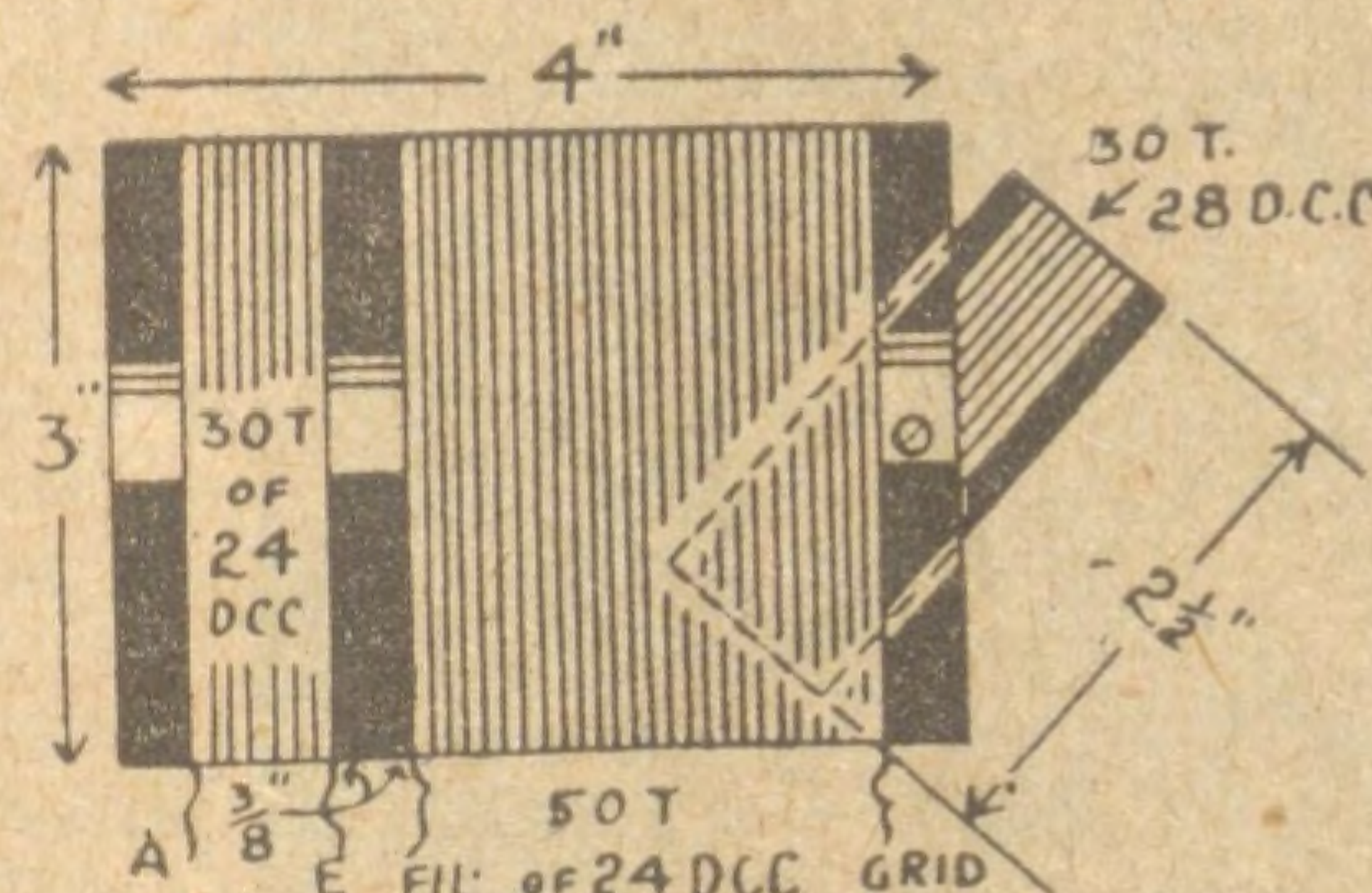
- 1 Panel, 12 x 7 inches.
- 1 Baseboard, 11½ x 6 inches.
- 2 UX Valve Sockets.
- 1 Radiokes Bayer R.F. Transformer.
- Home-constructed Coil Unit.
- 1 Audio Transformer.
- 1 .0005 Variable Condenser.
- 1 Combination B and Filament Jack.
- 1 .00025 Grid Condenser and 2-Meg. Leak.
- 1 60-volt B Battery.
- 1 4½-volt C Battery.
- 2 UX 199 Valves.

THE other night, while looking around my workshop, my eyes rested upon a large pile of components—good, bad, and indifferent. Old coil units, variable condensers of high and low loss types, valve sockets with good and poor spring contacts, 16-gauge tinned copper wire stripped from dismantled sets, and a veritable medley of junk.

I sifted the good and fairly good from the bad, intending to make use of these mediocre parts some day. No sooner had I done this than I remembered that I wanted to make a monitoring receiver to check up my experimental telephony transmissions on 220 metres to replace a crystal arrangement I was using in which the crystal would keep losing its sensitivity, causing me momentarily to lay the blame on a perfectly good transmitter.

This monitor receiver would not, of course, be used with an aerial, and only needed to be a lone detector valve arrangement; but, for luck, I decided to hitch on an audio amplifier. Sorting among the spares, I un-

earthed a slightly-damaged Radiokes Bayer R.F. transformer with variable reaction coil, an old type little-known intervalve transformer but with windings intact, two very cheap UX valve sockets, a combination jack for filament and B supply, two old UX 199 valves, a 4½-volt C battery, and a fairly old 60-volt B battery.



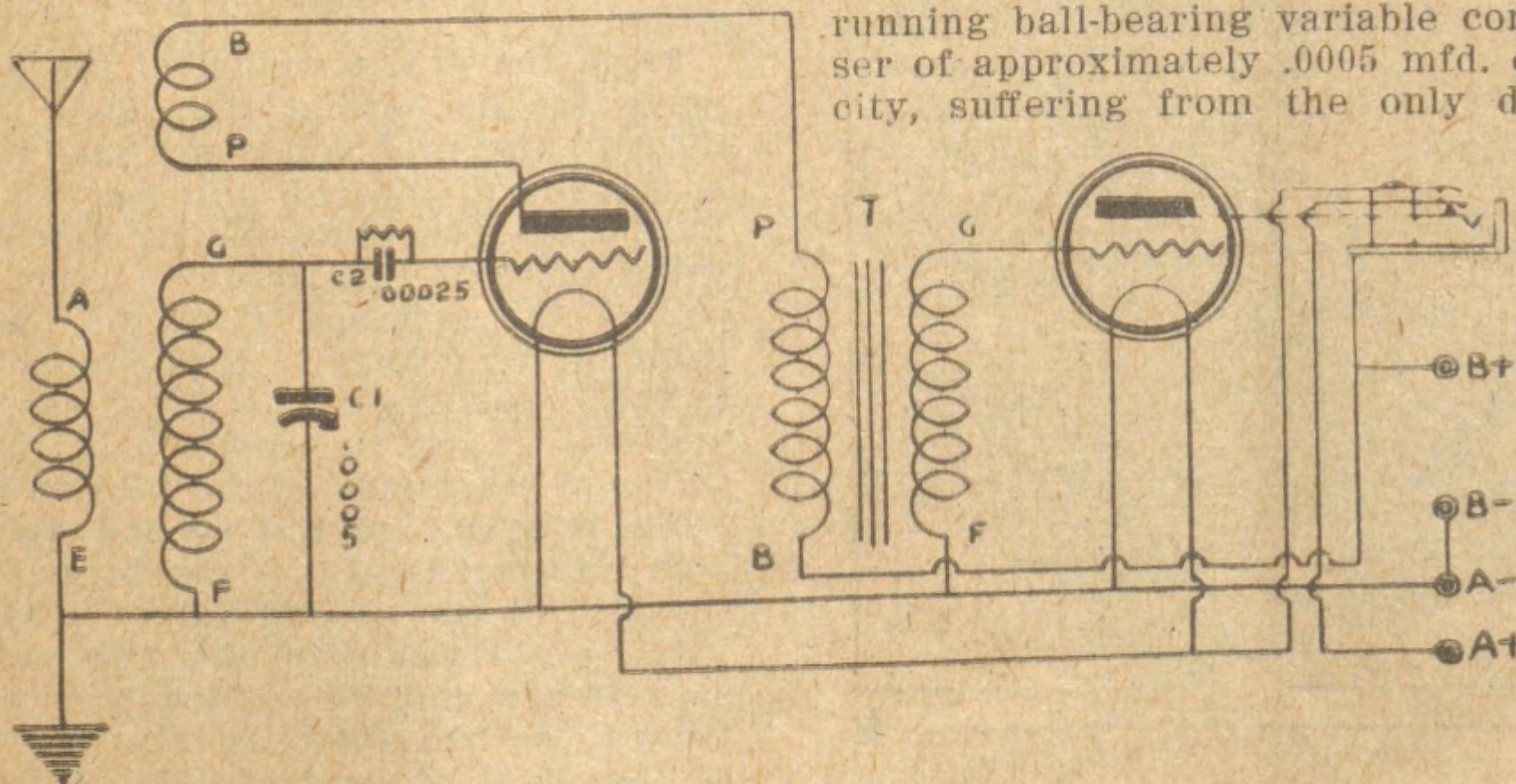
Most of the old variable condensers were suffering from bent plates, etc., and the rest were of too high a capacity. Examination of the old type Gecophone variable condenser, capacity .001 mfd., showed that it only needed a pair of pliers to remove the rotor and take off half the plates in a minute or two. This was promptly done, and I found I had a smooth-running ball-bearing variable condenser of approximately .0005 mfd. capacity, suffering from the only disad-

vantage that its 3-inch plain dial had to be used with it owing to the spindle design.

Why should I worry about the dial, anyway—I only wanted to check my own transmissions? An old cabinet was brought to light, of the type one buys for a mere song; a baseboard, and a piece of plywood. The plywood gave me an inspiration. Why not use it as a panel? I promptly sandpapered the surface, and my eye caught a tin of Black Duco on the shelf. Why not Duco'd plywood for the panel?

Duco, being a cellulose product, would make a good insulator. The plywood panel was cut to size to fit the grooves in the front of the cabinet, and then laid out flat on the bench. With a soft camel-hair brush the Duco was applied evenly, and the panel laid on one side. In an hour's time it was given another coat and left to dry. After two hours' drying the result was very pleasing, and, in fact, it was difficult to tell that the panel was not made of bakelite or hard rubber at first glance.

A baseboard was cut of sufficient size to take the components, and was given a coat of mahogany varnish. When dry the panel and baseboard were mounted by means of three black round-headed wood screws and three holes drilled. One was for the one-hole fixing of the Gecophone condenser, another for the mounting of the Radiokes Bayer coil unit, and the third for the jack. The valve sockets and transformer were then mounted and the little set wired up with any odd pieces of 16-gauge wire there were lying about the workshop. There was plenty of room inside the cabinet for batteries, so I included a 4½-volt C battery for the filaments of the two UX 199 valves and the 60-volt B battery, taking the leads from the circuits straight to the batteries.



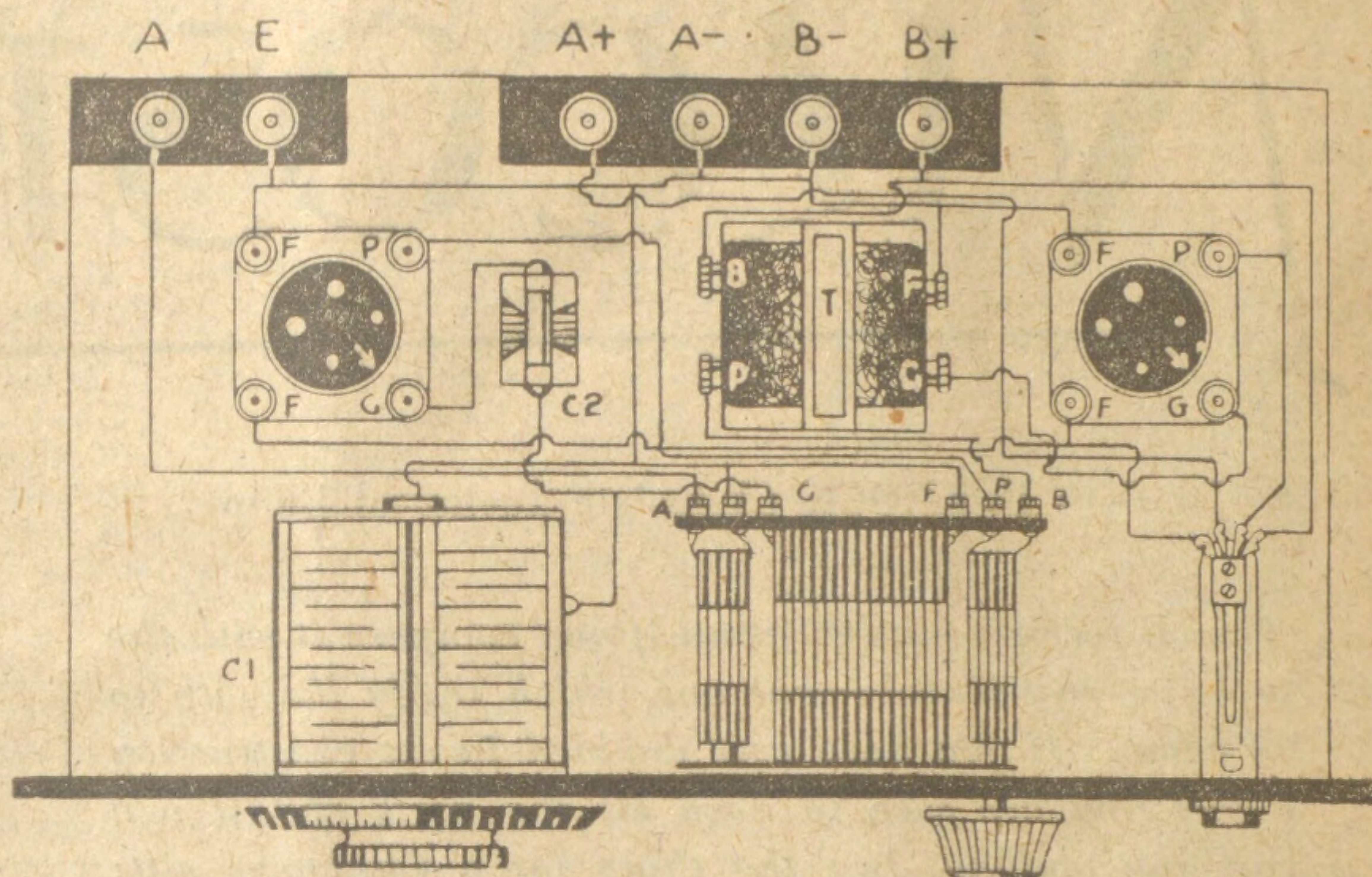


## Nilcost, a Quality Receiver---Local Stations on L.S.

Plugging a telephone plug into the jack closed the filament and plate circuits, and away the set went. Much to my surprise, I immediately tuned in at excellent headphone strength 2BL, 2FC, 2UE, 2KY, and 2UW—without any aerial or earth attached! The set as it stood was a very good headphone portable!

Hitching on an aerial and earth not only brought all the local stations up to speaker volume, but 3LO and 3AR were well audible at headphone strength. Being so impressed with the set in view of its cheapness, I forthwith had it photographed, and am here passing it on to "Wireless Weekly" readers "for better or for worse."

Trying it again in the city, it still persisted in bringing in all the local stations in the daylight, and seemed to ridicule the very idea of an aerial! The NILCOST, as I have termed this little set, is an example of what can be done when cutting expenses.



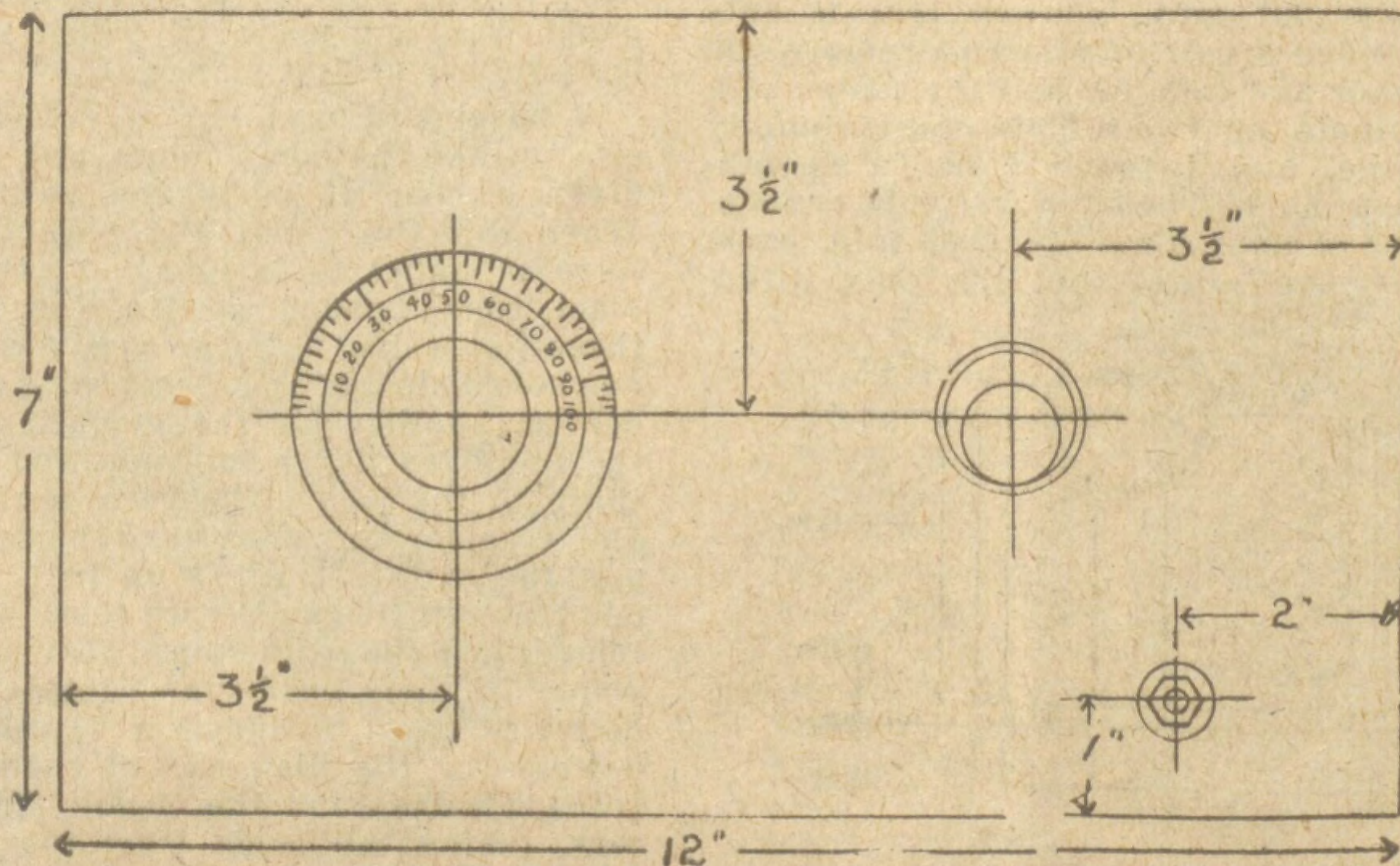
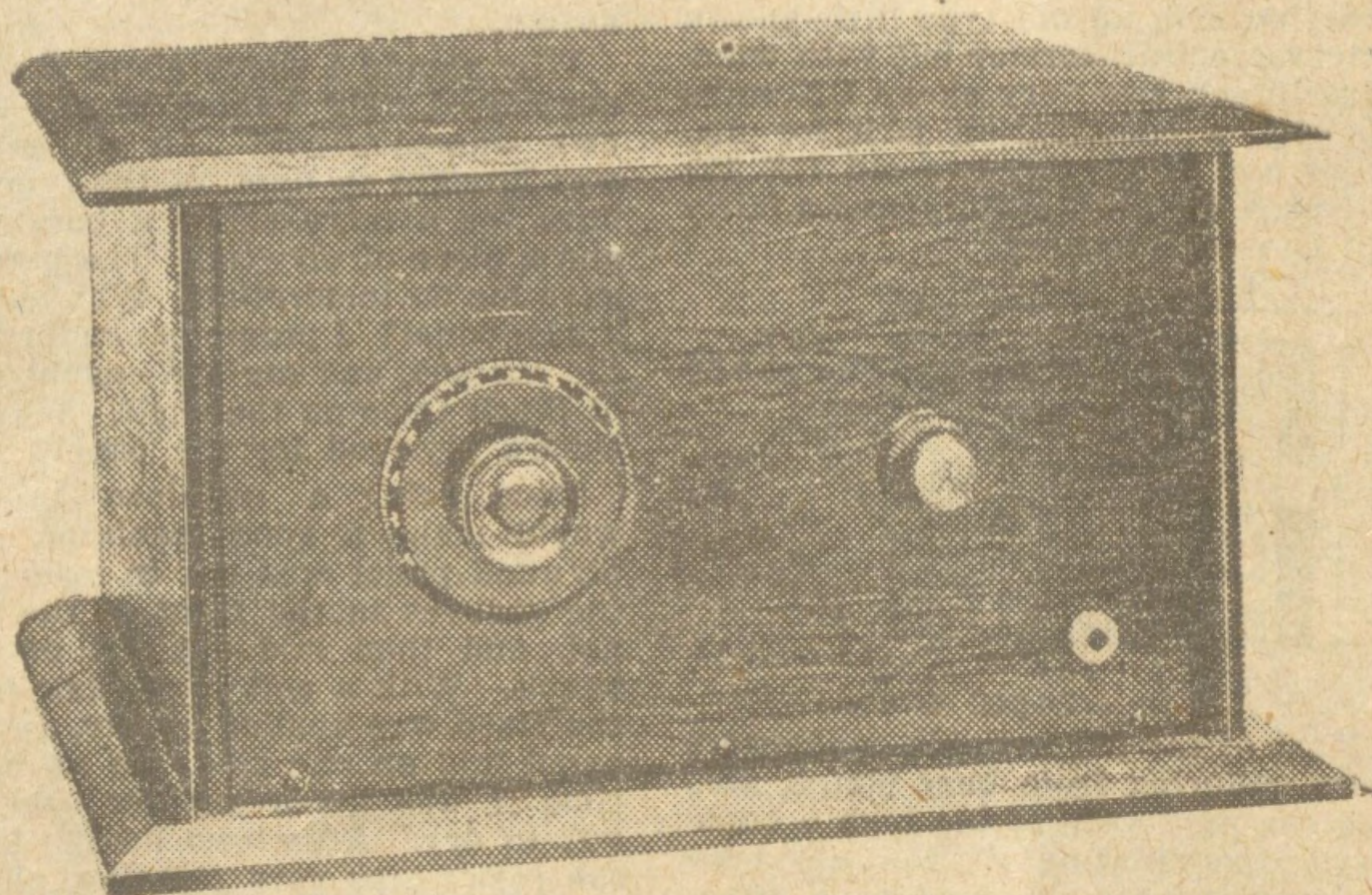
Perhaps there are many who are just graduating from the crystal stage, and would welcome details of a simple little set like this? There are also many to whom a loud speaker is like

a red rag to a bull, and if Mum and Dad want to enjoy the programme through two pairs of headphones, all that is needed is a multi-phone plug and the NILCOST is the very thing!

Cut your panel to measure 12 x 7 inches and a baseboard 11½ x 6 inches. You need not, of course, use plywood for the panel, but any old panel you may have lying around. Mount the components as shown in the diagrams and illustrations. The back-of-panel diagram shows terminals as usual, although in the original the battery leads were taken straight to the batteries, which are carried inside the cabinet with the set.

No grid battery is used for the audio amplifier, as the set is only made for headphones; but if you decide that you would like to listen to the local programme via a speaker, it is no trouble to include the battery. Join together the A negative and B negative terminals (if you use them), and from here connect to the F negative terminal of the interval transformer secondary, the F negative terminals of the two valve sockets, the R or plates of the variable condenser, the connection marked F on the coil, one side of the aerial coil, and the earth.

From the grid terminal of the first valve socket join in the usual way through the grid condenser and leak to the end of the coil unit marked G. Next from the plate of the detector valve through the rotatable reaction coil to the terminal P of the audio transformer primary. B is connected to the B positive terminal (or cable), and one side of the combination jack with the other side of the jack to the plate terminal of the second valve. Join terminal G of the transformer to the grid of the second valve. The F positive terminals of the two valve sockets are next joined together, and from these two a lead is taken to one of the filament contacts of the jack,



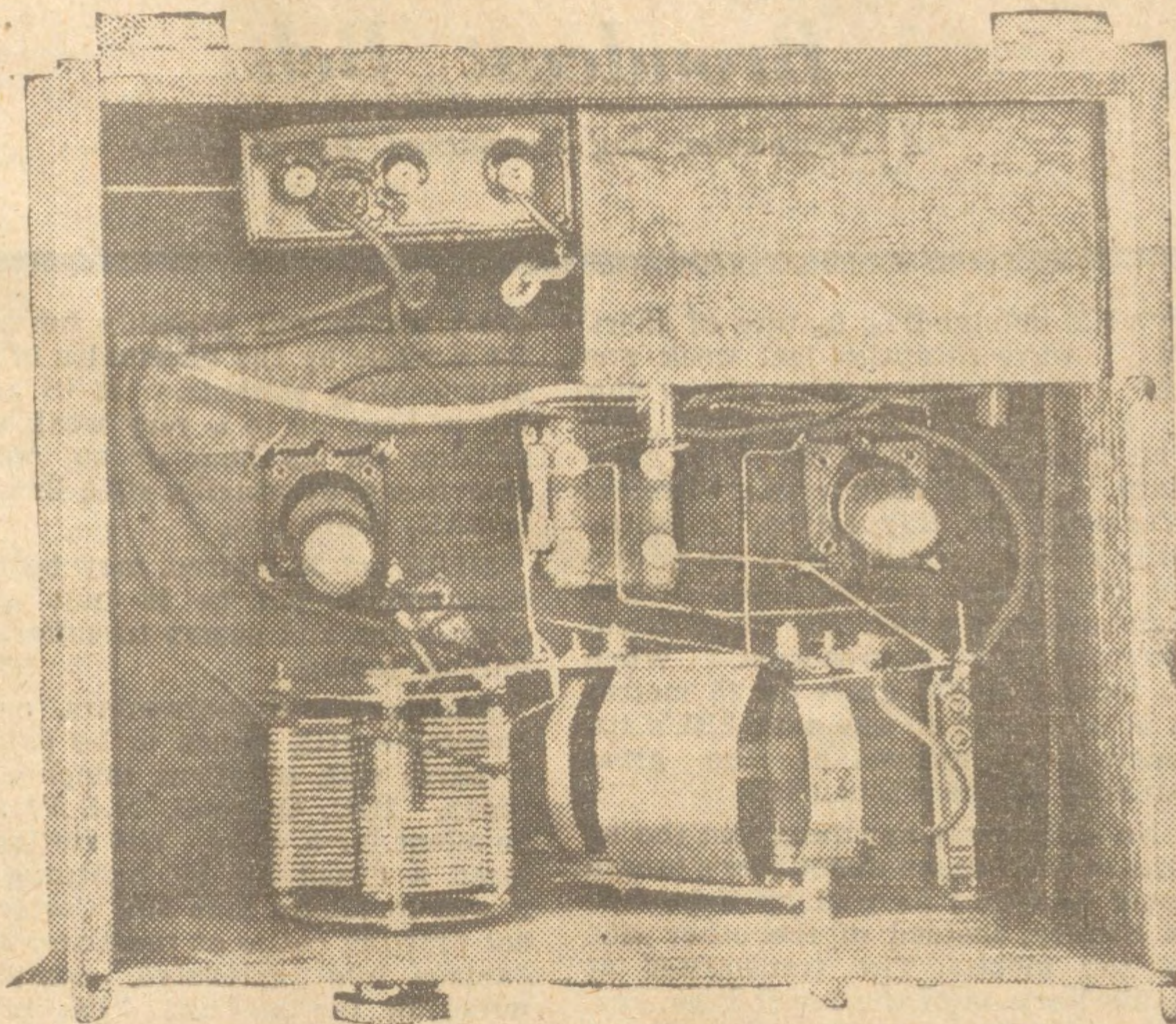


## The Easiest of Easy Sets to Make--Simplicity

with the other contact to the A positive terminal.

The Radiokes Bayer coil unit is very useful for this little set, and is to be preferred; but for those who wish to make the coil unit themselves the diagram will supply all necessary information. Two UX 199 type Ceco valves were used, and will not take too heavy a drain from such a small filament battery; but you must not expect a battery of this kind to last very long. I used it because the set is never in operation for more than a few minutes at a time. There are many readers who have stuck to the crystal set through thick and thin, and who would like to make a valve receiver, but seem to think there is something formidable about using valves.

The NILCOST is the easiest of easy sets to make. Give the average school-boy a pair of pliers, a screw-driver, and some solder, and he will have this little set together in record time; and judging by the performance of the original, he will be amply repaid.



## Radio Trade Prepares for Christmas

THE radio trade throughout Australia is making a determined bid to capture a share of the Christmas trade. Traders are pointing out that it is the outdoor season, and that therefore something for the open air is appropriate. As it is a season of goodwill and a time of rejoicing, a musical instrument—obviously a radio receiver—is suitable. The trade therefore is pointing out that the time is opportune to push forward a line of portable sets. It is a radio set that keeps one in touch with civilisation when holiday-making, without forcing into prominence the artificial side of civilisation. Prospective buyers are being told about the English cricket broadcasts—about the breezy way the play is described. Mention is made of the long hours the broadcasting stations are on the air in order that lovers of cricket may receive full measure.

For those who already have a radio set, it is suggested that nothing would be better for Christmas than a new set of valves, a fresh accumulator, a couple of B batteries, a few small items such as volt meters and milliammeters, and a speaker or an electric pick-up for the family gramophone.

### The DJ 6 in 3 Portable

THIS portable receiver is the most interesting of portables we have seen, and possesses features which should make it a very popular proposition.

The DJ 6 in 3 Portable was submitted to us for test by the radio department of David Jones, Ltd., Sydney. The engineers of the radio department of this progressive company have always kept to the forefront in modern design, and it is typical of their enterprise that they should place on the market the type of receiver which has been referred to in "Wireless Weekly" as "the set of the future." The DJ 6 in 3 makes full use of the screen grid and Penthode valves in an ideal manner. The RF stage uses a tuned plate, tuned grid coupling, and the detector is provided



THE D.J. PORTABLE.

with constant reaction by the variable capacity method. The valves used are the Philips A442, A445, and B443. The receiver is extremely well designed and complete in a strong leather case, with carrying handle. The batteries are hidden from view, and the valves well below the level of the three tuning controls, being thus immune from damage. Exhaustive tests of loud speakers suitable for inclusion with the circuit were made, and the choice lay with the excellent M.P.A. speaker recently introduced to Australia by Mr. C. D. MacLurean (2CM). The M.P.A. speaker, with its attractive grille, greatly enhances the appearance of the DJ 6 in 3 portable, and its reproduction is all that could be desired. We found that the tuning of the receiver is simplicity itself, and that it amply endorsed the claims made for it. In the offices of "Wireless Weekly," in the city, every local station could be tuned in at full volume with remarkable clarity, and when tested at Randwick, it showed that its capabilities were by no means limited, inter State stations being heard at good strength. Provision is made for the connecting of an external aerial and earth if desired, so that the DJ 6 in 3 is really a "home and portable" set. In the car, for week-ends and beach days, it is the ideal receiver, and with the advent of Christmas, we feel confident that the many visitors to David Jones, Ltd., will find just the set they have been looking for.



# Hitting Below The Broadcast Belt

*A Short-wave log conducted by OA-2NO*



THE outstanding feature of short wave reception last week was the excellent relay of the new Radio Paris station by 2BL. The chief engineer of 2BL (and Associate Technical Editor of "Wireless Weekly"), Mr. Ray Allsop, is continually sifting the ether with his powerful short-wave receivers for distant transmissions which are of sufficient intensity to be re-broadcast. When he located Radio Paris on 25 metres it is only mild to say that 2BL's listeners were amazed at the great strength of the Frenchman.

No fading was apparent, and the intake of the French announcer's breath could be heard as well as if he was in Sydney, instead of the other side of the globe. The transmitter at Radio Paris is of the latest type, and, although this accounts in the greater part for the strength as received in Sydney, Mr. Allsop's receiver plays no small part.

5SW, Chelmsford, is now operating very close to Radio Paris, on approximately 25 metres. This British station, relaying the 2LO programmes, is better on this frequency, but, as he is slightly above 25 metres, suffers a little from interference from the Beam transmitter, VIZ, in Ballan, Victoria. 5SW was relayed through 2BL on the evening of December 3, and reception was very good, the latest bulletins regarding the health of his Majesty King George V. being clearly heard.

Our old friend, Marcuse, of G-2NM, seems to have closed down on 32 metres. The new regulations are in force in Great Britain regarding short wave bands, so this may account for Marcuse's silence.

3LO, through 3ME, was heard every night during the last week at great strength. It was an easy matter to put him through a dynamic speaker at full volume, just as if he were a local station.

An American station, 2XG, was heard one evening fairly well. This station was once one of the "regulars," but disappeared, and has now put in an appearance on 27.8 metres.

RFN, Moscow, has also started operation on 29 metres, but his strength is on the weak side here.

There are many mystic and weird stations to be heard over most of the short-wave bands running continuously with telephony, but they are so weak or distorted as to render identification impossible. Newcomers to

short waves will probably be misled for a while by the harmonics of local broadcasting stations. It IS annoying to hang on to a very weak transmission for an hour or so, only to hear it say, eventually, 4QG, Brisbane, or 3AR, Melbourne.

JHBB, on 34 metres, may be heard occasionally, but he is not easily cleared up, and seems to suffer from intense fading.

Among the experimenters, our indomitable 7DX seems to be going at it hard, with excellent telephony, at times. 2HC, Quirindi, N.S.W., will be silent for a while. His station suffered a direct hit by lightning, and it was fortunate that Mr. Carter was out drafting cattle at the time, as the damage was extensive, completely wrecking the station. 3JK, in Victoria, has been putting over telephony on 32 metres which has, on occasions, been quite as strong as 3LO. His modulation is excellent. 7LJ, in Tasmania, has been heard recently with speech on 32 metres. He is usually, like most experimenters, handling a key. New Zealand 2BE is another one who sometimes blossoms out with good, intelligible speech.

Mr. Coxon, the manager of 6WF, in Perth, is still to be heard with 6AG, in the vicinity of 33 metres, and was recently running duplex telephony tests with PK-I, in Java. All experimental stations are getting ready for the great spring-cleaning in January, and the new band will be in the region of 42 metres, but it is safe to say that telephony from experimental stations will only be heard on 84 and 160 metres.

The N.S.W. Broadcasting Company, Limited, has arranged for 2BL to carry out a series of relays of programmes to be transmitted by American short-wave stations for reception by the Byrd expedition, now proceeding on its mission in the Antarctic.

These programmes are to be broadcast on one day in each week, commencing on December 8, when KFKX and KYW will set the ball rolling with a short concert programme. This will be received in Sydney between 6 and 7 on Sunday evening, December 9, and 2BL will then endeavor to relay it. On the following Sunday WBZ and WBZA will transmit, while on Sunday, 26th, KDKA will be the sending station. Throughout January, on the 2nd, 6th, 13th, 20th, and 27th, each of these stations will again, in turn, transmit programmes.

Conditions as I write are fluctuating badly. One evening Radio Paris or 5SW may be heard at good strength, and the next only a faint sign of a carrier may be heard. These poor conditions are about the worst time for a regular broadcast listener to enter the realms of short-wave reception, and I lay the blame with the elements when a reader writes and says: "Dear Sir, I built your ALL-EMPIRE receiver, and, although I hear a lot of Morse, I can get only faint speech and music from PCJJ or 5SW." Patience is a virtue, as the old saying goes, and no one requires more patience than the short-wave enthusiast.

**Monday, December 3.**

5SW was coming in well at 10.30 p.m., Sydney time, on 25 metres. The signal seemed much more constant than on his earlier wave. Lunch hour items from 2LO were heard well, also the latest bulletins regarding the health of His Majesty the King.

**Tuesday, 5.30 a.m., Dec. 4.**

PCLL was only a fraction of his usual strength, but 5SW strong. Chimes from Big Ben and musical items during the evening programme from 2LO well worth listening to.

7LO, Nairobi (Kenya Colony), heard very weakly. Morse interference acute.

7 a.m.: ANE, Java, calling Amsterdam. Very strong signal. Musical items sounded clear, although the carrier fluttered a little at times.

A few French amateurs heard on 32 metres on telegraphy working with Englishmen, but far below their usual strength.

**Wednesday, December 5**

PCJJ in middle of musical programme at 5 a.m. Strength decreasing rapidly, putting modulation below audibility at 5.35 a.m. At 6 a.m. 5SW medium strength. Rapid fading on orchestral music. Could not clear up announcements or news bulletin. 10 p.m.: Station on 28.5 metres, working duplex telephony. Gave no call sign. . . . Sounded local in announcer's speech. Many carrier waves to be heard, some at good strength, between 15 and 30 metres, but no modulation. Australian experimental stations conspicuous by their absence. Only four to be heard working telegraphy, local and American. Listeners may expect to find the experimental stations disappearing now in ones and twos on 32 metres, owing to preparation for the new frequencies.



# Xmas Programmes Prepared

2BL will celebrate Xmas Eve in the surf. Various other stations have equally novel arrangements. Features you cannot afford to miss.

## 2BL Features

### Christmas Eve Surf

**M**R. BASIL KIRKE has arranged a novel Christmas Eve programme for 2BL. At 5.40 on December 24 the Children's Session will begin from the surf at Manly, where the children's stories will be told. Uncle Bas, Aunt Willa, Uncle Peter, and Cousin Marjorie, clad comfortably in bathing-suits, will sing the evening choruses to the accompaniment of the studio harmonium. A special rubber-covered microphone will be used. Santa Claus will visit Manly and send Christmas greetings to the children of Australasia.

Later, the Manly Band will be heard, and at 10 p.m. a Charles Laurence Revue will broadcast from the surf at Manly Beach. Other artists will be Dorrie Ward, Dorothy Dewar, Amy Ostinga, and W. E. Lewis. The Mayor of Manly will give a talk, and other items, before the Christmas carols at 11.36, include a talk on the history of surf-bathing by Mr. Kirke, a description of beach sports, novelty nonsense at the piano by Charles Laurence, and community singing.

It is interesting to note that 2BL is always heard remarkably well at Christmas in the far north of America, where, at that time, conditions are anything but favorable for surf-bathing. American stations are to be advised to listen in to the 2BL broadcast, and to note the contrast. We think we shall go to Manly on Christmas Eve, if it is only to see what Uncle Bas and Mr. Charles Laurence—to say nothing of Uncle Peter and the other artists—look like in bathing costumes.

### KDKA Relay

**B**ETWEEN 5.0 and 6.0 p.m. on the evening of December 16 and 26 an attempt will be made by 2BL to relay KDKA, which at that time will be sending a special programme to the various ships of the Byrd Expedition. On January 2, 6, 13, 20, and 27, and February 3, 10, 17, and 24, similar relays will be attempted.

### "The Messiah"

**H**ANDEL'S oratorio, "The Messiah," will be performed by the Welsh Choral Society at Sydney Town Hall on Saturday evening, December 15. The first half of the concert, between 8.0 and 9.25 p.m., will be broadcast by 2FC, and the second half by 2BL.

\* \* \*

## 2FC Features

### G. and S. Star

**J**AMES HAY, of the late Gilbert and Sullivan Opera Company, is in Sydney, and 2FC have taken advantage of his short stay here to arrange several appearances for him. His song recital at the studio on Thursday evening, December 20, promises unusual features.

\* \* \*

### Whispering Jack

**J**ACK LUMSDAINE will be on the air again at 2FC on Saturday night, December 14. Listeners always retain a soft spot in their hearts for the pioneer of that peculiar crooning type of ballad, to which the microphone is so susceptible, and it is no exaggeration to say Jack Lumsdaine has no equal in this class of work.

\* \* \*

### Weather Report

**F**OLLOWING many requests from country listeners, a slight alteration has been made in the timing of the 7 to 8 a.m. session from 2FC. The official weather forecast and astronomical memoranda will now be called immediately after the clock strikes seven, while the studio music does not now commence until 7.12.

\* \* \*

### Wilde Comedy

**"THE Importance of Being Earnest,"** a comedy, which discloses Oscar Wilde in his most whimsical mood, is to be produced by the H. W. Varna Company on Wednesday, December 19. H. W. Varna has long been associated with the New South Wales Broadcasting Company, and the studio productions of popular plays by his talented company are always eagerly anticipated by listeners.

\* \* \*

### Kretschmann Club

**T**HE concert programme arranged by the Josef Kretschmann Club for the evening of December 17 will be interesting to lovers of good music. Instead of broadcasting from an outside source, the club arranges for the artists to come to the studio, and the practice has been found eminently successful. 2FC will transmit the concert between 8.0 and 9.30, and 2BL between 9.39 and 10.10.

## 3LO Features

### Special Xmas Music

**A** WELL-ARRANGED programme of Christmas music will be broadcast from 3LO on December 17 by the Royal Victorian Leidertafel, assisted by a choir of boys. Colin Thompson, who, in addition to being the soloist of Scots Church, has a great reputation as a concert and broadcasting artist, will be associated with the Leidertafel in Dudley Buck's cantata, "The Nun of Nardos," and the boys' choir will render the two carols, "Sleep, Holy Babe," and "The Manger Throne."

\* \* \*

### Camping for Boys

**W**ITH the holiday season near at hand, the talk given from 3LO on December 17, by Mr. W. D. Kennedy, who will discuss "The Value of Camping to the Boy," should strike a seasonable note.

\* \* \*

### Musical Education

**"S**HOULD music be included in the educational curriculum?" will be the subject of a talk given by Mr. J. Sutton Crow, of the University Conservatorium of Music, from 3LO on December 18. During the past few years he has had ample time to study from all points the advantages of a general musical education as part of a school curriculum.

\* \* \*

### Whistling Baritone

**A** NOVEL musical interlude will shortly be presented at 3LO by Roy Ryan, who, in addition to possessing a pleasing baritone voice, is one of the best whistlers in the Commonwealth, and, by way of variety, introduces many Australian bird calls and imitations into his turn. Billed as "The Boy Who Makes the Birds Jealous," there are few calls that he cannot give, and his excellent mimicry of cats and dogs has often led to most amusing situations.

\* \* \*

### Brilliant Young Pianist

**A** PIANOFORTE recital will be given from 3LO on December 1 by Miss Viva Clarke, a brilliant young pupil of Mr. Harold Elvin, who, at the age of fifteen, won a scholarship at the Albert Street Conservatorium. During her first year at the Conservatorium Miss Clarke was awarded High Honors (for the first time in the history of the Conservatorium), and has recently completed her diploma course.



## 3AR Features

### Special Xmas Service

A SPECIAL Christmas service will be broadcast from the Cairns Memorial Church by 3AR on Sunday, December 16. Selections from "The Messiah" will be given by the choir, the soloists being Miss Louise Thornton (soprano), Mr. Abery (contralto), Mr. A. J. Etheridge (tenor), and Mr. Frank Thomas (bass). Mr. R. J. Oehr will conduct, and organ accompaniments and solos will be played by Miss F. Thurman.

### "The Messiah"

ARRANGEMENTS have also been completed by 3AR to broadcast the performance of "The Messiah," given by the Melbourne Philharmonic Society at the Town Hall on December 18. The principal soloists will be Dorothy Humphries (soprano), Dawn Harding (contralto), Robert Harper (tenor), and Victor Harding (bass). Selections will be given by the University Symphony Orchestra, with Miss Connie Ziebell as principal violin. Miss Isabel Adams will officiate as organist, and the whole performance will be given under the conductorship of Mr. W. F. G. Steele.

### 3AR Dance Night

LISTENERS to 3AR are reminded that the next dance night music will be broadcast on Monday, December 17. These dance nights are maintaining their popularity with crowds of country people, who welcome the opportunity of dancing twice weekly to the excellent jazz rhythm supplied by Ned Tyrrell and his Radi-O-Aces.

## 4QG Features

### 4QG Christmas Eve

ARRANGEMENTS have been made at 4QG for a special Christmas Eve entertainment for little listeners by the bedtime story-tellers. This will be followed by a special children's Christmas service, relayed from St. Barnabas's Church of England, Red Hill. The main programme will commence at eight o'clock, and will last until after one o'clock on Christmas morning. During the first portion of it a varied studio programme, with seasonable items, will be given. The second part will comprise a Christmas ghost play, which will last for an hour. From half-past ten until midnight the

Brisbane Federal Band (conductor, W. H. Davis) and the studio Orpheans (conductor, Tom L. Muller) will provide a programme of Christmas music and carols. At midnight, after the season's greetings have been extended to listeners, a change over will be made to St. Stephen's Cathedral, from whence the solemn midnight Mass will be relayed. 4QG will close down at the termination of the service.

### Radio Mystery Play

ANOTHER radio mystery play by W. S. Mew, entitled, "The Sarcophagus," will be presented from the studio at 4QG on January 3. The prologue to the play is laid in the land of Egypt. The scene of the play itself is in the English home of Sir Arthur Colville. The play, which is most weird and mysterious, will cease at a most baffling point, and listeners will be asked to attempt to solve it, and to post their ideas to the station. A prize of £2/2/ will be awarded to the writer of the best solution. The play will be reviewed on the night of Tuesday, January 8, and will be taken up at a suitable point and enacted to the end. The name of the prize-winner will then be announced.

## Radio Eisteddfod Will Culminate in Town Hall Concert

THE Radio Eisteddfod, which is being conducted by the New South Wales Broadcasting Company, Limited, has entered into the last and most interesting stage. The finalists were chosen and broadcast throughout last week to enable the adjudicators to select the winners and the successful competitors are appearing at the final concert, to be held at the Sydney Town Hall on Tuesday December 18.

The adjudicators had a particularly hard time in selecting the finalists, and it was found necessary to conduct further elimination tests. Mr. Peachell set aside three days in which to hear the various competitors, whose marks were so close that it necessitated a further opportunity of hearing them, and in this way nearly 200 competitors have personally appeared before Mr. Peachell.

On the evening of December 18 the public are to have an opportunity of hearing the winners, either from the Town Hall concert or through the service of 2BL and 2FC. During the course of the evening the presentation

of prizes will take place from the Sydney Town Hall.

The first half of the concert will be broadcast by 2FC, when the successful competitors in the following sections will be heard: Section 2, mixed choir; section 16, champion violin solo; section 7, winner of the soprano solo; section 5, mixed quartet; section 10, winner of the tenor solo; section 18, 'cello solo; section 1 church choir; section 26, impromptu announcer; section 12, winner of the bass solo; section 32, best original Australian pianoforte composition; section 34, winner of the grand vocal championship. The transmission through 2FC will conclude with the presentation of prizes to the competitors, and the winners of the public voting contest.

The second half of the concert, to be broadcast through 2BL, will include winners of section 4 female choir; section 21, saxophone solo; section 8, winner of the mezzo solo; section 14, champion pianoforte solo; section 9, winner of the contralto solo; section 6, male quartet; section

33, best original Australian violin composition; section 22, dance band; section 3, male choir.

The winner of the best Australian original song, entitled, "Some Distant Day," is Mrs. Varney Desmond Monk, who is a well-known composer of songs and instrumental pieces, and is the wife of Mr. Cyril Monk. She has already had a number of compositions published in Australia. The winner of the best original Australian pianoforte composition, entitled, "A Spring Morn," is Mrs. Milly de Groen, and the successful competitor in the section for the best original Australian violin composition, entitled, "Reverie in D," is Mr. Edwin John Phillips. Both of these winners have a number of compositions to their credit. Messrs. W. H. Paling and Company have put in hand immediately the printing of these three compositions, and Messrs. G. H. Horton and Company are arranging to cut a "Master-touch" player roll of the winning pianoforte composition, "A Spring Morn."

The proceeds from the concert will go towards providing a scholarship at the N.S.W. Conservatorium of Music.



# 3LO Short-wave Broadcasts Heard in Other Countries

(By Our Melbourne Correspondent)

**D**URING recent weeks, Australian stations have been heard in many distant parts. 3LO has received cablegrams from distant countries expressing appreciation of various items picked up on the short-waves. For some time past regular weekly sessions have been held for short-wave international broadcasts, and it was a regular thing to obtain reports of reception from places in the other continents. The recent experimental transmissions have been on different wave-lengths, and further places have been reached successfully. For it is a peculiarity of those short-wave transmissions that one wave-length is good for daylight reception in one place, while another is satisfactory for reception during the hours of darkness; and some waves reach distant points better than others.

The lesson learned from about twelve months' experimentation was to vary the wave-lengths for different periods. This lesson has been learned by broadcasting organisations in other countries as well. The British Broadcasting Corporation, more concerned with the receiving end of international broadcasts, arranged with the transmitting stations to use different waves and concentrated on reception at various points. Receivers set up in different localities, were all connected by wire to a central point, where the sum of the various receptions was "mixed." In that way the annoying effect of fading has been defeated to a certain extent.

It has been demonstrated that a short-wave transmission faded differently in localities quite close together, and with a multiplicity of waves transmitting the same programme the net reception made a practically complete unfaded result.

This multi-station method of reception has been successfully tested in West Australia, and the big radio companies in America are also using it successfully.

Another satisfying feature of the short-wave broadcasts from 3LO has been the successful re-broadcasts from other Australian stations. Although not entirely successful, the results have been very encouraging. So much so that the use of short waves for relaying the main programmes from Melbourne or Sydney to stations in other States is deserving of more attention than in the past. Relying on the experience in other countries, it was concluded some months ago that there was but little to be expected from the short wave as a means of relaying. The land-lines were to be relied on. The transmission over many hundreds of miles of lines, and in some cases over shorter distances, has not always been satisfactory. And the difference between noisy land line transmission and fading short-wave

transmission is not likely to be very great if the progress promised by the recent experiments eventuates.

One would not say that the wireless method of relaying to-day is nearly as good as the wire method, but when the costs of land lines are considered, and the risks of interruption owing

to fire or flood or storm, then the cheaper means of wireless relaying demands further consideration. If the progress continues and a greater degree of dependability is assured, the problem of relaying a big high-class programme throughout Australia will be easier of solution.

## A Mechanical Man Who Talks

**T**ELEVOX," the Westinghouse mechanical man, who has won world fame for his amazing ability to execute commands given him over the telephone, has learned to talk.

Now, when his master (Roy J. Wensley) calls him on the 'phone Televox answers in a deep bass voice, telling who he is and that he is ready to go to work.

Mr. Wensley, an eminent member of the Switchboard Engineering Department of the Westinghouse Electric and Manufacturing Company of the United States, enabled his automaton to talk by incorporating into its parts of another outstanding development of the electric art, talking "movies." The result is that when Televox hears the telephone ring a roll of film, carrying pictures of appropriate sound waves, is set in motion, producing a suitable sentence, and sending it back over the telephone wires to the operator.

For example, under the present arrangement Wensley dials Televox's number, Marine 2608, on an ordinary automatic telephone. After a moment's pause he hears this reply:

"This is Televox speaking from Marine 2608."

Since the Televox was first constructed it has been able to carry on a conversation with the person at the other end of the telephone connection. Heretofore, however, it has had to rely on a code of buzzer signals rather than words to communicate what it had to say. The new feature makes it possible for a person unfamiliar with the code to understand the Televox.

Upon order from Wensley the Televox immediately performs any pre-arranged operations. For instance, it turns a light on or off, starts or stops an electric fan or vacuum sweeper, blows a horn, or lifts its arm.

This man of copper veins, porcelain bones, and vital organs of vacuum tubes is more than a toy or an engineering curiosity, Mr. Wensley declares. It was constructed to meet very definite and important industrial requirements.

"By means of the Televox," he says, "a load despatcher of an electric power company or street railway can call up on any telephone unattended power plants or sub-stations, receive reports on the status of every machine in the station, and start or stop machines, open and close switches, and perform other operations at will.

"Automatic operation of electric machinery has been in use for several years, but all systems now employed

require special wires run from the supervising point to the station. Where stations are many miles away numerous such installations may be very expensive. Telephone connections to all points always exist, however, and by using these lines for supervisory control the cost of the control system is greatly reduced.

"Distance is no barrier to the operation of the Televox," says Mr. Wensley. "The operator may be in New York and the Televox in San Francisco, yet the apparatus will operate just as readily as if directed from the same room."

## Dynamic Speakers Cheaper

**S**O great has become the demand for dynamic loud speakers that Messrs. Mick Simmons, Ltd., report they are able to make an all-round reduction in the prices of these instruments.

The Cordova, with dynamic 700 unit, 240 volt, 60 cycle A.C., combining rectifier and power amplifier, which takes the place of last audio stage in set, and operates with one 381 or 281 tube, and one 310 or 210 tube, is now quoted at £67/10/.

The Senior Beverley model is now priced £11, the Junior Beverley £10. The Belvedere £11/10/, and the Aristocrat model £15/10/.

The dynamic units themselves are now cheaper, ranging in price from the No. 700 at £45, to the 6 and 7 at £7/15/.

These speakers represent the very latest development in design and reproduction, and are well worth inspection—especially at the reduced prices.

## Request Night

**S**TATION 4QG announced recently that a night would be set apart for the broadcasting of items requested by listeners. So many requests reached the station, however, that listeners' wishes were sufficient to fill three programmes. It has been decided to grant as many of the requests as possible, and two additional nights, December 21 and January 7, have therefore been set apart for request items.

## Lance Fairfax at 3LO

**S**TRAIGHT from his success in "The Desert Song," Lance Fairfax, one of the most popular artists in Melbourne at the moment, will be singing from 3LO on Sunday, December 16.



Sydney:  
25 New Royal Arcade  
(near Palace Theatre).  
'Phone M6138.

Newcastle:  
13 Union Street, off Hunter  
Street West.  
'Phone: 1622.

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## Some Quality Parts for the ANYSET QUALITY AMPLIFIER

Bakelite Panels, 12 x 7 x $\frac{1}{8}$ .....	3/6
Hard Rubber Panels, 12 x 7 x 3-16 .....	4/3
Radion Panels, 12 x 7 x 3-16 .....	5/3
AWA Spring UX Sockets .....	3/-
Ferranti AF3 Transformers .....	45/-
BMS Single Circuit Jacks .....	1/7
4MF 700-volt Test Condenser .....	10/6
Radiokes Radio Frequency Chokes .....	8/6
Pollock Radio Frequency Chokes .....	5/6
Wetless .00025 Grid Condensers .....	1/9
Toggle Battery Switch .....	1/6
Mullard P.M.6 Valves .....	13/6
Cossor 610P Stenton Valves .....	15/-

# THE ECONOMIC RADIO STORE

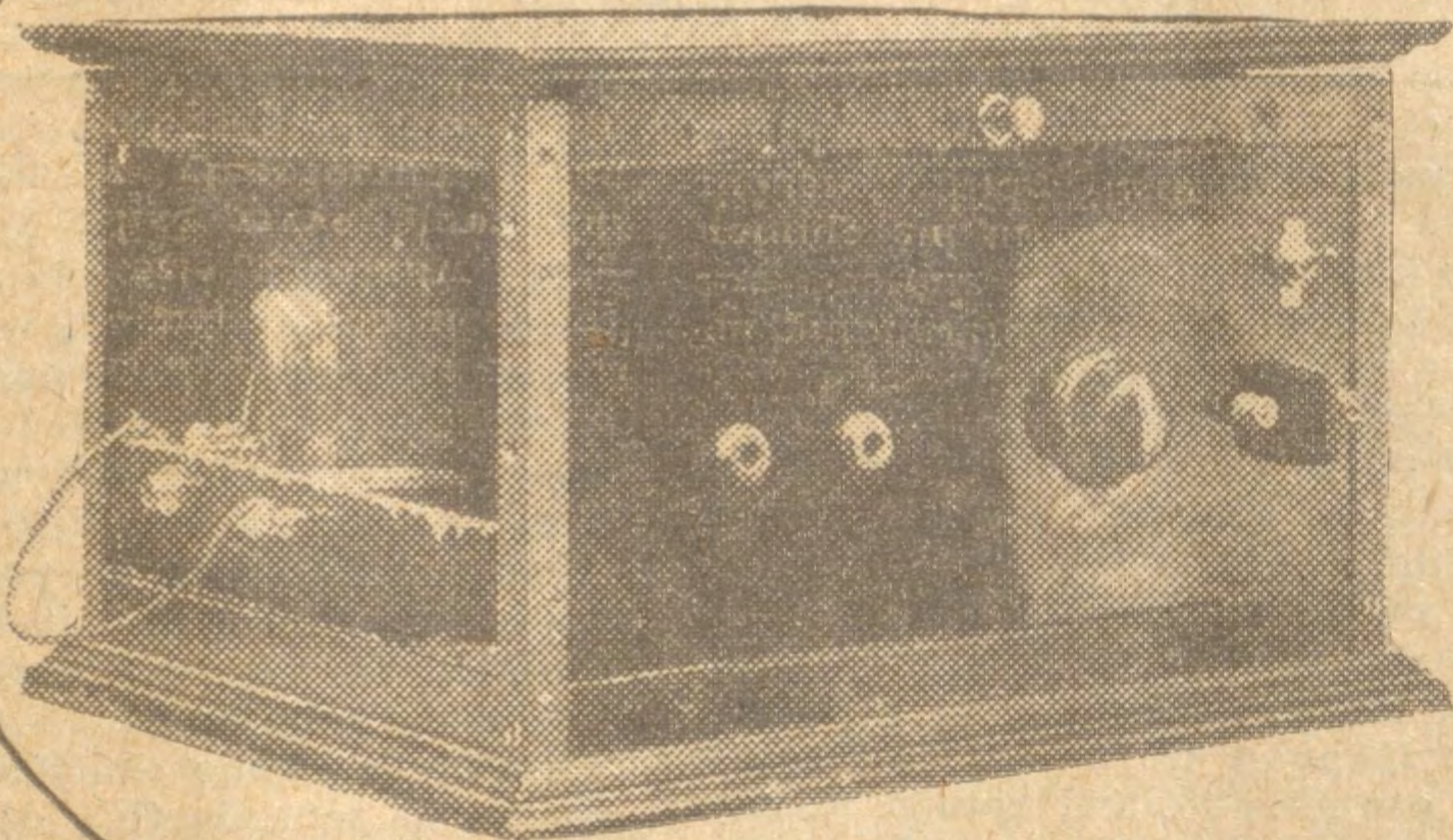
Parramatta:  
Cnr. Church and Macquarie  
Streets.  
'Phone: UW9601.

Orange:  
120A Summer Street.  
'Phone, Orange 735.



# The ANYSET

## Quality Amplifier



By  
DON. B. KNOCK  
(Associate Technical  
Editor)

IT is one matter to throw a set together with any sort of indifferent components, and another to study carefully, before acting, just what you expect to get out of that set. Most certainly everyone does or should think first about the degree of quality in these times. The days of "blaring" loud speakers are over, and the prospective customer walking into a radio store is not likely to be favorably impressed if the unfortunate salesman is compelled to render demonstrations with instruments which look well but sound awful.

Have you ever been obliged to carry on a conversation when, at the same time, a raucous loud speaker is telling you, with the full blast of metallic ringing distorted tones, that "the next item will be the popular fox trot, 'Horses'?"

I have, and I well remember a business deal being hurriedly closed by a disgusted client who tried to get a word in edgeways in competition with an overpoweringly loud loud speaker in an office. He turned round to the "business" man, who liked to accompany his deals with foolish pride in his wireless accomplishments, and said, "Well, if we have GOT to have that confounded noise, . . . good morning!"

Perhaps if a sweet-toned, soft reproduction had been hovering in the background with pleasant music, the deal might have been conducted to their mutual benefit. Good and appropriate music has a remarkable effect on human emotions, as most people are aware, and the effect is good or bad, according to the sounds heard.

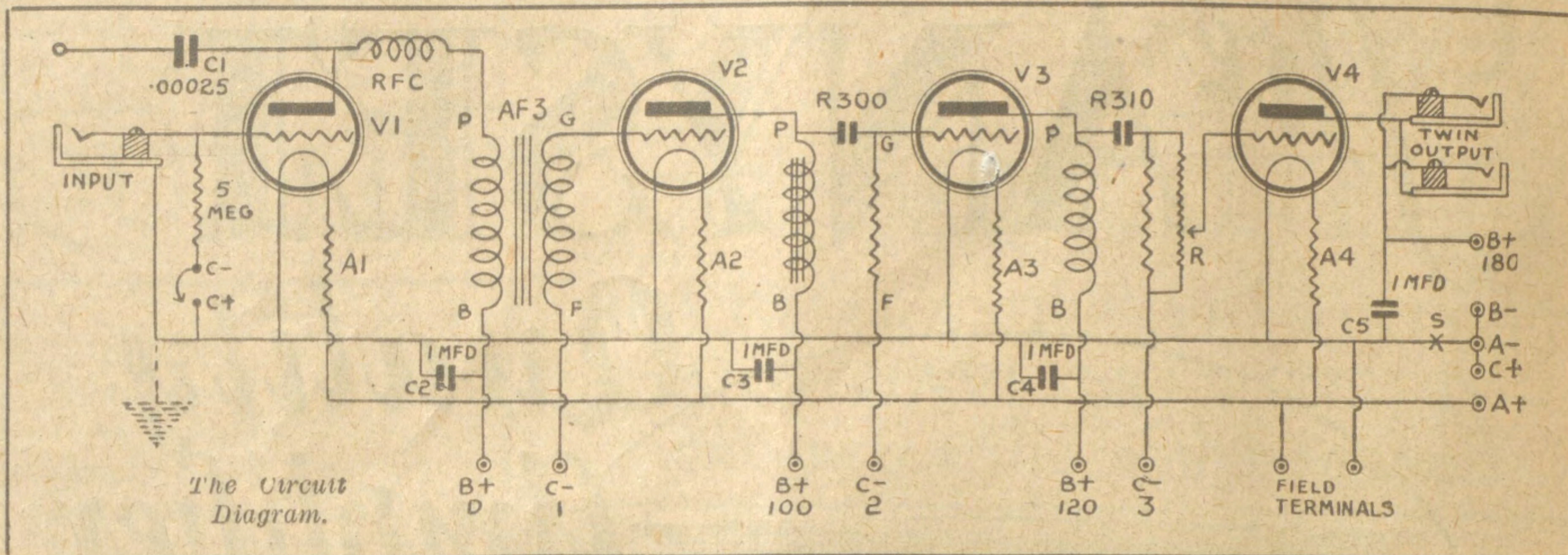
And so, we come again to the word "QUALITY." The factors which go to make up first-class quality reproduction are three in number. First, we have the actual transmission itself; then the receiver used to pick up the transmission; and, lastly, the loud speaker responsible for the conveyance of the sounds to the human ear. If we have two of these factors in good order and functioning as they should, we are still at a serious loss if the third factor is faulty and misbehaving itself, and, so, we cannot, under these circumstances, hope to get the high-grade reproduction which is, or, rather, should be, the goal of every serious-minded experimenter. Now, it is necessary to analyse these three factors and find out what we may do to make them each worthy of their status.

We will begin by approaching the fountain head. The transmissions from the broadcasting station should be of the highest possible quality, and it is a foregone conclusion that we are very fortunate in this respect in Australia. I have had the opportunity of hearing high and low power broadcasting stations at close range in both Europe and Australia, and, whereas there might have been a bone to pick two years ago, to-day our main Australian stations are radiating programmes with a technical perfection of quality which is second to none. The fidelity is such that we may go straight ahead with the other two factors and accept the first as granted.

The performance of receivers is, on the whole, very much at variance, and, although there are thousands of sets now in use which are giving of the best in selectivity and sensitivity, and the tuning is all desired, yet they are far behind the standard of high quality which is expected in these days. There are many loud speakers which will make the best possible showing within limitations, but there is one type which really does justice to the broadcast programme when a high-grade receiver is used with it.



# This Amplifier is Designed for a Variety of Uses



I refer here to the dynamic or moving coil speaker. In Sydney the Magnavox Dynamic speaker is obtainable from Mick Simmons, Ltd., Haymarket, and as yet this is the one speaker of this type available. Those who are using these latest of Magnavox speakers will agree that this dynamic speaker will reproduce with remarkable fidelity, and may be looked upon as being the best possible in modern loud speakers.

Then there are many cone type loud speakers on the market which will reproduce most of the low tones which are missing with the average horn loud speaker. Among these will be found the Amplion, MPA, Brown, Philips, Celestion, Gecophone, and Six Sixty. We may accept the fact, then, that we have many loud speakers (which are worthy of a better name in 1928 than **LOUD** speaker) which are true reproducers, and, yet, we have very few receivers capable of doing justice to these reproducers. The purpose of this article is to show "Wireless Weekly" readers how to make a really good amplifier, which, in addition, is more than an amplifier, as it may be used with any tuner before it. The detector valve for the preceding tuner is carried in the amplifier itself, and the whole arrangement is very flexible in operation, and is built, if required, to provide ample energy to actuate a first-class dynamic speaker, such as the Magnavox.

If we consider the reasons, we will see why this amplifier has been designed, and why it is that the average audio amplifier in most sets fails to do the work required. We have broadcasting stations transmitting impulses which are undistorted over a frequency range of from 30 to 8000 cycles per second. The dynamic speaker starts its reproduction at somewhere about 40 cycles, but a great number of horn loud speakers will not respond to anything below about 150 cycles. Fortunately, the many excellent cone reproducers available at present will outclass this by responding to the low notes with

more ease than the ordinary horn types.

It is interesting to peruse the number of letters I have had among technical queries, complaining that the sender of the letter gets good reception, but, if he turns the set on to full volume, the loud speaker begins to rattle. Right away he tacks the blame on an unoffending speaker! It can't be any good, so he takes it back to the manufacturers, who promptly put it through their service department, examine it, and return it, saying definitely that the speaker is in perfect order. Of course, there are cases of faulty armatures, but they are few and far between. What Mr. Querist has overlooked is that the last valve of the audio amplifier in his receiver is overloaded!

It will be new to many to hear that perhaps a hundred times more energy is necessary to give the same volume of sound on a low note as on a high note. For reproduction of the low notes it is necessary to use an output valve which is designed for a high grid bias, and it depends on three things as to how much you will vary this grid voltage. These are: What degree of amplification perfection you require; how much volume you require; and what your loud

speaker is capable of doing on the lower tone frequencies.

It is obvious that only a small percentage of readers will want to build an amplifier for one purpose alone, so the ANYSET quality amplifier is presented in the design submitted, with a view to making the instrument as adaptable as possible for a wide range of uses. It need not be confined to wireless purposes alone, for it may be used as an amplifier with gramophone pick-ups for the electrical reproduction of records.

A large variety of valves may be used, from the usual general purpose valves up to the latest super-power types. The valves used to test this amplifier for pick-up and wireless purposes are those mentioned later on.

Look at the circuit diagram. First we have the detector valve, which is coupled by a Ferranti AF3 inter-valve transformer to the first audio valve. This valve is coupled to the second by a Rauland Lyric R300 Impedance unit, and the second to the third by a Rauland Lyric R310 unit. It is perfectly feasible to put some form of substitute in place of these Rauland units, but it would be just as expensive, as only the best type of choke and resistance, such as the Ferranti and Mullard, is permissible here.

Across the grid and C negative terminals of the Rauland R310 unit, a 0 to 500,000 ohm Royalty potentiometer is shunted. This is the volume control, and is indispensable. Twin output jacks are provided for the output from the last valve. This is not essential, and one jack will suffice, but the reason I included two was because I used the amplifier before a good short wave tuner of the Reinartz type, and, by using one loud speaker myself in the operating room and another in the house, with connecting leads, I was able to let domestic interests participate in a transmission from 5SW, England! The idea is thus passed on for the benefit of those who may be interested in reproduction from two speakers in separate rooms.

## NEXT WEEK'S CIRCUIT

Next week Mr. Knock will describe the "Everyman's Screen-grid Four." This receiver gives the maximum possible amplification from a single R.F. Amplifier. It is a good distance-getter, and extremely easy to operate. In short, a modern receiver.



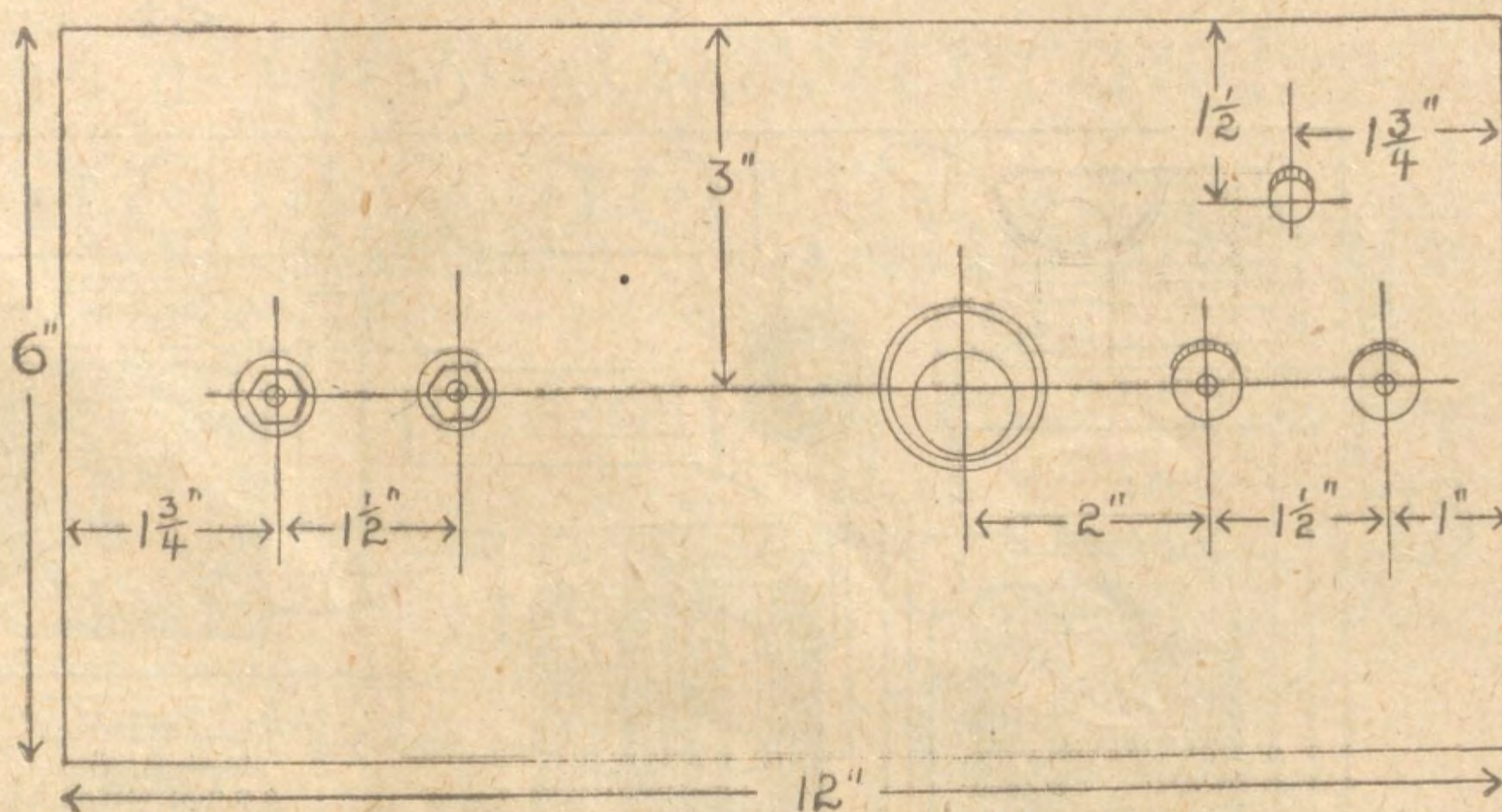
# Loud Speakers Are not Always to Blame for "Rattles"

Two terminals are provided for the field connections to a dynamic speaker. These are simply leads taken from the filament supply, which is six volts, as six-volt valves are used throughout. Each B positive supply is by-passed by a 1mfd TCC or Mansbridge condenser to the B negative, which will, in the case of most tuners, also be the earth.

It is possible that one may wish to use this amplifier behind a tuner, preceded by a screen-grid RF amplifier, so that the detector valve is arranged for grid biasing as well as with the usual grid leak arrangement. The amplification is often so heavy from screen grid RF amplifiers that it is sometimes necessary to give the detector a fairly heavy negative bias to enable it to oscillate smoothly and not be overloaded.

The input to the amplifier is taken by means of a single circuit jack and a separate lead. This lead has included a stopper condenser, with a fixed capacity of .00025 mfd. This is a protective device, to prevent shorting of the B supply if the tuner has a faulty reaction condenser. As the amplifier stands it is suitable for use with a Reinartz tuner of the kind used in the Minimax, described in "Wireless Weekly" for November 30.

If a tuner with a separate reaction coil is used, it will be necessary to disconnect the RF choke from the plate of the detector valve and to take this to another external input connection. To use this amplifier behind a crystal tuner it is only necessary to disregard the lead to the



The Drilling Template.

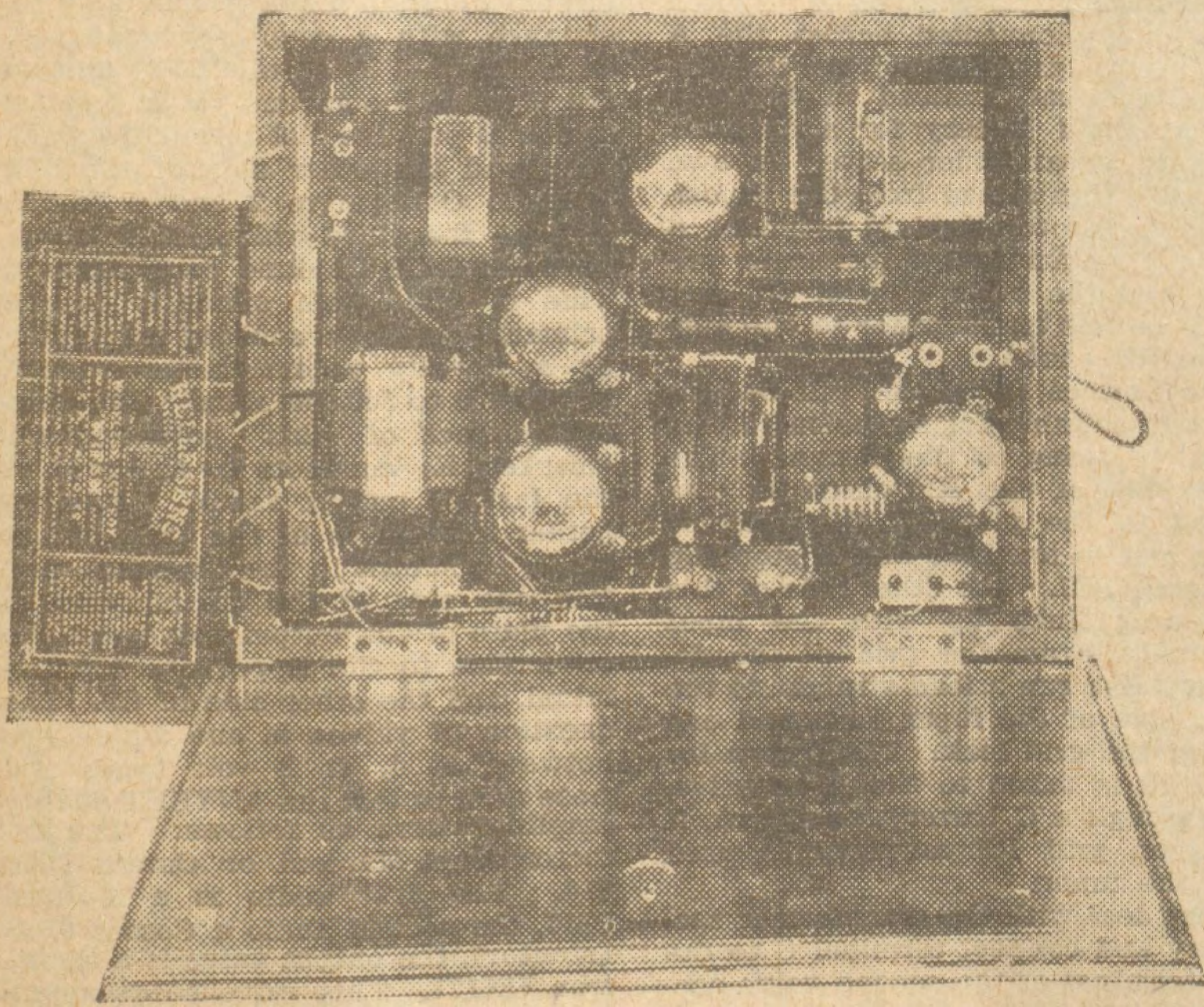
plate of the detector valve and to feed the output from the tuner direct to the grid and filament of the detector valve through the input jack. If you have an old cabinet handy, preferably of the square type, it will be an easy matter to cut a panel to suit it, so that the amplifier may be boxed in, as shown in the illustrations. If you have not got a cabinet, it is just as well to get one. There are many dealers around town who are selling for a mere song just this kind of cabinet, not very pretty to build a receiver in, but just the thing for this amplifier. The size of the panel you may wish to use is immaterial. The amplifier won't work any better if the panel is twice as big—so use your own discretion. The size given

with this description happened to be 12 x 6 inches. The photographs and the drilling diagram show how the controls are laid out. The two jacks on the left of the panel are the twin output arrangement explained previously with the knob for volume control, dynamic field terminals, and "on-off" switch on the right-hand side of the panel.

Mount these components on your panel first, and then assemble the valve sockets, transformer, impedance units, by-pass condensers, either on a baseboard, or, if you wish, on the floor of the cabinet itself. The original amplifier had a special multi-connector at the rear of the cabinet for all A and B battery connections, but I am showing the amplifier arranged as if for terminal wiring to avoid any confusion in tracing out the point to point diagram.

A ledge was made to carry a 30-volt dry battery inside the cabinet for the grid biasing voltages. One photograph shows this battery in position, and the other the battery removed to show the Rauland Impedance units, etc., underneath. Assuming that you are going to use terminals on a baseboard for battery connections, you will require 14. Eleven are for the batteries, one is alongside the input jack on the left, and two are on the panel for the dynamic field terminals. Each valve has an Amperite or Brachstat as a precautionary measure. It is an easy matter to change the resistances if one wishes to use 4-volt valves, and the risk of danger to the valves is minimised if a 6-volt supply is connected up with 4-volt valves in place.

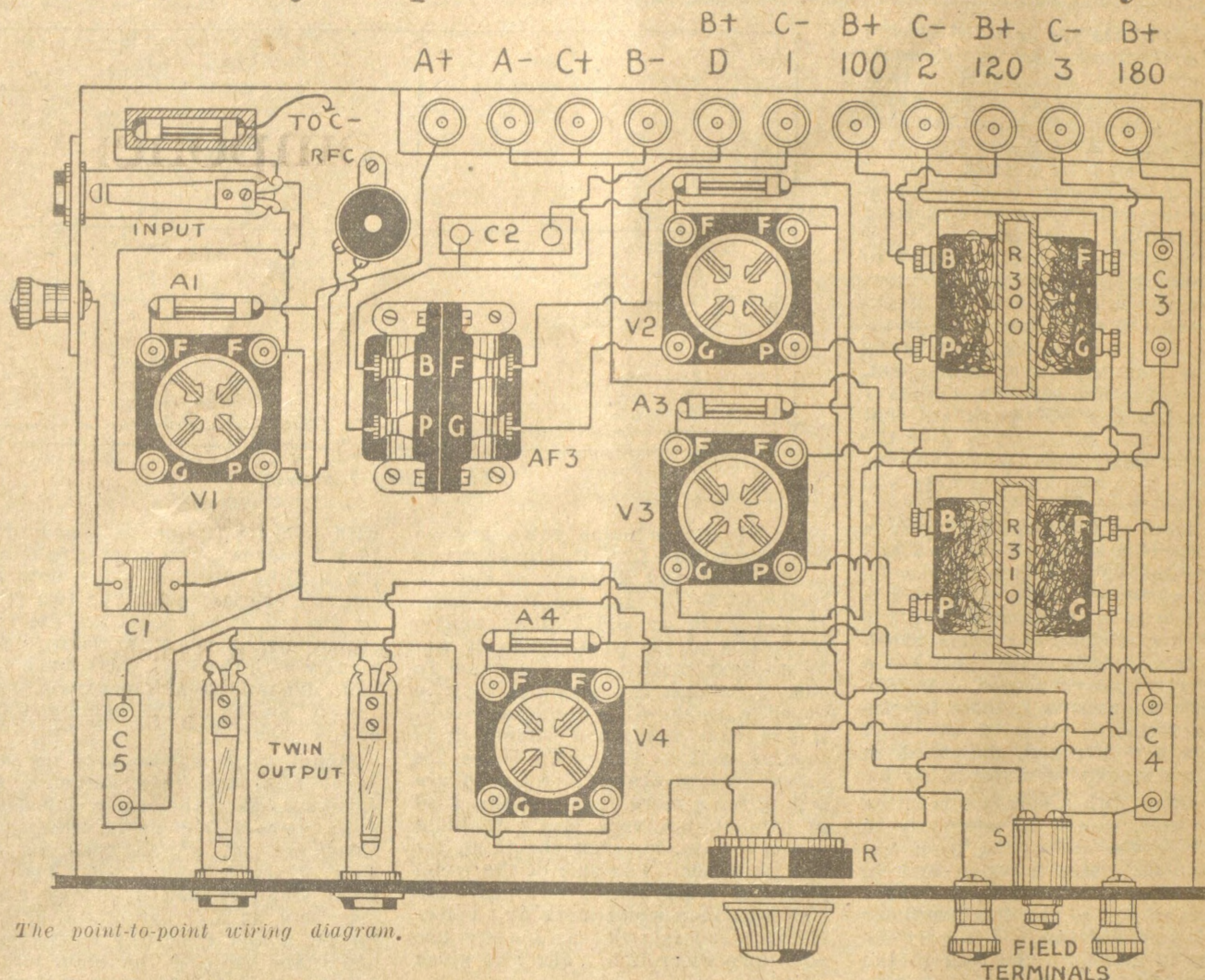
The wiring of the amplifier is done with 18-gauge tinned copper wire, used with insulating sleeving. Chromax or Glazite will be quite suitable for us alternatively. Arrange the 11 terminals for the A, B, and C batteries on a strip of bakelite, hard rubber or other insulating material, on the back edge of the baseboard. Support it in the usual manner by distance pieces



Showing grid-bias battery removed from amplifier to show lay-out.



# Real Quality Reproduction Achieved on "Anyset"



The point-to-point wiring diagram.

with wood screws running through to keep the underneath part of the terminals clear of the baseboard. You will save yourself a lot of trouble in wiring if a soldering tab is slipped under the head of each terminal, allowing the end of each tab to project toward the back of the panel. A short strip of bakelite screwed to the left-hand edge of the baseboard will mount the single circuit input jack and the plate connection terminal.

Joining together first the A negative B negative and C positive terminals on the battery strip, run a lead from these three to the "on-off" switch on the panel. From the other side of the switch run a bus bar, linking up the negative filament terminals of each valve socket, and continue to one side of the input jack. Make provision for biasing the detector valve, if required, by means of a short length of flex and a clip to include a C battery, and also join to this A negative bus bar one side of each 2 mfd by pass condenser. These condensers are marked C2, C3, C4, and C5. From the A positive terminal on the strip a bus bar is run to each automatic resistance, and the other side of each resistance to its respective A positive terminal on the valve socket.

The two dynamic field terminals on the panel beneath the "on-off" switch are simply connected across the A positive-A negative supply to the amplifier, so that, instead of using a separate field battery for a dynamic speaker, the amplifier serves its own purpose. Run a lead from the B positive detector terminal to terminal B of the Ferranti AF3 transformer primary and the other side of C1, and join P of this transformer to one side of the RF choke.

The Lewcos RF choke will be particularly suitable for inclusion in this amplifier owing to the design. The other side of the RF choke is connected to the plate of the detector valve and to one side of the stopping condenser, C1. The other side of this condenser links up with the input terminal. From the grid of the detector valve run a lead straight to the other side of the input jack, and one side of the grid leak. The return for the leak is taken to the A negative, but through a C battery, as shown, if a screen grid RF amplifier is used with the tuner.

Next deal with the transformer secondary and connect terminal G to the grid terminal of the second valve socket. F is joined to the C negative I terminal on the battery strip. The

Rauland R300 unit is shown in the circuit diagram as a choke and resistance with a coupling condenser. Join terminal P of the R300 unit to the plate of the second valve, and B to the B positive 100 terminal on the strip and the other side of C3. F joins to C negative 2 and G to the grid of the third valve. Next we have the R310 Rauland coupling unit. This is dealt with similarly in the primary, but the secondary is shunted by a Royalty potentiometer with a value of 0 to 500,000 ohms. The moving contact of this potentiometer (marked R) connects to the grid of the last or output valve. Join together both sides of the twin output jacks, as shown in the diagrams, and join one side of the combination to the plate of the output valve and the other side to the B positive 180 terminal, and the other side of C5. The question of valves is one which lies between 6, 4, or 2 volt types and those used to test the ANYSET quality amplifier were as follows: The detector is a Marconi or Osram DEP 610. The first audio is a Mullard PM6, the second audio a Cossor 610P (stentor), the output valve is a Radiotron UX171. This valve needs approximately a bias voltage of 12 volts, with a plate voltage of 180. Many



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cause of their correct design and accurate manufacture they can be used with equal success throughout the broadcast band and way down on all the shorter wavelengths in use to-day.

This is a giant size illustration, for in reality these little instruments are quite small, being only  $\frac{7}{8}$  in. diameter, and they sell at a small price too, only 8/6 each.

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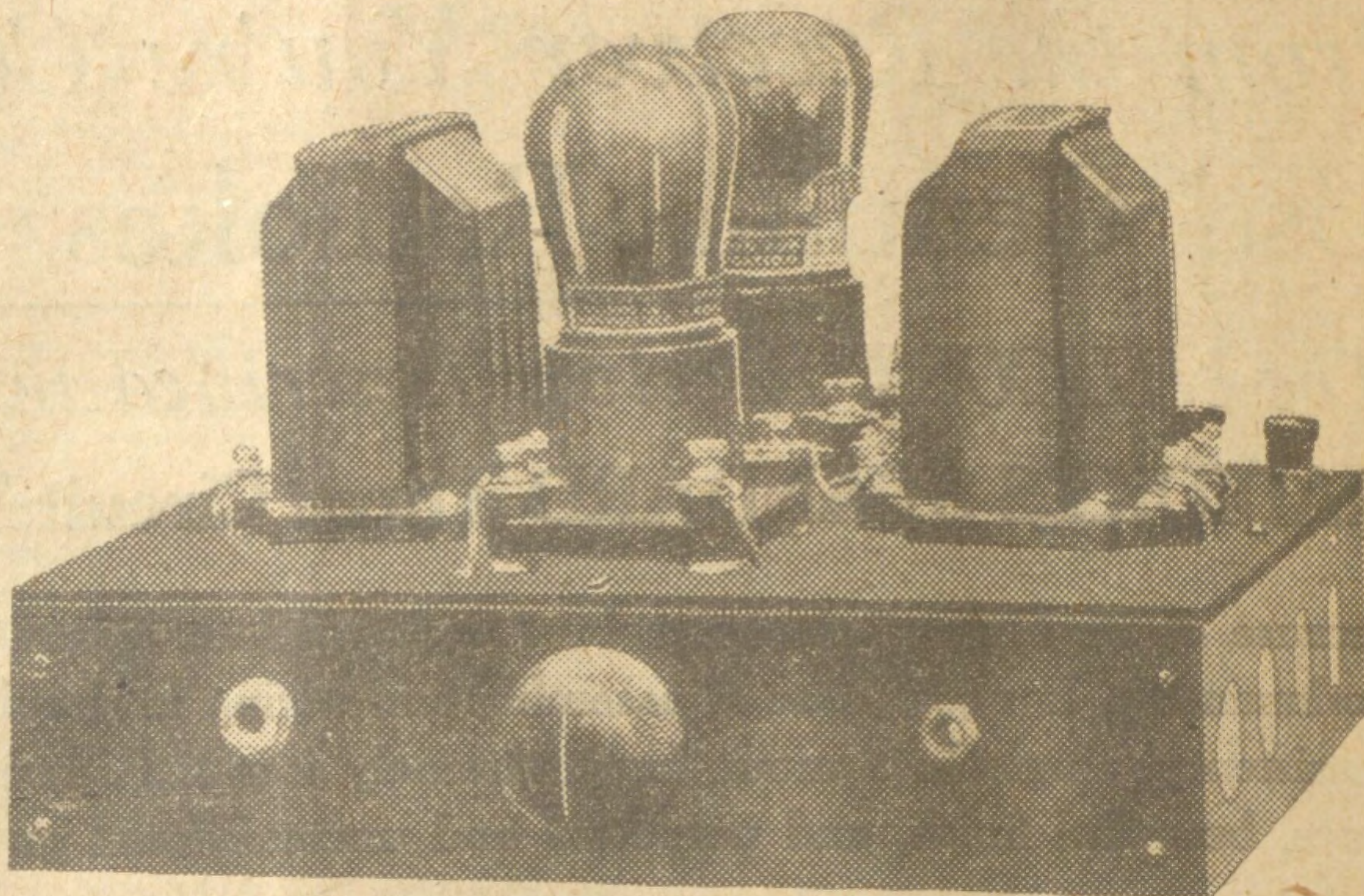


## Ideal for Experimeter Testing New Circuits

other combinations of valves can be used with equal success, but the grid biasing must be adjusted to suit the valves used.

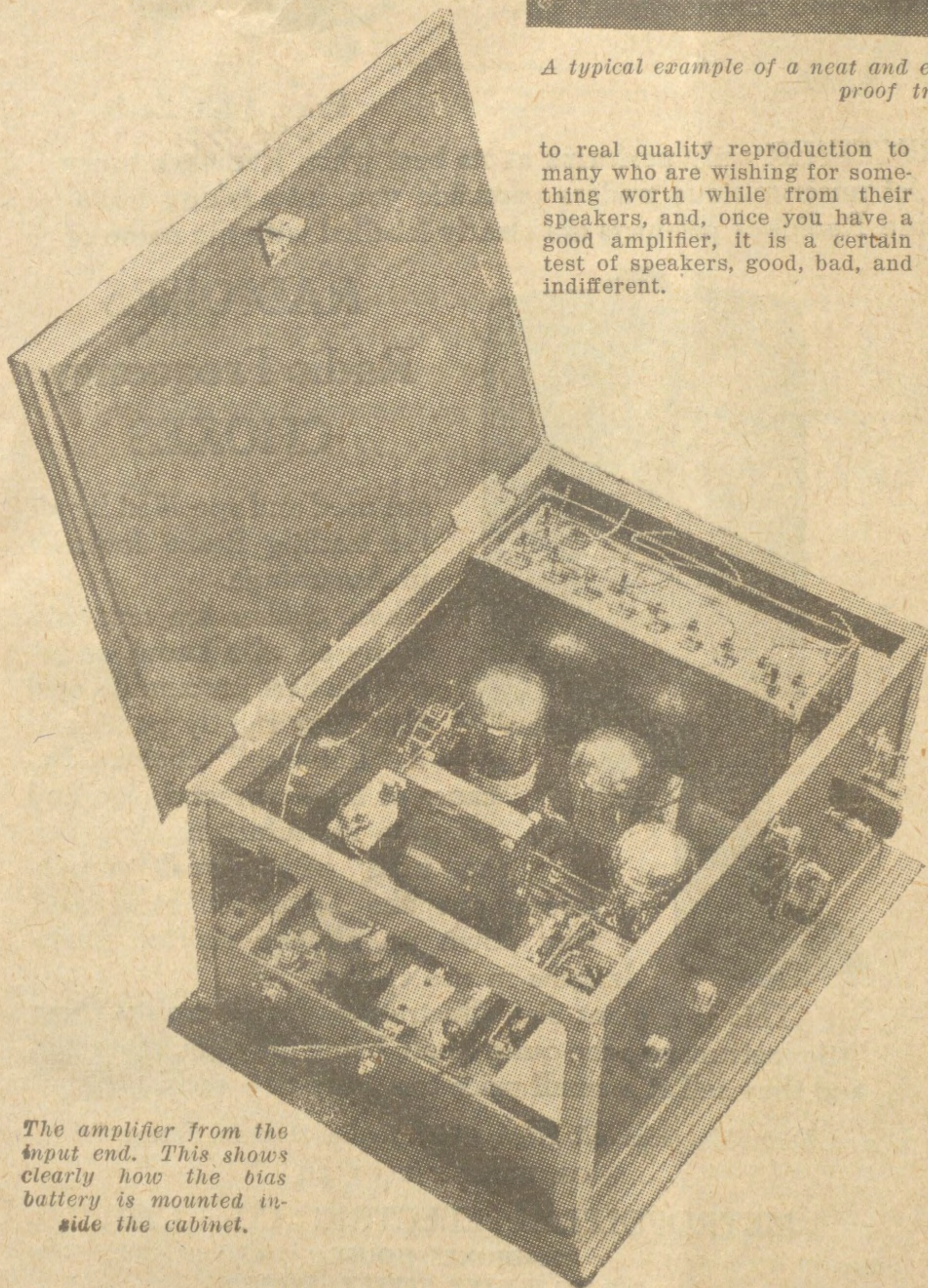
The amplifier has a wide variety of uses, and is the ideal piece of apparatus for the experimenter who wishes to try many circuits. By using the ANYSET quality amplifier he has the knowledge that his audio amplifier will always give the best in perfect fidelity of reproduction. It is really essential to use either a good accumulator B battery or an eliminator, as the drain will be too heavy for ordinary low capacity dry cells. The Oldham B accumulators are used with this amplifier in the "WIRELESS WEEKLY" test-room, and a very suitable B eliminator is the Philips B and C type.

This description will show the way,



*A typical example of a neat and efficient amplifier, using Pilot moisture-proof transformers.*

to real quality reproduction to many who are wishing for something worth while from their speakers, and, once you have a good amplifier, it is a certain test of speakers, good, bad, and indifferent.



*The amplifier from the input end. This shows clearly how the bias battery is mounted inside the cabinet.*

### List of Parts for the Anyset Quality Amplifier

- 1 5 megohm Mullard grid leak, rubber panel, 12 x 6 x 3-16 in.
- 4 AWA, Emmco, or Benjamin UX valve sockets.
- 1 Ferranti AF3 Audio transformer.
- 1 Kauland Lyric R300 Audio coupling unit.
- 1 Kauland Lyric R310 Audio coupling unit.
- 3 Single circuit jacks.
- 4 1 mfd TCU or Mansbridge fixed condensers.
- 1 Wetless .00025 fixed grid condenser.
- 1 LEWCOS, Radiokes, or Wetless radio frequency choke.
- 1 5 megohm Mullard grid leak, with clip mounting.
- 1 Royalty Potentiometer, 0 to 500,000 ohms.
- 4 Amperites, or Brachstats.
- 14 Terminals.
- 1 Battery switch.
- 1 30-volt C battery.
- Valves recommended.
- 1 Osram or Marconi DEP 610.
- 1 Mullard PM6.
- 1 Cossor 610P (Stentor).
- 1 Radiotron, or QRS UX 171.
- 18-gauge tinned copper wire, insulating sleeving, solder, etc., or Chromax or Glazite wire.
- 1 Baseboard.



# The WONDERFUL COLMOVOK RECEIVERS



*Always have been and always  
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Deposit, £3.	Weekly, 6/2.	Deposit, £13/10/.	Monthly, £3/6/8.
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Deposit, £5.	Weekly, 9/8.	Deposit, £20.	Monthly, £3/6/8.

## Colville Moore Wireless Supplies Limited

Telephone, B2261.

**10 Rowe St., Near Hotel Australia Sydney**



# Broadcasting Stations

AUSTRALIA.			Metres. Watts.		Metres. Watts.	
New South Wales.			5KA—Sport Radio Ltd., 51 Kin-tore Ave., Prospect .....		WJZ—National B'casting Co., 195 Broadway, New York ..	
2FC—N.S.W. B'casting Co., Ltd., Market St., Sydney .....	442	5000	Western Australia.		FL—Eiffel Tower, Paris, France	
2BL—N.S.W. B'casting Co., Ltd., Market St., Sydney .....	353	5000	6WF—Westralian Farmers Ltd., 569 Wellington St., Perth ..		EUROPE.	
2GB—Theosophical B'casting, 29 Bligh St., Sydney .....	316	3000	Tasmania.		JAPAN.	
2KY—Trades and Labour Council, Goulburn St., Sydney .....	280	1500	7ZL—Tasmanian B'casters Ltd., 95 Elizabeth St., Hobart ...		JOAK—Tokyo Central B'casting Co., Tokyo, Japan .....	
2UW—			NEW ZEALAND.		JOBK—Osaka Central B'casting Co., Osaka, Japan .....	
2UE—Electrical Utilities, Ltd., 619 George St., Sydney .....	293	250	1YA—Radio B'casting Co. of N.Z., Karangahope Rd., Auk.		JOCK—Nagoya Central B'casting Co., Nagoya, Japan .....	
2MK—Mockler Bros., Hawick St., Bathurst .....	275	250	2YA—Radio B'casting Co., Wel-lington .....		JODK—Keijo B'casting Co., Keijo, Japan .....	
2HD—H. A. Douglas, King St., Newcastle .....	288	100	3YA—Radio B'casting Co. of N.Z., Christchurch .....		DUTCH EAST INDIES.	
2BE—Burgin Electric Co., Ltd., 340 Kent St., Sydney .....	316	100	4YA—Radio B'casting Co. of N.Z., Dunedin .....		JFC—Bataviasche Radio, Jereen-ing, Batavia .....	
Victoria.			GREAT BRITAIN.		PHILIPPINE ISLANDS.	
3LO—Dominions B'casting Co., Ltd., 120a Russell St., Melb.	371	5000	2LO—British B'casting Co., Savoy Hill, London .....		KZRM—Radio Corp. of The Philippines, Manila, Philip-pine Islands .....	
3AR—Dominions B'casting Co., Ltd., 120a Russell St., Melb.	484	1600	5XX—British Broadcasting Co., Daventry .....		KZKZ—Radio Corp. of the Philippines, Manila, Philip-pine Islands .....	
3UZ—O. J. Nilson & Co., Bourke St., Melb. ....	319	100	UNITED STATES OF AMERICA.		KZIB—Radio Corp. of the Philippines, Manila, Philip-pine Islands .....	
3DB—Druleigh Business College, Melb. ....	255	500	KDKA—Westinghouse Elec. and Mfg. Co., East Pittsburg, Pa.		INDIA.	
Queensland.			KFI—Earle C. Anthony Inc., 1000 So., Hope St., Los Angeles		7CA—Indian Broadcasting Co., Calcutta .....	
4QG—Queensland Govt. Radio Service, Brisbane .....	385	5000	KGO—General Electric Co., Oakland, California .....		7BY—Indian Broadcasting Co., Bombay .....	
4GR—Gold Radio Service, Margaret St., Toowoomba .....	294	100	KOA—General Electric Co., 1370 Krameria St., Denver, Colo.		SOUTH AFRICA.	
South Australia.			WEAF—National B'casting Co., 195 Broadway, New York ..		WAMG—African B'casting Assn., Cape Town, South Africa ..	
5CL—Central B'casters, Ltd., 59 Franklin St., Adelaide .....	395	5000	WGY—General Electric Co., So. Schenectady, N.Y. ....		JB—African B'casting Co., Johannesburg, South Africa,	
5DN—5DN Pty., Ltd., 2-4 Mont-perier St., Parkside .....	313	500				

## Short Wave Broadcasting Stations

AUSTRALIA.		Wavelengths.		Wavelengths.		Wavelengths.	
2ME—A.W.A. (Syd.) station used for 2FC transmissions .....		28.5		WHAM—Rochester, N.Y. ....		Various.	
2YG—Ray Allsop (Syd.) station used for 2BL transmissions .....		32.5		WGY—Schenectady, N.Y. ....		15-100	
3ME—A.W.A. (Melb.) station used for 3LO transmissions .....		32.		WIZ—R.C.A., N. Brunswick, N.Y. ....		61.06	
4.30 a.m. to 6.30 a.m. every Monday (Melb. time).				WJZ—Bound Brook, N.J. ....		Various.	
6AG—W. E. Coxon (Perth) station used for 6WF transmissions .....		32.9		WLW—Crossley Radio, Cincinnati ..		52.	
GREAT BRITAIN.				WOW—Fort Wayne, Indiana .....		22.80	
5SW—Marconi Company, Chelms-ford, England .....		24		WRNY—Coteyville, N.J. ....		30.91	
2YT—Poldhu, England, .....		25, 32, 92, 94		WBZ—Springfield, Mass. ....		70	
2NM—Gerald Marcuse, Queen's Park, Caterham, Surrey, England .....		32.5 and 28 metres		8XF—Cleveland, Ohio .....		66.04	
UNITED STATES.				WAAM—Newark, N.J. ....		65.18	
2XAA—Houlton, Maine, U.S.A. ....		21.99		KFBC—San Diego, U.S.A. ....		65.18	
2XAD—G.E.C. Schenectady, U.S.A. ..		21.96		2XAQ—Newark, N.J. ....		65.4	
2XAF—G.E.C. Schenectady, N.Y. ....		32.7		XJ—Columbus, Ohio .....		54.02	
2ZAG—G.E.C. New York, U.S.A. 14, 16, 42.				2XBH—Coney Island, N.Y. ....		54.02	
2XAC—W.G.Y. Radio, Schenectady 15 to 100				WCGV—Brooklyn, N.Y. ....		54	
2XBA—W.G.Y. Radio, Newark, N.J. ..		65.18		7XAD—Portland, Oregon .....		53.54	
2XAL—"Radio News," New York ....		30.91		8XAL—Harrison, Ohio .....		52.05	
2XE—Richmond Hill, N.Y. ....		22.1		6XAR—San Francisco, Calif. ....		33	
2XG—W.E.C. Rocky Point .....		16.02, 23.		2XAB—New York, U.S.A. ....		24	
6XAI—Inglewood, Cal., U.S.A. ....		66.04		WOWO—Fort Wayne, Indiana .....		22.8	
6XAR—San Francisco, Cal., U.S.A. ..		33		8XAO—Detroit, Mich. ....		32.	
8XK—c/o K.D.K.A., E. Pittsburg, U.S.A.		63.5, 42, 14.		INDO-CHINA.			
8XP—c/o KDKA, E. Pittsburg, U.S.A.		63.5, 42, 14.		HVA—Hanoi, Indo-China .....		31.5	
9XU—Council Bluffs, Iowa .....		61.06		HOLLAND.			
KDKA—Westinghouse Ltd., Pittsburg		63.5, 42, 26, 14.		PCJJ—Philips' Experimental Station, Hilversum, Holland		31.4	
KFKX—Hastings, Nebr. ....		56		PCLL—Philips' Lamps, Ltd., Kootwijk, Holland .....		32.5, 46	
NPG—San Francisco, Cal., U.S.A. 40, 43, 81.				PCTT—Philips' Lamps, Ltd., Kootwijk, Holland .....		21	
NXX—Bellevue, Anna, D.C., 16, 17, 20, 50, 54, 71, 81, 84.				PCMM—Philips' Lamps, Ltd., The Hague, Holland .....		25	
WCY—Schenectady, N.Y. ....		32, 79, 32.5		PCPP—Philips' Lamps, Ltd., Kootwijk, Holland .....		27	
WGN—W.E.C. Long Island, N.Y. ....		75		PCUU—Philips' Lamps, Ltd., The Hague, Holland .....		42	
				UNION OF SOVIET SOCIALIST REPUBLICS.			
				RFN—U.S.S.R. Moscow .....		29, 60, 59	
				RFM—U.S.S.R. Siberia .....		60, 30	
				ITALY.			
				IMI—Unione Radiofonica, Milan .....		45	
				IDO—Ido Radio, Italy .....		33.5	
				IAX—Rome, Italy .....		45	
				SOUTH AFRICA.			
				JB—Johannesburg Bd'g. Co., Cape Town .....		20, 25	
				JAPAN.			
				JHBB—Ibarakiken, Japan .....		37.5	
				JIPP—Tokio, Japan .....		20	
				JIAA—Iwatsuki, Japan .....		79	
				JKZB—Tokio El. Co., Tokio .....		20	
				GERMANY.			
				AGJ—Naven .....		56.7	
				POX—Naven .....		70	
				POZ—Naven .....		19	
				EH9XD—Zurich Radio Club .....		85, 32.	
				AGC—Naven .....		17.2	
				NORWAY.			
				LGN—Bergen, Norway .....		30	
				SWEDEN.			
				7MK—Copenhagen .....		39.2	
				7RL—Copenhagen .....		42.72	
				AUSTRIA.			
				OKK2—Vienna, Austria .....		70	
				SPAIN.			
				—Casablanca, Spain .....		51	
				FRANCE.			
				GC—Radio LL, Paris .....		61.	
				YR—Lyon, Rhone .....		40, 20	
				FL—Eiffel Tower, Paris .....		32	
				SWITZERLAND.			
				EH9OC—Berne, Switz. ....		32	
				JAVA.			
				ANF—Malabar .....		58	
				JFC—Bataviasche Radio, Batavia ..		22, 40.	
				ANDIR—Bandoeng .....		38.5	
				ANE—Malabar .....		32, 31.26, 15.93	
				ANH—Malabar .....		17.4, 27, 32	



# BROADCASTING PROGRAMMES

## For the COMING WEEK

### Friday, December 14

New South Wales Broadcasting  
Company, Limited

#### 2FC SERVICE

Wave Length, 442 metres

##### EARLY MORNING SESSION.

Announcer: Laurence Halbert.

- 7 a.m.: "Big Ben" and announcements.
- 7.2 a.m.: Official weather, forecast, rainfall, river reports, temperatures, astronomical memoranda.
- 7.5 a.m.: "Sydney Morning Herald" summary.
- 7.10 a.m.: Shipping intelligence, mail services.
- 7.12 a.m.: Studio music.
- 7.22 a.m.: Investment market, mining share markets, metal quotations.
- 7.28 a.m.: Wool sales, breadstuffs markets, inter-State markets, produce markets.
- 7.35 a.m.: Studio music.
- 8 a.m.: "Big Ben." Close down.

##### MORNING SESSION.

Announcer: Laurence Halbert.

- 10.0 a.m.: "Big Ben" and announcements.
- 10.2 a.m.: Pianoforte reproduction.
- 10.10 a.m.: "Sydney Morning Herald" news service.
- 10.25 a.m.: Studio music.
- 10.45 a.m.: A talk on Home Cooking and Recipes by Miss Ruth Furst.
- 11.0 a.m.: "Big Ben." A.P.A. and Reuter's cable services.
- 11.5 a.m.: Close down.

##### MID-DAY SESSION.

- 12 noon: "Big Ben" and announcements. From the Sydney Cricket Ground, description of play in the 2nd Test cricket Match, England v. Australia.
- 1.30 p.m.: From the studio: Stock Exchange, second call.
- 1.32 p.m.: Weather forecast.
- 1.34 p.m.: "Evening News" mid-day news service; Producers' Distributing Society's report.
- 1.42 p.m.: Rugby wireless news.
- 1.45 p.m.: Studio music.
- 2 p.m.: "Big Ben." Close down.

##### AFTERNOON SESSION.

Announcer: Laurence Halbert.

- 2.30 p.m.: Programme announcements.
  - 2.32 p.m.: Educational session for the schools.
  - 3.0 p.m.: "Big Ben"; pianoforte reproduction.
  - 3.16 p.m.: Greta Callow, soprano, (a) "The Wood-Pigeon" (Liza Lehmann), (b) "Rondel" (Clive Carey).
  - 3.23 p.m.: Fosse Brakel, contralto.
  - 3.29 p.m.: From the Wentworth, the Wentworth Cafe Dance Orchestra, under the direction of Mr. Jimmy Elkins.
  - 3.45 p.m.: From the Studio, cricket scores; a Reading.
  - 4.0 p.m.: "Big Ben." Greta Callow, soprano, (a) "To one who Passed Whistling" (Armstrong), (b) "The Cuckoo Clock" (Grant-Schaefer).
  - 4.7 p.m.: Fosse Brakel, contralto.
  - 4.15 p.m.: From the Sydney Cricket Ground, description of the 2nd Test Match, England v. Australia.
  - 5.0 p.m.: "Big Ben." Close down.
- Note: Cricket description will be carried on by 2BL until stumps drawn at 6 o'clock.

##### EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

- 5.40 p.m.: The chimes of 2FC.
- 5.45 p.m.: The Hello Man talks to the children; letters and stories.
- 6.10 p.m.: The "Farmyard Five" from Kookaburra Gully.

- 6.30 p.m.: Dalgety's market reports (wool, wheat, and stock).
- 6.40 p.m.: Fruit and vegetable markets.
- 6.42 p.m.: Stock Exchange information.
- 6.45 p.m.: Weather and shipping news.
- 6.48 p.m.: Rugby wireless news.
- 6.50 p.m.: Late sporting news, told by the 2FC Racing Commissioner.
- 7.0 p.m.: "Big Ben"; late news service.
- 7.10 p.m.: Special record recital.

##### EVENING SESSION.

Announcer: A. S. Cochrane.

Accompanist: Ewart Chapple.

- 7.40 p.m.: Programme announcements.
- 7.47 p.m.: Pianoforte reproduction.
- 7.50 p.m.: Cricket resume for New Zealand listeners by M. A. Noble, England v. Australia, 2nd Test.
- 7.54 p.m.: Popular music.
- 8.0 p.m.: "Big Ben." By courtesy of J. C. Williamson, Limited, a theatrical transmission will be arranged from one of Sydney's leading theatres for the benefit of listeners.
- 9.10 p.m.: From the studio, weather report.
- 9.12 p.m.: The "Trio de Paris" in vocal and instrumental items.
- 9.27 p.m.: Charles Lawrence and Rae Foster, vocal duets.
- 9.37 p.m.: Beatrice Tange, pianoforte solos, (a) "Le Rossignol" (The Nightingale), (Liszt), (b) "The Contrabandists" (Schumann-Tausig).
- 9.47 p.m.: Charles Lawrence, popular numbers.
- 9.51 p.m.: The "Trio de Paris," in vocal and instrumental items.
- 10.0 p.m.: "Big Ben." Rae Foster, popular vocalist.
- 10.4 p.m.: Beatrice Tange, pianoforte solos, "The Cossack March" (Rachmaninoff).
- 10.14 p.m.: The "Trio de Paris," in vocal and instrumental items.
- 10.27 p.m.: To-morrow's programme.
- 10.30 p.m.: National Anthem. Close.

#### 2BL SERVICE

Wave Length, 353 metres

Friday, December 14

##### MORNING SESSION.

Announcer: A. C. C. Stevens.

- 8 a.m.: G.P.O. clock and chimes; metropolitan weather report.
- 8.1 a.m.: State weather report.
- 8.2 a.m.: Studio music.
- 8.15 a.m.: G.P.O. clock and chimes; news from the "Daily Telegraph Pictorial."
- 8.25 a.m.: Studio music.
- 8.30 a.m.: G.P.O. clock and chimes; studio music.
- 8.35 a.m.: Information; mails, shipping arrivals, departures, and sailings.
- 8.38 a.m.: News from the "Daily Telegraph Pictorial."
- 8.45 a.m.: G.P.O. clock and chimes; studio music.
- 9.30 a.m.: Half an hour with silent friends.
- 10 a.m.: G.P.O. clock and chimes. Close down.

##### MIDDAY SESSION

Announcer: Basil Kirke.

- 11 a.m.: G.P.O. clock and chimes; 2BL Women's Sports Association session, conducted by Miss Gwen Varley.
- 11.30 a.m.: Advertising hints.
- 11.40 a.m.: Women's session, conducted by Mrs. Cranfield.
- 12 noon: G.P.O. clock and chimes; special ocean forecast and weather report.
- 12.3 p.m.: Studio music.
- 12.30 p.m.: Shipping and mails.
- 12.35 p.m.: Market reports.
- 12.45 p.m.: Cricket scores, second Test match, England v. Australia.
- 12.48 p.m.: "Sun" midday news service.
- 1 p.m.: Studio music.
- 1.30 p.m.: From the Cricket Ground, cricket impression by M. A. Noble.

- 1.35 p.m.: From the studio, talk to children and special entertainment for children in hospital.
- 1.57 p.m.: Cricket scores.
- 2 p.m.: G.P.O. clock and chimes. Close down.

##### AFTERNOON SESSION.

Accompanist: Kathleen Roe.

- 2.45 p.m.: G.P.O. clock and chimes. From the Sydney Cricket Ground, description of the second Test match, England v. Australia.
- 4 p.m.: From the studio, Dismal Desmond, comedian.
- 4.7 p.m.: Captain Fred. Aarons, "Apelles, the Painter."
- 4.20 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.
- 4.30 p.m.: Kathleen Roe, pianist.
- 4.37 p.m.: Dismal Desmond, comedian.
- 4.45 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.
- 5 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia.

##### EARLY EVENING SESSION.

Announcer: J. Knight Barnett.

- 5.40 p.m.: Children's music and entertainment.
- 6 p.m.: Children's letters and stories.
- 6.30 p.m.: "Sun" news and late sporting.
- 6.40 p.m.: Special dinner music recital.
- 7.10 p.m.: Cricket scores.
- 7.12 p.m.: Australian Mercantile Land and Finance Company's report.
- Weather report and forecast, by courtesy of Government Meteorologist.
- Producers' Distributing Society's fruit and vegetable market report.
- Grain and fodder report ("Sun").
- Dairy produce report ("Sun").
- 7.25 p.m.: Mr. Pim and Miss Pam, in advertising talks and nonsense.
- 7.55 p.m.: Programme and other announcements.

##### EVENING SESSION.

Announcer: J. Knight Barnett.

Accompanist: G. Vern Barnett.

- 8 p.m.: G.P.O. clock and chimes.
- 2BL topical chorus.
- 8.3 p.m.: Dorothy Dewar and Jack Barnett, entertainers.
- 8.12 p.m.: From the Arcadia Theatre, Chatswood, Nicholas Robins playing the Wurlitzer organ.
- 8.22 p.m.: From the studio: The "Two Tones."
- 8.32 p.m.: The Bohemian Five, ballet suite, "Sylvia" (Delibes).
- 8.52 p.m.: Dorothy Dewar and Jack Barnett, entertainers.
- 9.2 p.m.: Weather report and forecast.
- 9.5 p.m.: Last minute sporting information, by C. Dexter.
- 9.17 p.m.: The Bohemian Five—
- (a) "American Suite" (Thurban).
- (b) "Wagneriana" (arr. Saar).
- 9.27 p.m.: The "Two Tones."
- 9.37 p.m.: The Bohemian Five—
- (a) "Canary Cottage" (Carroll).
- (b) "Stars of a Summer Night" (Stafford).
- 9.55 p.m.: Gardening talk by Mr. Cooper, Park Superintendent, City Council.
- 10.15 p.m.: From the Arcadia Theatre, Chatswood, Nicholas Robins playing the Wurlitzer organ.
- 10.30 p.m.: From the studio, the Savoyan Band, with popular choruses by Art Leonard.
- 10.57 p.m.: Resume of following day's programme.
- 10.59 p.m.: The Savoyan Dance Band, with popular choruses by Art Leonard.
- 11.30 p.m.: National Anthem.



## 2GB, SYDNEY

Theosophical Broadcasting Service  
Wave Length, 316 metres

Friday, December 14

10.0 a.m.: Music. 10.10 a.m.: Happiness talk by A. E. Bennett. 10.20 a.m.: Music. 10.30 a.m.: Women's session by Miss Helen J. Beegling. 11.30 a.m.: Close down. 2.0 p.m.: Music. 2.5 p.m.: Women's radio service by Mrs. Dorothy Jordan. 2.50 p.m.: Music. 3.0 p.m.: Talk. 3.15 p.m.: Music. 3.30 p.m.: Description housekeeping demonstration at Mark Foy's. 5.30 p.m.: Children's session by Uncle George. 7.0 p.m.: Stock and market reports by New Zealand Loan and Mercantile Agency, Ltd. 7.15 p.m.: Music. 8.0 p.m.: 2GB Instrumental Trio, Miss Ada Brook, Mr. Cecil Berry, Mr. Cedric Ashton. 8.20 p.m.: Songs by Mr. Barend Harris. 8.30 p.m.: Violin solos by Mr. Cecil Berry. 8.40 p.m.: Songs by Miss Flora Ingham. 8.50 p.m.: Pianoforte solos by Miss Mollie Jones. 9.0 p.m.: Weather report and address. 9.15 p.m.: Cello solos by Mr. Cedric Ashton. 9.30 p.m.: Songs by Mr. Barend Harris. 9.40 p.m.: Pianoforte solos by Miss Mollie Jones. 9.50 p.m.: Songs by Miss Flora Ingham. 10.0 p.m.: 2GB Instrumental Trio. 10.20 p.m.: Orchestral music. 10.30 p.m.: Close down.

## 2UW, SYDNEY

Radio Broadcasting, Limited  
34 Paling's Buildings, Ash Street,  
Sydney.

Wave Length, 267 metres

Friday, December 14

### MIDDAY SESSION

12.30 p.m.: To-day's anniversary. 12.32 p.m.: Music. 1.0 p.m.: G.P.O. clock and chimes. 1 p.m.: Music. 2 p.m.: Talks to women. 2.15 p.m.: "Cheerio Talk." 2.30 p.m.: Close down. 4.30 p.m.: Musical programme.

### EVENING SESSION

5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7.0 p.m.: G.P.O. clock and chimes. 7.0 p.m.: Music. 7.10 p.m.: News items. 7.30 p.m.: Musical interlude. 7.35 p.m.: Talk on Modern English Poetry. 8.0 p.m.: G.P.O. clock and chimes. 8.0 p.m.: Music. 9.0 p.m.: G.P.O. clock and chimes. 9.0 p.m.: Comments on foreign affairs by Mr. J. M. Prentice. 9.10 p.m.: Music and request numbers. 10.0 p.m.: Close down.

## 3LO, MELBOURNE

Broadcasting Company of Australia  
Wave Length, 371 metres

Friday, December 14

### EARLY MORNING SESSION.

7.15 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports; market reports; general news; shipping; sporting information. 8.0 a.m.: Melbourne Observatory time signal. 8.1 a.m.: Morning melodies. 8.15 a.m.: Close down.

### MORNING SESSION.

Announcer: Maurice Dudley.

10.45 a.m.: Rupert E. Wood, dietitian: "The Feeding of Children," part II. 11.0 a.m.: "Au Fait" will speak on "Fashions." 11.15 a.m.: Under the auspices of the Health Department, Dr. Featonby will speak on "Vitamines." 11.30 a.m.: Description of Sheffield Shield match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor.

### MIDDAY SESSION.

12.0 noon: Melbourne Observatory time signal; express train information. 12.1 p.m.: 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. 12.15 p.m.: Newmarket stock sales; special reports by John M'Namara and Co. 12.20 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. 1.15 p.m.: Meteorological information; weather forecast for Victoria, New South Wales, South Australia, and

Tasmania; ocean forecasts; river reports. 1.22 p.m.: Stock Exchange information. 1.24 p.m.: The Station Orchestra, "Kol Nidrei" (Bruch), "Riviera Scenes" (Brooke). 1.34 p.m.: Myrtle Robertson, violin, first movement of "Sonata" (Mozart). 1.40 p.m.: Close down.

### AFTERNOON SESSION.

2.0 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. 4.0 p.m.: Sonora recital. 4.15 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 5.0 p.m.: "Herald" news session; Stock Exchange information; acceptances and barrier positions for the charity race meeting to be held at Moonee Valley on Tuesday, December 18. 5.10 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 6.0 p.m.: Stumps scores of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. During the afternoon frequent broadcasts will be made of the progress scores of the Second Test match, between England and Australia, at Sydney.

### EVENING SESSION.

Announcer: Maurice Dudley.

6.5 p.m.: Answers to letters and birthday greetings by "Little Miss Kookaburra." 6.30 p.m.: Capt. Donald MacLean will continue his "Pirate" stories.

### NIGHT SESSION.

Announcer: C. J. O'Connor.

Accompanist: Agnes Fortune.

Parlez Vous Français?

6.50 p.m.: Madame Soward, "French Without Tears."

7.5 p.m.: Stock Exchange information.

7.15 p.m.: Official reports of the Newmarket stock sales by the Associated Stock and Station Agents, Bourke Street, Melbourne; fish market reports by J. R. Borrett, Ltd.; rabbit prices; river reports; market reports by the Victorian Producers' Co-operative Company, Ltd.; poultry, grain, hay, straw, jute, dairy produce, potatoes, and onions; market reports of fruit by the Victorian Fruit Merchants' Association; citrus fruits.

7.30 p.m.: News session; stumps scores second Test match, England v. Australia, at Sydney, and Sheffield Shield, Queensland v. Victoria, at M.C.C.

7.43 p.m.: Birthday greetings.

7.45 p.m.: "Out of the Past."

7.46 p.m.: Under the auspices of the Agricultural Department, Mr. S. Fish, Science Field Officer, will speak on "Transit Rot of Peaches."

8.0 p.m.: "A Maker of History."

8.1 p.m.: H. K. Love will speak on "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.

8.11 p.m.: Collingwood Citizens' Band.

March, "Newcastle."

Overture, "The Silver Star."

8.20 p.m.: Ida Walker, mezzo-contralto.

"It is Only a Tiny Garden" (Haydn Wood).

"They Say" (Warwick Evans).

8.27 p.m.: Collingwood Citizens' Band.

Selection: "Our Miss Gibbs."

8.37 p.m.: James Hay, tenor.

Selections from his repertoire.

8.44 p.m.: Victor Stephensen, piano.

"Gavotte" (Gluck-Brahms).

"Rhapsody in G Minor."

"Intermezzo in E Flat."

"Scherzo in E Minor."

9.0 p.m.: James Hay, tenor.

Selections from his repertoire.

9.7 p.m.: Collingwood Citizens' Band.

Cornet solo, "Because." Soloist: F. Crawley.

9.14 p.m.: J. Howard King, bass-baritone.

"Oh, Could I But Express in Song" (Malashkin).

"Ah! Weep No More" (Tschaiakowsky).

9.21 p.m.: Capt. Donald Maclean.

"Under the Skull and Crossbones."

9.36 p.m.: Collingwood Citizens' Band.

Selection, "Maritana."

9.46 p.m.: Ida Walker, mezzo-contralto.

"All Suddenly the Wind Comes Soft" (Alan Burr).

"Spreading the News" (Herbert Olives).

9.53 p.m.: Collingwood Citizens' Band.

Fox-trot, "Day Dreams" (Hallam).

March, "Reliance."

10.0 p.m.: Eric Welch will speak on tomorrow's races at Moonee Valley.

10.10 p.m.: Collingwood Citizens' Band.

Trombone solo, "On With the Motley," from "Pagliacci" (Leoncavallo).

10.17 p.m.: J. Howard King, bass-baritone.

"The Curfew" (Gould).

"Heart's Devotion" (Kramer).

10.25 p.m.: "Argus" news service; British official wireless news from Rugby; meteorological information; road notes supplied

by the Royal Automobile Club of Victoria; announcements. Weekly seasonable gardening reminder, supplied by Leslie Brunning. 10.35 p.m.: The Collingwood Citizens' Band. March, "Down Main Street." "The Unfinished Symphony" (Schubert). 10.45 p.m.: The Radi-o-Aces. "Without You, Sweetheart" (Henderson). "After My Laughter Came Tears" (Turk). "Golden Gate" (Woods). "Brainstorm" (Sanders). "Jeannine" (Gilbert). 11.0 p.m.: Our great thought. 11.1 p.m.: The Radi-o-Aces. "Dream House" (Foxe). "Tiger Rag" (Moore). "That's My Weakness Now" (Stept). "Get Out and Get Under the Moon" (Tobias). "Sleepy Baby" (Kahn). "You Can't Be a Good Little Fellow" (Stanley). "Sincerely I Do" (Davis). "Sally Rose" (Friend). "Goodnight Waltz" (Bibo). "Goodnight Chorus." 11.40 p.m.: God Save the King.

## 3AR, MELBOURNE

Associated Radio Company  
Wave Length, 484 metres

Friday, December 14

### MORNING NEWS SESSION.

10.0 a.m.: G.P.O. clock says "Ten." 10.1 a.m.: Age Stock Exchange reports, London metal market. 10.10 a.m.: Age market reports—farm and station produce, fruit, fish, vegetables, etc. 10.25 a.m.: Age shipping reports, ocean forecast. 10.30 a.m.: Mail notices, express train information. 10.35 a.m.: Age news service, exclusive to 3AR. 10.59 a.m.: Weather forecast.

### MORNING MUSICAL SESSION.

Announcer: John Stuart.

Accompanist: Reg Brown.

11.0 a.m.: Radi-o-Aces. "Back in Your Own Backyard" (Jolson), "Dream House" (Fox). "Jeannine" (Gilbert), "Got a Big Date With a Little Girl" (Tobias), "Sunshine" (Berlin), "A Stolen Melody" (Fisher). 11.30 a.m.: Elsa May, soprano, "I Know a Lovely Garden" (d'Hardelot), "I Hear a Thrush at Eve" (Cadman). 11.37 a.m.: Radi-o-Aces, "Lauretta" (Lewis), "Adoree" (Silver), "Dear, on a Night Like This" (Conrad), "Never Before, Never Again" (Chik), "Laugh, Clown, Laugh" (Young), "There's Something About a Rose" (Kahal). 12.0 noon: Rupert Thomas, baritone, "The Arrow and the Song" (Baile), "Sea Fever" (John Ireland). 12.7 p.m.: Radi-o-Aces, "Loved Me" (Wilson), "Fascinating Vamp" (Nussbaum), "That's My Weakness Now" (Stept), "Get Out and Get Under the Moon" (Tobias), "What a Baby" (Whiting), "Somebody's Crazy About You" (Johnson). 12.27 p.m.: British official wireless. Announcements. 12.37 p.m.: Elsa May, soprano, "I Look Into Your Garden" (Wood), "God's Rose" (Phillips). 12.44 p.m.: Radi-o-Aces, "What Do I Care What Somebody Said" (Woods), "Just a Memory" (Henderson), "Lonesome in the Moonlight" (Baer), "Angelia Mia" (Rappee), "Kiss Before the Dawn" (Parker), "Parting With You" (Conly). 1.4 p.m.: Rupert Thomas, baritone, "Garden of Happiness" (Daniel Wood), "Passing By" (Purcell). 1.11 p.m.: Radi-o-Aces, "Chloe" (Kahn), "Lonely in a Crowd" (Greer), "Louisiana" (Schafer), "Nesting Time" (Nussbaum), "Just a Year Ago Tonight" (Rose), "Because My Baby Don't Mean Maybe Now" (Donaldson). 1.30 p.m.: Close down.

### AFTERNOON SESSION.

Announcer: John Stuart.

Accompanist: Agnes Fortune.

2.0 p.m.: Station Orchestra, Overture, "Hamlet" (Tschaiakowsky), "Canzone Riste." 2.15 p.m.: James Riley, tenor, "Roses of Picardy" (Wood), "Bird Songs at Eventide" (Coates). 2.22 p.m.: Station Orchestra, "Adagio and Allegro No. 1 Symphony" (Schubert). 2.32: Ida Walker, mezzo, "You Lay So Still in the Sunshine" (Col. Taylor), "Soul of Mine" (Ethel Barns). 2.39 p.m.: Strad Trio, Cecil Parkes, violin; May Broderick, piano; Frank Johnstone, cello, "Trio in G Major" (Mozart), "Allegro," "Allegretto," "Andante and Variations." 2.52 p.m.: J. Norris, baritone, "Come to the Fair" (Easthope Martin), "Tommy Lad" (Margeson). 2.59 p.m.: May Broderick, piano, "Organ Toccato and Fugue in D Minor"



(Bach-Tansig). 3.7 p.m.: Strad Trio, "Ave Maris Stella" (Grieg), "Menuett" (Haydn). 3.11 p.m.: Jean Lewis, contralto, "In Questa Tomba" (Beethoven), "Lullaby" (Mozart). 3.18 p.m.: Cecil Parkes, violin, "Melodie" (Tchaikowsky), "Toy Soldiers' March" (Kreisler), "Liebesfreud" (Kreisler). 3.27 p.m.: Strad Trio, "Gavotte" (Martini-Parkes), "Flower Waltz" (Tchaikowsky). 3.35 p.m.: Frances Fraser, speaker, "The Browning in Florence." 3.50 p.m.: Station Orchestra, "Adoration" (Borowski), "Berceuse" (Daube). 3.58 p.m.: James Riley, tenor, "Mother Machree" (Ball), "Eileen Alanah" (Thomas). 4.5 p.m.: Station Orchestra, "Prelude" (Saint Saens), "Two Sketches" (Frommel). 4.15 p.m.: Ida Walker, mezzo, "This is the Island of Gardens" (Col. Taylor), "The Early Morning" (Graham Peel). 4.22 p.m.: Station Orchestra, "Peer Gynt Suite No. 2" (Grieg). 4.32 p.m.: J. Norris, baritone, "The Drum Major" (Ernest Newton), "Youth" (Allitsen). 4.39 p.m.: Station Orchestra, "Kol Nedrei" (Bruch), "Reverie Scenes" (Brooke). 4.49 p.m.: Jean Lewis, contralto, "The Wreath" (K. Rae), "Little Brown Cottage" (S. Dickson). 4.56 p.m.: Announcements.

## EVENING SESSION

Announcer: Frank Hatherley.

6.0 p.m.: A recital of the best records.

## NIGHT SESSION.

Announcer: Frank Hatherley.

8.0 p.m.: Cricket results. Second Test at Sydney, Victoria v. Queensland, at M.C.C.

8.15 p.m.: Eric Aikens. To-morrow's events at the Motordrome.

8.30 p.m.: Community singing from Malvern Town Hall.

10.30 p.m.: "Age" news service, exclusive to 3AR.

10.38 p.m.: Weather forecast.

10.39 p.m.: Our Australian Good Night Quote.

11.0 p.m.: God Save the King.

## 4QG, BRISBANE

Queensland Radio Service  
Wave Length, 385 metres

Friday, December 14

## EARLY MORNING SESSION

(Announcer: J. Tyson)

7.43 a.m.: From the Observatory—Time signals. 7.45 a.m.: News service supplied by courtesy of "The Daily Mail." 8.0: Some electric records. 8.15 a.m.: News service supplied by courtesy of "The Courier." 8.30 a.m.: Close down.

## MORNING SESSION

(Announcer: Rita M'Auliffe)

8.30 a.m.: Close down. 11.0 a.m.: Music. 11.5 a.m.: Social news. 11.15 a.m.: Lecturette, A Cookery and Household Talk by "The Etiquette Girl." 11.30 a.m.: Music. 11.35 a.m.: More social news. 11.45 a.m.: Music. 12.0 noon: Close down.

## MID-DAY SESSION

(Announcer: R. Wight)

1.0 p.m.: Market reports and weather information. 1.15 p.m.: Luncheon adjournment scores in the test match. 1.20 p.m.: From the Paris Cafe—Lunch-hour music. 2.0 p.m.: Close down.

## AFTERNOON SESSION

3.0 p.m.: A programme of electrically reproduced records. 3.30 p.m.: Main train running times. 3.31 p.m.: From St. John's Cathedral—A recital by Mr. George Sampson, F.R.C.O. (City Organist). 4.0 p.m.: From the Studio—Afternoon news. 4.30 p.m.: Close down.

## EARLY EVENING SESSION

(Announcers: R. Wight and H. Humphreys)  
6.0 p.m.: From the Studio—Mail train running times, mail information, shipping news. 6.5 p.m.: From the Paris Cafe—Dinner music. 6.25 p.m.: From the Studio—Commercial announcements. 6.30 p.m.: Bed-time stories conducted by "The Sandman." 7.0 p.m.: News in brief. 7.5 p.m.: Stock Exchange news. 7.6 p.m.: Metal quotations. 7.7 p.m.: Market reports. 7.25 p.m.: Fenwick's stock report. 7.30 p.m.: Weather information. 7.40 p.m.: Announcements. 7.43 p.m.: Standard time signals. 7.45 p.m.: To-morrow's sporting fixtures reviewed.

## NIGHT SESSION

8.0 p.m.: From the Irish Club—Official opening night.

10.0 p.m.: From the Studio—Week-end road information for motorists, officially supplied

by the Royal Automobile Club of Queensland.

10.10 p.m.: From the Studio—"The Daily Mail" news, "The Courier" news, weather news. Close down.

## 5CL, ADELAIDE

Central Broadcasters, Limited  
Wave Length, 395 metres

Friday, December 14

## MORNING SESSION.

11 a.m.: G.P.O. chimes. 11.1: Musical interlude on the "Sonora." 11.15 a.m.: "Economist." Kitchen craft and menu talk. 11.30 a.m.: Musical interlude. Recital of Parlophone recordings on the "Sonora."

## MIDDAY SESSION.

12 noon: G.P.O. chimes. 12.1 p.m.: "Sonora" recital of world-famous Columbia recordings. 12.15 p.m.: The "Advertiser" general news service. 12.35 p.m.: British official wireless news. 12.40 p.m.: "Sonora" recital. A few minutes with Columbia jazz orchestras. 12.50 p.m.: S.A. railway information. 12.51 p.m.: S. C. Ward and Co.'s Stock Exchange information. 12.58 p.m.: Meteorological information. 1 p.m.: G.P.O. chimes. 1.1 p.m.: Jack Burgess, baritone, "Don't Be Angry with Me" (Donaldson), "Side by Side" (Woods). 1.10 p.m.: Metronola Dance Band—"Rain" (Ford), "Harvest Moon" (Norworth), "Lila" (Tobias). 1.20 p.m.: Linda Wald, soprano—"Cradle Song" (Kreisler), "A Memory" (Park). 1.27 p.m.: Metronola Dance Band—"Afraid of You" (Henderson), "Sunshine" (Berlin), "Chloe" (Moret). 1.37 p.m.: Jack Burgess, baritone—"My Ohio Home" (Donaldson), "Magnolia." 1.44 p.m.: Metronola Dance Band—"Oh, Doris, Where Do You Live?" (Kahn), "A Night in June" (Friend). 1.52 p.m.: Linda Wald, soprano—"An Old Garden" (Temple), "Over the Waters Blue" (Clark). 1.57 p.m.: Meteorological information. 2 p.m.: G.P.O. chimes and close down.

## AFTERNOON SESSION.

Announcer: J. L. Norris.

3 p.m.: G.P.O. chimes. 3.1 p.m.: A pot pourri concert. 3.1 p.m.: From the Adelaide Oval, description of the international tennis, England v. South Australia, by Mr. F. J. Mills. 3.11 p.m.: The Radio Twins, instrumentalists (studio), selected popular numbers. 3.19 p.m.: Alys Watson, soprano—"A June Morning" (Willeby), "A Rose, a Kiss, and You" (Arthur). 3.25 p.m.: William Davey, xylophonist—"Chloe" (Moret), Hollister, humorist, in droit humor, "Sunshine" (Berlin). 3.31 p.m.: Sydney description of the international tennis. 3.30 p.m.: From the Adelaide Oval, England v. South Australia, by Mr. F. J. Mills. From studio. 3.50 p.m.: The Radio Twins, selected popular numbers. 3.55 p.m.: Jean Sinclair, contralto—"Reaping" (Clarke), "All Thro' the Night" (Welsh). 4.2 p.m.: William Davey, xylophonist—"Under the Clover Moon," "Miss Annabelle Lee." 4.10 p.m.: Sydney Burchall, popular baritone—"Beautiful" (Shay), "Little Irish Girl" (Loehr). 4.17 p.m.: From Adelaide Oval, description of tennis match, England v. South Australia, by F. J. Mills. 4.25 p.m.: Alys Watson, soprano, "Vale" (Russell), "Request" (Findon). 4.31 p.m.: Radio Twins, instrumentalists, in popular numbers. 4.38 p.m.: Sydney Hollister, humorist, in comedy sketches. 4.43 p.m.: Jean Sinclair, contralto—"Sea Slumber Song" (Elgar), "Wiegenlied" (Brahms). 4.50 p.m.: William Davey, xylophonist—"That's My Mammy," "My Ohio Home." 4.57 p.m.: S. C. Ward and Co.'s Stock Exchange information. 5 p.m.: G.P.O. chimes and close down.

## EVENING SESSION.

Announcer: Athol Lykke.

6.0 p.m.: G.P.O. chimes. 6.1 p.m.: International cricket scores, second Test match at Sydney. 6.30 p.m.: Musical interlude on the Sonora. 6.55 p.m.: International cricket scores, second Test match, at Sydney. 7.0 p.m.: G.P.O. chimes. 7.1 p.m.: S. C. Ward and Co.'s Stock Exchange information. 7.6 p.m.: General market reports. 7.10 p.m.: 5CL's sporting service, by "Silvius," including a review of Tattersall's and Moonee Valley meetings. 7.22: "Willow" talk on "Cricket." 7.30 p.m.: P. H. Nichols, talk on "Don Quixote."

## NIGHT SESSION.

7.45 p.m.: Muriel Prince, pianiste, "Country Gardens" (Grainger).

7.50 p.m.: Sydney Burchall, popular baritone, "The Piper" (Steel), "Laugh, Clown, Laugh" (Fioroto).

7.56 p.m.: Organ recital by Laurence Haggitt, transmitted from Flinders Street Baptist Church.

"Choral Song and Fugue in C" (Wesley). "Canon in A Minor."

8.5 p.m.: Sydney Burchall.

"Chloe" (Moret).

"Coquette."

8.10 p.m.: Organ recital by Laurence Haggitt. "Evening Song" (Bairstow).

8.16 p.m.: From J. C. Williamson's Garden Theatre. A night of novelty, by the Humphrey Bishop Famous English Comedy and Operatic Company.

9.15 p.m.: Organ recital by Laurence Haggitt.

"Theme and Variations in B Flat" (Haigh).

"Epilogue" (Willan).

9.30 p.m.: Novelty entertainment continued.

10.15 p.m.: The "Advertiser" general news service.

10.20 p.m.: 5CL's sporting service, by "Silvius," including a review of Tattersall's and Moonee Valley meetings.

10.30 p.m.: Meteorological information and overseas grain report.

10.32 p.m.: Our good-night thought.

10.33 p.m.: Modern dance numbers by the famous Radi-o-Aces.

11.10 p.m.: God Save the King.

## 6WF, PERTH

Westralian Farmers'  
Wave Length, 1250 metres

Friday, December 14

12.30 p.m.: Tune in. 12.35 p.m.: Markets, news, and cables. Results will be given of the second Test match between the English Eleven v. Australian Eleven, played at Sydney. 1.0 p.m.: Time signal. 1.1 p.m.: Weather notes supplied by the Meteorological Bureau of West Australia. Station announcements. 1.2 p.m.: Luncheon music—The Studio Quintette, conducted by Mr. Val Smith, will play the following selections, with vocal interludes: Overture, "Tantalusqualen" (Suppe); characteristic, "Nordische Hochzeit" (Brasse); intermezzo, "Messakina" (Gerold); selection, "Bifolia Parade" (Voltpatti); suite, "Gipsy Pictures" (Mallory). 3.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 3.35 p.m.: Music and Song—Afternoon Tea Concert relayed from the Rosebud Cafe, Perth; vocal and instrumental interludes from the studio. 5.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 5.5 p.m.: Close down. 6.45 p.m.: Tune in. The evening transmission is broadcast on 104.5 metres, as well as the usual wave length. 6.48 p.m.: Musical session for the kiddies, by Uncles Henry, Percy, and Duffy, and Aunties Amy and Audrey. 7.5 p.m.: Items by the Studio Trio. 7.30 p.m.: Stocks; markets; news. 7.45 p.m.: Racing talk by the sporting editor of "Truth" Newspaper Co. 8.0 p.m.: Time signal. 8.1 p.m.: Weather notes supplied by the Meteorological Bureau of West 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: Items by the Instrumental Duo of the s.s. Katoomba. 9.0 p.m.: Late news items, by courtesy of "The Daily News" Newspaper Co.; ships within range announcement; weather report and forecast, station announcements. 9.25 p.m.: Wrestling—A description will be given by the sporting editor of "Truth" Newspaper Co. of the wrestling match. 10.30: 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, Limited  
Wave Length, 516 metres

Friday, December 14

**MIDDAY SESSION.**

11.30 a.m.: Messrs. Zonophone and Autotone in aerial undertones. 11.34 a.m.: Special midlands weather forecast. 11.35 a.m.: Messrs. Zonophone and Autotone in aerial undertones. 11.55 a.m.: Tasmanian Stations' 9 a.m. weather report. 12 noon: G.P.O. clock chimes the hour. 12.1 p.m.: Shipping information; ships within wireless range; mail notices; housewives' guide. 12.8 p.m.: Messrs. Zonophone and Autotone in aerial undertones. 12.11 p.m.: British official wireless news. 12.20 p.m.: Messrs. Zonophone and Autotone in aerial undertones. 12.29: Announcements. 12.33 p.m.: "Mercury" news service; produce sales held at Railway. 1.10 p.m.: Messrs. Zonophone and Autotone in aerial undertones. 1.30 p.m.: Close down.

**AFTERNOON SESSION.**

Announcer: Jack Broadbent.

3 p.m.: G.P.O. clock chimes the hour. 3.1 p.m.: Messrs. Zonophone and Autotone in aerial undertones. 3.4 p.m.: Weather information. 3.5 p.m.: An all-star and vocal concert, with Messrs. Zonophone and Autotone—Jean Lensen and his orchestra. "Chanson Hindou" — Song of India (Rimsky - Korsakov). "Second Serenade" (Toselli); Clara Butt and Kennerly Rumford. "The Keys of Heaven." "Friendship; Edward Isaac (piano solo). "Moments Musical F Minor" (Schubert). "Humoreske." "Waltz in D Flat" (Chopin); Charles Hackett (tenor). "In a Persian Garden"—Aa Moon of My Delight. "Beloved, It Is Morn" (Aylward); Classic Symphony Orchestra. "Stradella Overture, parts 1 and 2 (Flo-tow); Muriel Brunskill (contralto). "Kathleen Mavourneen" (Crawford). "O, Lovely Night" (Teschemacher); Les Cherniavsky (violin solo). "Caprice Viennois" (Kreisler). "Las Borrachita" (American song). "From the Canebake" (Gardner). "Waltz in A Major" (Hochestein). 4.15 p.m.: Readings from the "Weekly Courier"; "What energetic men are doing" 4.30 p.m.: Close down. During the afternoon progress results will be given of the second Test match, played at Sydney, New South Wales.

**EARLY EVENING SESSION**

Announcer: Jack Broadbent.

6.15 p.m.: Answers to letters and birthday greetings by "Uncle David". 6.20 p.m.: Messrs. Autotone and Zonophone in aerial undertones. 6.30 p.m.: "The Story Lady" will tell a story to the children. 6.45 p.m.: Messrs. Autotone and Zonophone in aerial undertones. 7 p.m.: Request numbers for the children.

**EVENING SESSION**

Announcer: Jack Broadbent.

Accompanist: Leila Read.

7.15 p.m.: A. M. O'Leary will speak on "Cricket Activities." 7.30 p.m.: A studio concert by Messrs. Zonophone and Autotone and 7ZL artists—Rene Dyer (contralto), "The Rosary" (Nevin), "That's All" (Brahe), Messrs. Zonophone and Autotone. "Silver Threads among the Gold." "Tis the Last Rose of Summer" (Moore); Lynn Starr (soprano). "You in a Gondola" (Clarke). "Down Here" (Squire); Messrs. Zonophone and Autotone. "La Paloma" (Yradier). "La Golodrina"; Albert Sargison (tenor). "Selected." "Selected"; Messrs. Autotone and Zonophone. "Blue Danube Waltz" (Strauss). "Tales from the Vienna Woods" (Strauss); Katie Rothwell (contralto). "Thanks Be to God" (Dickson). "Yonder" (Oliver); Messrs. Autotone and Zonophone. "Dreamy Hawaii." "Hiawatha's Melody"; Rene Dyer (contralto). "My Dear Soul" (Byron). "Lilac Tree" (Garthlan); Messrs. Autotone and Zonophone. "Beautiful Ohio" (Earl). "March of the Toys" (Herbert); Lynn Starr (soprano). "I Heard You Go By" (Wood). "Come to the Fair" (Easthope); Messrs. Autotone and Zonophone. "Call of Aloha." "That's What the Lei Said to Me"; Albert Sargison (tenor). "Selected." "Selected"; Messrs. Autotone and Zonophone. "Just Like a Melody out of the Sky" (Donaldson). "Because My Baby Don't Mean, Maybe Now" (Donaldson); Katie Rothwell (contralto). "A Request" (Finden). "Cradle Me Low" (May Brahe). 8.45 p.m.: J. M. Counsel. "A Musical Hour with the Old Masters"—The History and Development of Music. 9.45

p.m.: British official wireless news; readings from "Weekly Courier", "Mercury" special Tasmanian news service; railway auction produce sales; weather information; Hobart Stock Exchange quotations; Royal Auto Car Club of Tasmania road guide for the week-end; cycling notes by the Hobart Cycling Association; athletic news by the Amateur Athletic Association; market reports from Messrs. Roberts and Co., Messrs. Wise and Stirling, and Messrs. A. G. Webster and Sons. 10 p.m.: G.P.O. clock chimes the hour. 10.1 p.m.: The Royal Auto Car Club of Tasmania safety message. 10.2 p.m.: Our Tasmanian good-night thought. 10.3 p.m.: "God Save the King"; close down.

**Saturday, December 15**

New South Wales Broadcasting  
Company, Limited

**2FC SERVICE****EARLY MORNING SESSION**

Announcer: Laurence Halbert.

7 a.m.: Big Ben and announcements. 7.2 a.m.: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda. 7.5 a.m.: "Sydney Morning Herald" summary. 7.10 a.m.: Shipping intelligence; mail services. 7.12 a.m.: Studio music. 7.22 a.m.: Investment market; mining share markets; metal quotations. 7.28 a.m.: Wool sales; breadstuffs markets; inter-State markets; produce markets. 7.35 a.m.: Studio music. 8 a.m.: Big Ben, close down.

**MORNING SESSION**

Announcer: Laurence Halbert.

10.0 a.m.: "Big Ben" and announcements. 10.2 a.m.: Pianoforte reproduction. 10.10 a.m.: "Sydney Morning Herald" news service. 10.25 a.m.: Studio music. 10.30 a.m.: Last minute sporting information by the 2FC racing commissioner. 10.40 a.m.: Studio music. 10.45 a.m.: A talk on "Gardening," by J. G. Lockley ("Redgum"). 11.0 a.m.: "Big Ben," A.P.A. and Reuter's cable services. 11.5 a.m.: Close down.

**MID-DAY AND AFTERNOON SESSIONS**

Announcer: Ewart Chapple.

12 noon: "Big Ben." From the Sydney Cricket Ground, cricket—description of play in the 2nd Test cricket match, England v. Australia. 1.30 p.m.: From the Studio. Stock Exchange, first call. 1.32 p.m.: Weather forecast. 1.34 p.m.: "Evening News" mid-day news service. Producers' Distributing Society's report. 1.42 p.m.: Rugby wireless news. 1.45 p.m.: Studio music. 2 p.m.: "Big Ben."

**RACES.**

During the afternoon events at the Rosehill races will be described by the 2FC racing commissioner. Results of the Kensington ponies will be transmitted as received.

**CRICKET.**

Description of the play in the 2nd Test cricket match, England v. Australia, broadcast from the Cricket Ground. During sporting intervals items will be given by The Tuneful Three, instrumentalists—

Les Busse, melo-accordion solos:  
(a) "When you played the organ" (Gilbert).  
(b) "Down Kentucky way" (Wendall Hall).  
(c) "Rosetime" (Hall).  
(d) "The Rosary" (Nevin).  
4.45 p.m.: From the Studio. Complete sporting resume.  
5 p.m.: "Big Ben"; close down.

**EARLY EVENING SESSION**

5.40 p.m.: The chimes of 2FC.  
5.45 p.m.: The Children's Session, conducted by the "Hello Man." Letters and stories.  
6.30 p.m.: Music and entertainment.  
6.40 p.m.: Weather intelligence; shipping; Stock Exchange.  
6.45 p.m.: Rugby wireless news.

6.50 p.m.: Sporting news; late news and studio music.  
7.10 p.m.: The 2FC Dinner Quartette, conducted by Horace Keats.  
(a) "You're a real sweetheart" (Friend).  
(b) "Was it a Dream?" (Coslow).  
(c) "Russian Peasant Dance" (Lehar).  
(d) "Sunny" (Kern).  
(e) "Nebraska" (Sissle).  
(f) "Sizilietta" (Von Blon).

**EVENING SESSION**

Announcer: A. S. Cochrane.

Accompanist: Ewart Chapple.

7.40 p.m.: Programme announcements.  
7.45 p.m.: Pianoforte reproduction.  
7.50 p.m.: Cricket resume for New Zealand listeners by M. A. Noble, England v. Australia, 2nd Test match.  
7.54 p.m.: Popular studio music.  
8.0 p.m.: "Big Ben"; from the Town Hall, Sydney. Handel's Oratorio—"The Messiah," by the Welsh Choral Society.  
9.25 p.m.: From the studio. Weather report. Elaine Penniford (violinist).  
9.33 p.m.: A. G. McDonald (baritone).  
(a) "Blow, Blow, Thou Winter Wind" (Roger Quilter).  
(b) "Now sleeps the crimson petal" (Roger Quilter).  
9.40 p.m.: From the Wentworth. The Wentworth Cafe Orchestra under the direction of Mr. Jimmy Elkins.  
9.50 p.m.: From the studio. Gwladys Fimister (soprano).  
9.57 p.m.: Elaine Penniford (violinist).  
10.4 p.m.: A. G. McDonald (baritone).  
(a) "If Thou wert blind" (Noel Johnston).  
(b) "Wait" (Guy D'Hardelot).  
10.11 p.m.: From the Wentworth. The Wentworth Cafe Orchestra, under the direction of Mr. Jimmy Elkins.  
10.21 p.m.: From the studio. Gwladys Fimister (soprano).  
10.29 p.m.: Late weather report.  
10.32 p.m.: Don James, in songs at the piano.  
10.39 p.m.: From the Wentworth. The Wentworth Cafe Orchestra, under the direction of Mr. Jimmy Elkins.  
10.50 p.m.: From the studio. Don James in songs at the piano.  
10.57 p.m.: To-morrow's programme and announcements.  
11.0 p.m.: From the Wentworth. The Wentworth Cafe Orchestra, under the direction of Mr. Jimmy Elkins.  
11.30 p.m.: National Anthem.  
Close.

**2BL SERVICE**

Saturday, December 15

**MORNING SESSION**

Announcer: A. C. C. Stevens.

8.0 a.m.: G.P.O. clock and chimes. Metropolitan weather report.  
8.1 a.m.: State weather report.  
8.2 a.m.: Studio music.  
8.15 a.m.: G.P.O. clock and chimes. News service from the "Daily Telegraph Pictorial."  
8.25 a.m.: Studio music.  
8.35 a.m.: Information, mails, shipping, arrivals, departures, and sailings.  
8.38 a.m.: News from the "Daily Telegraph Pictorial."  
8.45 a.m.: G.P.O. clock and chimes. Studio music.  
9.0 a.m.: G.P.O. clock and chimes. Studio music.  
9.30 a.m.: Half an hour with silent friends.  
10.0 a.m.: G.P.O. clock and chimes—close down.

**MIDDAY SESSION**

Announcer: A. C. C. Stevens.

11.0 a.m.: G.P.O. clock and chimes. Women's session, conducted by Mrs. Cranfield.  
12.0 noon: G.P.O. clock and chimes.  
12.3 p.m.: Studio music.  
12.30 p.m.: "Sun" news service.  
12.40 p.m.: What's on at the Pictures and Theatres.  
12.45 p.m.: Cricket scores, second Test match, England v. Australia.  
12.47 p.m.: Studio music.  
1.30 p.m.: "Sun" news service.  
1.40 p.m.: Studio music.  
1.57 p.m.: Cricket scores.  
2.0 p.m.: G.P.O. clock and chimes. Close down.  
Note: Race results from Rosehill Races and Kensington Ponies will be broadcast by courtesy of the "Sun" Newspapers.



## AFTERNOON SESSION

Announcer: Basil Kirke.

Accompanist: Kathleen Roe.

- 2.15 p.m.: G.P.O. clock and chimes.  
From the Sydney Cricket Ground: Description of the second Test match, England v. Australia. Cricket impressions by M. A. Noble.  
4.0 p.m.: From the Studio:—"The Happy Trio."  
4.10 p.m.: Beryl Scott, songs at the piano.  
4.15 p.m.: The Happy Trio.  
4.22 p.m.: Beryl Scott, songs at the piano.  
4.29 p.m.: Studio music.  
4.39 p.m.: The Happy Trio.  
4.46 p.m.: Popular music.  
5.0 p.m.: G.P.O. clock and chimes.  
From the Sydney Cricket Ground: Description of the second Test match, England v. Australia.

## EARLY EVENING SESSION

Announcer: Basil Kirke.

- 5.40 p.m.: Children's music and entertainment.  
6.0 p.m.: Children's letters and stories.  
Announcer: J. Knight Barnett.  
6.30 p.m.: "Sun" news service.  
6.40 p.m.: 2BL Dinner Quartette—  
(a) "In a Bamboo Garden" (Donaldson).  
(b) "Lolita" (Stoneham).  
(c) "Schon Rosmarin" (Kreisler).  
(d) "Gilbert and Sullivan Memories."  
(e) "Rose Marie Waltz" (Friml).  
(f) "Sunshine."  
7.10 p.m.: Cricket scores.  
7.12 p.m.: Complete sporting resume.  
Complete racing resume.  
7.30 p.m.: Mr. Pim and Miss Pam in advertising talks and nonsense.

## EVENING SESSION

Announcer: J. Knight Barnett.

Accompanist: G. Vern Barnett.

- 8.0 p.m.: G.P.O. clock and chimes.  
2BL Topical Chorus.  
8.3 p.m.: "The Two Tonics," entertainers.  
8.13 p.m.: The Harmony Duo.  
8.20 p.m.: "The Two Tonics," entertainers.  
Popular studio programme.  
9.35 p.m.: From the Town Hall, Sydney—Handel's Oratorio, "The Messiah," by the Welsh Choral Society.  
10.30 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
10.57 p.m.: Resume of following day's programme.  
10.59 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
11.30 p.m.: National Anthem.

## 2GB, SYDNEY

Saturday, December 15

- 5.30 p.m.: Children's session by Uncle George. 7.15 p.m.: Music. 7.20 p.m.: Dance programme. 8.0 p.m.: Request evening. 9.0 p.m.: Grown-up bedtime stories. 10.0 p.m.: Close down.

## 2UW, SYDNEY

Saturday, December 15

- 5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7 to 9.59 p.m.: Musical programme. 10.0 p.m.: Close down.

## 3LO, MELBOURNE

Saturday, December 15

## EARLY MORNING SESSION.

- 7.15 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports; market reports; general news; shipping; sporting information. 8.0 a.m.: Melbourne Observatory time signal. 8.1 a.m.: Morning melodies. 8.15 a.m.: Close down.

## MORNING SESSION.

Announcer: Maurice Dudley.

- 11.0 a.m.: Eric Welch will speak on today's races at Moonee Valley. 11.10 a.m.: French Bros., banjoists, "Swanee River Moon." "Smile the While." 11.20 a.m.: James Riley, tenor, "Roses of Picardy" (Wood). "Mother o' Mine" (Towis). 11.27 a.m.: French Bros., banjoists, "Sentimental Baby" (Palmer). "After My Laughter Came Tears" (Turk). 11.34 a.m.: Ida Walker, contralto, "This is the Island of Gardens" (Coleridge-Taylor). "The Rainbow Child" (Coleridge-Taylor). 11.40 a.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor.

## MIDDAY SESSION.

- 12.0 noon: Melbourne Observatory time signal; express train information. 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; "Argus" news service. 12.20 p.m.: Description of the Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. From the studio. Artist, Ida Walker. Station Orchestra (conductor, Frederick Hall). 1.15 p.m.: Stock Exchange information; meteorological information; weather forecast for Victoria, Tasmania, South Australia, and New South Wales. 1.23 p.m.: The Station Orchestra, suite, "In Days of Old" (Meredith Ball). 1.30 p.m.: Ida Walker, contralto, "St. Nicholas' Day in the Morning" (Easthope Martin). "You Lay So Still in the Sunshine" (Coleridge-Taylor). 1.37 p.m.: The Station Orchestra, suite, "A Kiss for Cinderella" (Bucalosse). 1.45 p.m.: Close down.

## AFTERNOON SESSION.

- 1.55 p.m.: Description of Banyule Trial Hurdle Race, two miles, at Moonee Valley races, by Eric Welch. 2.5 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. 2.28 p.m.: Description of Barcoola Handicap, five furlongs, at Moonee Valley races. 2.35 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 2.58 p.m.: Description of Koombahla Maiden Plate, one mile, at Moonee Valley races. 3.5 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 3.38 p.m.: Description of Laluma Handicap, 1 1/4 mile, at Moonee Valley races. 3.45 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 4.0 p.m.: Sonora recital. 4.18 p.m.: Description of Kiata Handicap, six furlongs, at Moonee Valley races. 4.25 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 4.48 p.m.: Description of Argyle Highweight Handicap, seven furlongs, at Moonee Valley races. 4.55 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 5.10 p.m.: "Herald" news session. 5.20 p.m.: Description of cricket, Victoria v. Queensland, at M.C.C. During the afternoon frequent broadcasts will be made of the progress scores of the second Test match, between England and Australia, at Sydney.

## EVENING SESSION.

Announcer: Maurice Dudley.

- 5.50 p.m.: Sporting results. 6.0 p.m.: Answers to letters and birthday greetings by "Billy Bunny." 6.25 p.m.: Musical interlude. 6.30 p.m.: "Billy Bunny" will tell you a nice new story.

## NIGHT SESSION.

Announcer: C. J. O'Connor.

Accompanist: Agnes Fortune.

- 7.0 p.m.: Stock Exchange information.  
7.10 p.m.: River reports; market reports by the Victorian Producers' Co-operative Company, Ltd.; poultry, grain, hay, straw, jute, dairy produce, potatoes, and onions; market reports of fruit by the Victorian Fruit-growers' Association; wholesale prices of fruit by the Wholesale Fruit Merchants' Association; citrus fruits.  
7.25 p.m.: News session; stumps score, second Test match, England v. Australia, at Sydney, and Sheffield Shield, Queensland v. Victoria, at M.C.C.  
7.40 p.m.: Birthday greetings.  
7.44 p.m.: "Out of the Past."  
7.45 p.m.: Dr. J. A. Leach will speak on "Robins, Plain."  
8.0 p.m.: "A Maker of History" Programme announcements.  
Tasmanian letter to 3LO from the "Courier," Launceston.  
8.1 p.m.: The Station Orchestra. Overture, "Il Guarany" (Gomez).  
8.10 p.m.: James Riley, tenor, "Now Sleeps the Crimson Petal" (Quilter).  
"I Hear a Thrush at Eve" (Cadman).  
8.17 p.m.: Marion Lightfoot, English concertina.  
"Ave Maria."  
"Melodie d'Amour."  
8.24 p.m.: Ida Walker, mezzo-contralto, "Still as the Night" (Bohm).  
"The Heart Worships" (Holst).  
8.31 p.m.: The Station Orchestra. Overture, "Hamlet" (Tchaikowsky).  
8.41 p.m.: Olive Painter and Tom Masters, mezzo-soprano and tenor.  
"Garden of Your Heart" (Dorel).  
"Look Down, Dear Eyes" (Fisher).  
8.48 p.m.: The Station Trio.  
8.58 p.m.: The song feature of the week.  
9.2 p.m.: Eric Welch will describe to-night's events at the Stadium.

- 9.17 p.m.: Molly Mackay, soprano, "Nymphs and Sylvains" (Bemberg).  
"Songs My Mother Taught Me" (Dvorak).  
9.24 p.m.: The Station Orchestra. Selection, "The Pearl Fishers" (Bizet).  
9.34 p.m.: James Riley, tenor. Request numbers.  
9.41 p.m.: Marion Lightfoot, banjo. "Peach Blossoms."  
"The Darkies' Patrol."  
9.48 p.m.: Ida Walker, mezzo-contralto. "Thou Art Risen, My Beloved" (Coleridge-Taylor).  
"Pleading" (Elgar).  
10.5 p.m.: Eric Welch will again describe to-night's events at the Stadium.  
10.20 p.m.: Olive Painter and Tom Masters, mezzo-soprano and tenor. "A Night in Venice" (Lucantonio).  
"Beyond the Meadow Gate" (Phillips).  
10.27 p.m.: The Station Orchestra. Adagio and Allegro, "No. 1 Symphony" (Schubert).  
10.34 p.m.: Molly Mackay, soprano. "Snowflakes" (Mallinson).  
"Lullaby" (Scott).  
10.41 p.m.: Late sporting results.  
10.46 p.m.: The Radi-o-Aces. "Loneliness" (Pollack).  
"Clarinet Marmalade" (Fergus).  
"Ramona" (Wayne).  
"Rain" (Ruby).  
"Mother of mine" (Jolson).  
11.0 p.m.: Our Great Thought.  
11.1 p.m.: The Radi-o-Aces. "Because My Baby Don't Mean Maybe Now" (Donaldson).  
"Beloved" (Kahn).  
"Just Like a Melody Out of the Skies" (Donaldson).  
"That's What You Mean to Me" (Davis).  
"I'm Tired of Making Believe" (Kelley).  
"Chloe" (Kahn).  
"That Stolen Melody" (Fisher).  
"Adoree" (West).  
"Googily Goo" (Davis).  
11.40 p.m.: God Save the King.

## 3AR, MELBOURNE

Saturday, December 15

## MORNING NEWS SESSION.

- 10 a.m.: G.P.O. clock says "Ten." 10.1 a.m.: Age Stock Exchange reports London metal markets. 10.10 a.m.: Age market reports—farm and station produce, fruit, fish, vegetables, etc. 10.25 a.m.: Age shipping reports. Ocean forecast. 10.30 a.m.: Mail notices. Express train information. 10.35 a.m.: Age news service, exclusive to 3AR. 10.59 a.m.: Weather forecast.

## MORNING MUSICAL SESSION.

Announcer: John Stuart.

Accompanist: Reg Brown.

- 11 a.m.: The Radi-o-Aces, "Down Where the Sun Goes Down" (Jones). "Don't Keep Me in the Dark, Bright Eyes" (Bryan). "All Day Long" (Cross). "Happy Go Lucky Lane" (Lewis). 11.15 a.m.: E. Mason Wood, baritone, "Devonshire Cream and Cider" (Sanderson). "An Epitaph" (Besley). 11.22 a.m.: The Radi-o-Aces. "Little Log Cabin of Dreams" (Hanley). "Virginia Creeper" (Wade). "Can't You Hear Me Say I Love You?" (Brown). "Dream Kisses" (Yellan). 11.37 a.m.: E. Mason Wood, baritone, "Young Tom o' Devon" (Russell). "The Banjo Song" (Homer). 11.44 a.m.: The Radi-o-Aces. "Without You, Sweetheart" (de Silva). "Lolita" (Stoneham). "After My Laughter Came Tears" (Tobias). "Beautiful" (Sharp). 12 noon: Close down.

## AFTERNOON SESSION.

Announcer: John Stuart.

Accompanist: Reg Brown.

- 2 p.m.: Johnston's Studio Band, selection. "Our Miss Gibbs." 3.15 p.m.: Donian Male Quartette, "Dinah" (Akst). "Keep Sweeping the Cobwebs off the Moon" (Levant). 3.22 p.m.: Johnston's Studio Band, two popular waltz songs, "Jeannine." "Ramona." 3.32 p.m.: Alan Mitchell, tenor, "An English Rose" (German). "A False Note" (Borodine). 3.39: Reg. Brown, piano, "Melodie" (Rachmaninoff). "Prelude" (Rachmaninoff). 3.49 p.m.: The Donian Male Quartette, "Chloe" (Moret). "Bridget O'Flynn" (King). 3.56 p.m.: Johnston's Studio Band, selection, "Musical Snapshots." 4.6 p.m.: H. Rayner Phillips, "An Old English Love Song" (Allitsen). "The Star" (Rogers). 4.13 p.m.: Johnston's Studio Band, trombone solo, A. Thorn, "On With the Motley" from "Pagliacci" (Leoncavallo). Johnston's Studio Band, "With Sword and Sabre." 4.23 p.m.: The Donian Male Quartette, "Blue Skies" (Berlin). "Talking to the Moon" (Baskette). 4.30 a.m.: Reg. Brown, piano, "Air de Ballet" (Caamin-



ade), "Rustle of Spring" (Sinding). 4.40 p.m.: Donian Male Quartette, request numbers. 4.47 p.m.: Johnston's Studio Band, selection, "Favorite Operatic Airs." 5 p.m.: Close down.

## EVENING SESSION.

Announcer: Frank Hatherley.

6 p.m.: A recital of the best recordings.

## NIGHT SESSION.

Announcer: Frank Hatherley.

8 p.m.: All sporting results.

8.30 p.m.: Newport Workshops Band, overture, "Royal Windsor" (Greenwood), march, "National Emblem" (Bagley).

8.40 p.m.: Ralph Thompson, baritone, "The Harp That Once" (Moore), "The Minstrel Boy" (Moore).

8.47 p.m.: Newport Workshops Band, selection, "Memories of Britain" (Rimmer).

8.57 p.m.: The Austral Quartette (violin, cello, piano), selection, "Rose Marie" (Friml), soprano, violin, cello, piano, "The Flower" (Schubert-Clutsam), "When the Lilac Bloom Uncloses" (Clutsam), violin, cello, piano, selections, "Lilac Time" (Schubert), mezzo, soprano, violin, cello, piano, "Wild Bird" (Leliar), "Pretty Things" (Friml).

9.27 p.m.: One-act play, "The Burglar and the Girl," produced by J. Beresford Fowler. The Burglar, J. Beresford Fowler; The Girl, Thora Coxhead.

9.42 p.m.: Newport Workshops Band, waltz, "Summer Glory" (Greenwood), march, "The Royal Trophy" (Rimmer).

9.52 p.m.: Ralph Thompson, baritone, "Little Irish Girl" (Lohr), "Wanderer's Song" (Schumann).

9.59 p.m.: C. E. Monteath, organ, "Offering on two Christmas Themes" (Guilmant), "Cantilene Pastorale" (Guilmant), "Carol for Christmastide" (Guilmant), choral prelude "In Dulci Jubilo" (from "Little Organ Book") (Bach), "And the Glory of the Lord"—"The Messiah" (Handel).

10.20 p.m.: News, announcements, sporting results.

10.30 p.m.: God Save the King.

## 4QG, BRISBANE

Saturday, December 15

## EARLY MORNING SESSION

(Announcer: J. Tyson)

7.43 a.m.: From the Observatory—Time signals. 7.45 a.m.: News service supplied by courtesy of "The Daily Mail." 8.0 a.m.: Some electric records. 8.15 a.m.: News service supplied by courtesy of "The Courier." 8.30 a.m.: Close down.

## NO MORNING SESSION

## NO MID-DAY TRANSMISSION

## AFTERNOON SESSION

From Albion Park—B.A.T.C. races. 5.0 p.m.: Close down.

## EARLY EVENING SESSION

6.0 p.m.: From the Studio—Mail train running times. Special "Queenslander" bi-weekly news service for distant listeners. 6.30 p.m.: Bedtime stories conducted by "Uncle Ben." 7.15 p.m.: To-day's race results in brief. 7.20 p.m.: General sporting notes. 7.30 p.m.: Sailing notes by Mr. Fred Smith.

## NIGHT SESSION

8.0 p.m.: From the Studio—The Royalty Duo. Opening number, "Going to Have One." Interruption and patter. The Royalty Duo—"Rich and Poor." Blanche Burns (contralto), "Home o' Mine." Ken West (comedian), "Heaven Help the Sailors." The Royalty Duo—Popular harmony duet, "Spanish Town."

8.20 p.m.: From the Savoy Theatre—Ten minutes' orchestral music. Studio programme.

8.30 p.m.: The Rio Grande Serenaders—Hawaiian instrumentalists. Bessie Manners (pianiste), selected. Aeolian Vocalion selection—A Wurlitzer organ record. Bessie Manners (pianiste), selected. The Rio Grande Serenaders—Hawaiian instrumentalists.

8.50 p.m.: From the Savor Theatre—Ten minutes' orchestral music. Lennon's Hotel—Speedway.

9.0 p.m.: From Lennon's Hotel—Dance music. From the Speedway—Motor cycle races.

10.0 p.m.: From the Studio—"The Sunday Mail" news, weather news. Close down.

## 5CL, ADELAIDE

Saturday, December 15

## MORNING SESSION

Announcer: J. L. Norris.

11.0 a.m.: G.P.O. chimes. 11.1 a.m.: Late sporting selections for Moonee Valley by Mr. Eric Welch, 3LO's special sporting commissioner. 11.4 a.m.: "The Advertiser" general news service. 11.25 a.m.: British Official Wireless news. 11.30 a.m.: Musical interlude, Sonora recital of world-famous Parlophone artists. 11.45 a.m.: Late sporting selections for Moonee Valley by Mr. Eric Welch, 3LO's special sporting commissioner. 11.51 a.m.: 5CL's sporting calendar. 11.55 a.m.: Sonora recital of world-famous Parlophone artists. 12.0: G.P.O. chimes and close down.

## AFTERNOON SESSION.

Announcer: J. L. Norris.

1.0 p.m.: G.P.O. chimes. 1.1 p.m.: From Morphettville Racecourse, positions and riders for Maiden Handicap. 1.15 p.m.: From Morphettville Racecourse, description of Maiden Handicap, by Mr. Arnold Treloar. 1.20 p.m.: Studio music, recital of famous Parlophone recordings on the "Sonora." 1.45 p.m.: Moonee Valley race results; International cricket scores. 1.50 p.m.: From Morphettville Racecourse, positions and riders for Summer Hurdles. 1.55 p.m.: Studio music, recital of Parlophone recordings on the Studio Recreator. 2.5 p.m.: From Morphettville Racecourse, running description of Summer Hurdles by Mr. Arnold Treloar. 2.10 p.m.: Moonee Valley races, result of Barkoola Handicap. 2.11 p.m.: Studio music, a few minutes with famous H.M.V. jazz orchestras. 2.30 p.m.: From Morphettville Racecourse, positions and riders for December Handicap. 2.35 p.m.: Sonora recital, by Columbia's jazz experts, Paul Whiteman and his orchestra. 2.44 p.m.: Moonee Valley races, result of Koomabala Maiden Plate. 2.45 p.m.: From Morphettville Racecourse, description of the December Handicap by Mr. Arnold Treloar. 2.50 p.m.: From the Studio, Sonora recital of H.M.V. recordings. 3.0 p.m.: Resume of sporting results. 3.10 p.m.: From Morphettville Racecourse, positions and riders for Juvenile Handicap. 3.15 p.m.: Studio music, a few more minutes with Parlophone celebrity artists. 3.24 p.m.: Moonee Valley race resultst. 3.25 p.m.: From Morphettville Racecourse, description of Juvenile Handicap by Mr. Arnold Treloar. 3.30 p.m.: Relay from South Australian Lawn Tennis Association Courts, Memorial Drive, of the English Team v. South Australia, by Mr. F. J. Mills. 3.50 p.m.: From Morphettville Racecourse, positions and riders for Handicap Welter. 3.55 p.m.: Studio music, Sonora recital of world-famous Columbia recordings. 4.0 p.m.: Resume of Moonee Valley and Tattersall's Meetings. 4.5 p.m.: From Morphettville Racecourse, description of the Handicap Welter, by Mr. Arnold Treloar. 4.10 p.m.: Studio music, twenty minutes with world-famous H.M.V. artists. 4.30 p.m.: Moonee Valley Races, result of Argyle Highweight Handicap. 4.31 p.m.: From Morphettville Racecourse, positions and riders for Closing Handicap. 4.45 p.m.: Running description of Closing Handicap by Mr. Arnold Treloar. 4.50 p.m.: Studio music, recital of Parlophone recordings on the "Sonora." 4.58 p.m.: Resume of sporting results. 5.0 p.m.: G.P.O. chimes and close down.

## EVENING SESSION.

Announcer: Athol Lykke.

6 p.m.: G.P.O. chimes. 6.1 p.m.: Resume of late sporting. International cricket scores, second Test match at Sydney. 6.10 p.m.: Children's happy moments. Birthday greetings, correspondence, songs, and stories, by "The Wattle Lady." 6.40 p.m.: Dinner music session. Sonora recital of world-famous Parlophone recordings. 6.55 p.m.: International cricket scores, second Test match at Sydney. 7 p.m.: G.P.O. chimes. 7.1 p.m.: S. C. Ward and Co.'s Stock Exchange information. 7.7 p.m.: Station announcements. 7.10 p.m.: Rev. G. E. Hale, B.A., talk on "The Art of Elocution." 7.25 p.m.: "Willow," in a resume of the afternoon's cricket. 7.35 p.m.: C. G. Riley, talk on "Items of Interest." 7.45 p.m.: 5CL's sporting service, including Tattersall's and Moonee Valley race results; international cricket scores, second Test match at Sydney; international tennis scores.

## NIGHT SESSION.

8 p.m.: G.P.O. chimes.

8.1 p.m.: A band concert, Hindmarsh Municipal Band—March, "Elephant" (Hume) overture, "The Village Bride" (Rimmer).

8.13 p.m.: Sydney Burchall, popular baritone—"A Banjo Song" (Homer), "Mother o' Mine" (Tours).

8.20 p.m.: Hilda Riemann, violiniste—"Rondino" (Kreisler), "Minuet" (Beethoven).

8.27 p.m.: Sydney Hollister, humorist, in comedy sketches.

8.32 p.m.: Hindmarsh Municipal Band, "Gems from Operas" (Sullivan).

8.44 p.m.: Mrs. Keith Steward, soprano—"Christina's Lament" (Dvorak), "The Fairie Pipers" (Brewer).

8.50 p.m.: Hindmarsh Municipal Band—"Drum Head's Church Parade" (Hume).

9 p.m.: G.P.O. chimes.

9.1 p.m.: Sydney Burchall popular baritone—"Here in the Quiet Hills" (Purcell), "Drums of Life" (Lohr).

9.7 p.m.: Hilda Riemann, violiniste—"Largo" (Handel), "Ave Maria" (Schubert).

9.14 p.m.: Sydney Hollister, humorist interlude.

9.20 p.m.: Hindmarsh Municipal Band—Waltz, "Delilah" (Nicholls).

9.27 p.m.: Frank McCabe, baritone—"Still as the Night" (Bohm), "Simon the Cellarer" (Hatton).

9.34 p.m.: Hilda Riemann, violiniste, selected solos.

9.40 p.m.: Mrs. Keith Steward, soprano—"A Song of Thanksgiving" (Allitsen), "There is a Land" (Allitsen).

9.46 p.m.: Hindmarsh Municipal Band—Serenade, "Moonlight" (Moret), march, "Uncle Sammy" (Holzman).

9.55 p.m.: Frank McCabe, baritone—"Two Grenadiers" (Schumann), "Fleurette" (M'Geoch).

10.2 p.m.: Hindmarsh Municipal Band—Indian characteristic, "Four Indian Love Lyrics" (Finden).

10.15 p.m.: 5CL's sporting service, including Tattersall's and Moonee Valley race results; international cricket scores, second Test match, at Sydney; international tennis scores.

10.29 p.m.: Our good-night thought.

10.30 p.m.: By courtesy of 3LO, Melbourne, modern dance numbers by the Radi-o-Aces.

11.10 p.m.: God Save the King.

## 6WF, PERTH

Saturday, December 15

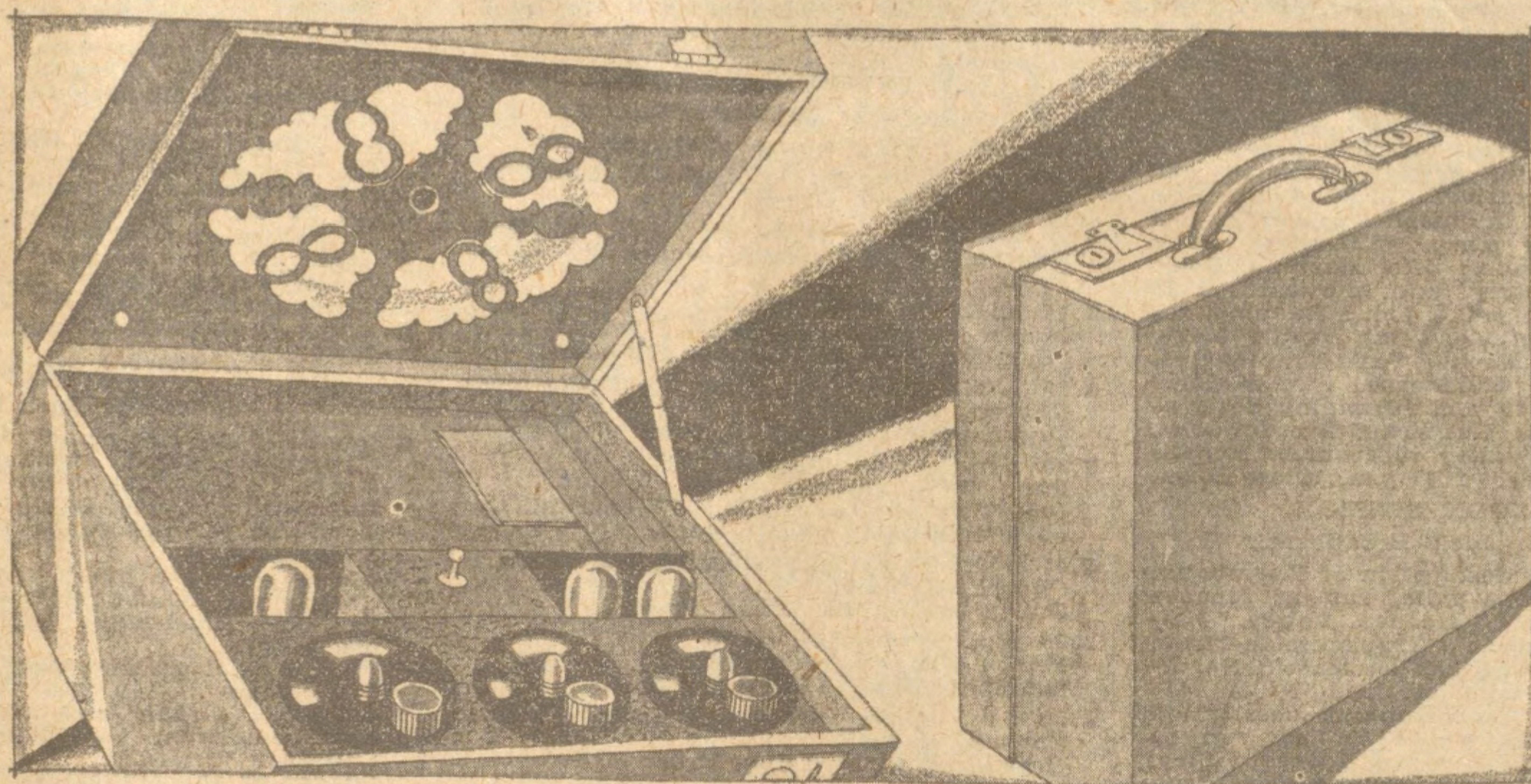
12.0: Tune in. 12.5 p.m.: Musical programme, including pianoforte selections by Miss Audrey Dean. 12.47 p.m.: Markets, news, and cables. Results will be given of the second Test match between the English Eleven v. Australian Eleven, played at Sydney. 1.0 p.m.: Time signal. 1.1 p.m.: Weather notes supplied by the Meteorological Bureau of West Australia. Station announcements. 1.2 p.m.: Close down. 3.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 3.15 p.m.: Tune in. 3.20 p.m.: Sporting session—Racing results and general sporting news. Musical programme from the studio, including vocal and instrumental numbers. 5.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 5.5 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. 6.48 p.m.: Stories for the kiddies and birthday greetings by Uncle Duffy and the Radio Bird. Fairy stories for the tiny tots by Auntie Amy. 7.5 p.m.: Sports results. 7.30 p.m.: Markets, news, and cables. 7.45 p.m.: Talk. 8.0 p.m.: Time signal. 8.1 p.m.: Weather notes supplied by the Meteorological Bureau of West 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. Motor cycling events described in detail, relayed from the Claremont Speedway. 9.0 p.m.: Late news items by courtesy of "The Daily News" Newspaper Co. Ships within range announcement; weather report and forecast; station announcements. 10.30 p.m.: Close down.

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# DAVID JONES'



**7ZL, HOBART****Saturday, December 15****MID-DAY SESSION**

Announcer: Jack Broadbent.

11.30 a.m.: His Master's Voice in moments Merry and Musical. 11.34 a.m.: Special midlands weather forecast. 11.35 a.m.: His Master's Voice in moments merry and musical. 11.55 a.m.: Tasmanian stations 9 a.m. weather report. 12.0 noon: G.P.O. clock chimes the hour. 12.1 p.m.: Shipping information; ships within wireless range; mail notices; commercial news; housewives' guide. 12.8 p.m.: His Master's Voice in moments merry and musical. 12.11 p.m.: British official wireless news. 12.20 p.m.: His Master's Voice in moments merry and musical. 12.29 p.m.: Announcements. 12.30 p.m.: Anticipations—3LO, Melbourne, sporting commissioner last minute selections for Melbourne races, also selections for Sydney races by our special representative. 12.33 p.m.: His Master's Voice in moments merry and musical. 12.55 p.m.: "Mercury" news service. 1.10 p.m.: His Master's Voice in moments merry and musical. 1.30 p.m.: Close down. 2.0 p.m.: Running description of Banyule Trial Hurdle Race, 2 miles, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 2.5 p.m.: Close down. 2.30 p.m.: Running description of Barkoola Handicap, five furlongs, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 2.35 p.m.: Close down.

**AFTERNOON SESSION**

Announcer: Jack Broadbent.

3.0 p.m.: Running description of Koombahla Maiden Plate, one mile, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 3.5 p.m.: Transmission from North Hobart Oval, cricket match, North-west v. Newtown, described by A. M. O'Leary. 3.40 p.m.: Running description of Luluma Handicap, 1½ miles, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 3.45 p.m.: Transmission from North Hobart Oval, cricket match, North-west v. Newtown, described by A. M. O'Leary. 4.0 p.m.: His Master's Voice in moments merry and musical. 4.20 p.m.: Running description of Kiata Handicap, 6 furlongs, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 4.25 p.m.: Transmission from North Hobart Oval, cricket match, North-west v. Newtown, described by A. M. O'Leary. 4.50 p.m.: Running description of Argyle Highweight Handicap, 7 furlongs, run at Moonee Valley racecourse, Moonee Valley, Melbourne. 4.55 p.m.: All sporting results to hand. 5.0 p.m.: Close down. During the afternoon progress results will be given of English XI, second Test match at Sydney, also tennis match, New South Wales v. Tasmania, at Sandy Bay lawn tennis courts.

**EARLY EVENING SESSION.**

Birthday Greetings: "Uncle David."

Announcer: Jack Broadbent.

6.0 p.m.: All sporting results to hand. 6.15 p.m.: His Master's Voice in moments merry and musical. 6.45 p.m.: "Uncle David" will entertain the ———. 7.0 p.m.: Answers to letters and birthday greetings by "Uncle David." 7.5 p.m.: His Master's Voice in moments merry and musical. 7.15: "Mercury" special information; Hobart Stock Exchange quotations; to-day's golf, athletics, racing, cricket, "Mercury" late sporting news; results of New Town Egg-laying Competition; homing and bowling.

**EVENING SESSION.**

Announcer: Jack Broadbent.

7.30 p.m.: Roy Johnson will speak on "Manual Training" 7.45 p.m.: Serial story, "The Nobbelled Favorite," a stirring story of the turf. (Third instalment.) 8.0 p.m.: G.P.O. clock chimes the hour. 8.1 p.m.: Fifty years ago to-day—"Once in the flight of ages past, there lived a man, and who was he?" (James Montgomery). 8.6 p.m.: Transmission from the Theatre Royal, Campbell Street, Hobart, a concert by the St. Virgil College Boys (Conductor, Bro. McCarthy). 10.20 p.m.: From the Studio—News session; to-day's sporting; news service; ships within wireless range; Tasmanian district weather report. 10.22 p.m.: Our Tasmanian Good-night Thought is—"There is no wisdom in useless and hopeless sorrow." (Dr. Johnson.) God Save the King. Close down.

**Sunday, December 16**

New South Wales Broadcasting Company, Limited

**2FC SERVICE****MORNING SESSION.**

Announcer: Laurence Halbert.

10 a.m.: Big Ben and announcements. 10.2 a.m.: Studio music. 10.15 a.m.: News service. 10.30 a.m.: Studio music. 11 a.m.: Morning service, broadcast from First Church of Christ, Scientist, corner Liverpool and Forbes Streets, Sydney. 12.15 p.m., approx.: Close down.

**AFTERNOON SESSION.**

Announcer: Laurence Halbert.

2.30 p.m.: Programme announcements. 2.32 p.m.: Cheer Up Society, conducted by Mr. Frank Grose. 3 p.m.: From Pitt Street Congregational Church, Sydney, organ recital by Lillian Frost. 3.15 p.m.: From the studio. Muriel O'Malley, contralto. "Summer Night" (Goring Thomas). 3.19 p.m.: From Pitt Street Congregational Church, Sydney. Organ recital by Lillian Frost. 3.34 p.m.: From the studio. Rene Rich, violinist. (a) "Scherzo Tarantelle" (Wieniawski). (b) "Rondino" (Beethoven). 3.41 p.m.: From Pitt Street Congregational Church, Sydney. Organ recital by Lillian Frost. 3.56 p.m.: From the studio. Muriel O'Malley, contralto. "Soul of Mine" (Ethel Barnes). 3.59 p.m.: From Pitt Street Congregational Church, Sydney. Organ recital by Lillian Frost. 4.3 p.m.: From the studio. Rene Rich, violinist. (a) "Romance" (Wieniawski). (b) "Minuet" (Beethoven). 4.17 p.m.: From Pitt Street Congregational Church, Sydney. Organ recital by Lillian Frost. 4.30 p.m.: From the studio. Studio music. 5 p.m.: Big Ben; close down.

**EVENING SESSION.**

Announcer: Laurence Halbert.

6.0 p.m.: Big Ben; programme announcements. 6.5 p.m.: The Austral Quartet, instrumentalists. 6.20 p.m.: Anne Luciano, soprano. 6.28 p.m.: The Austral Quartet, instrumentalists. 6.43 p.m.: Anne Luciano, soprano. 6.50 p.m.: The Austral Quartet, instrumentalists. 7 p.m.: Evening service, broadcast from Lyceum Hall, Pitt Street, arranged by the Central Methodist Mission, conducted by Rev. H. C. Foreman. 8.30 p.m.: From the studio. Lawrence Macaulay, baritone. (a) "I am Fate" (Hamblen). (b) "The Watchman" (Squire). 8.37 p.m.: Alexander Sverjenski, pianoforte solos. (a) "Dumka" (Tschalkowsky). (b) Selected. 8.52 p.m.: Suzanne Ennis, contralto. 8.59 p.m.: Greta Callow, soprano. 9.6 p.m.: Jules Van Der Klei, 'cellist. "Sonata," Part 1 and 2 (Bach). 9.12 p.m.: Lawrence Macaulay, baritone. (a) "Pilgrim's Song" (Tschalkowsky). (b) "Five and Twenty Sailor Men" (Coleridge-Taylor). 9.21 p.m.: Alexander Sverjenski, pianist. (a) "Melodie" (Gluck-Sgambati). (b) "Hark, Hark, the Lark" (Schubert-Liszt). (c) "Don Juan's Serenade" (Mozart-Backhaus). 9.31 p.m.: Suzanne Ennis, contralto. 9.39 p.m.: Jules Van Der Klei, 'cellist. (a) "Andante" (Hugo Becker). (b) "Adagio" (Corelli). (c) "Ave Maria" (Schubert-Popper). 9.52 p.m.: Greta Callow, soprano. 10.0 p.m.: Big Ben. Recital of selected records. 10.30 p.m.: National Anthem. Close down.

**2BL SERVICE****Sunday, December 16****MORNING SESSION.**

Announcer: A. C. C. Stevens.

11.0 a.m. G.P.O. clock and chimes. Morning service, broadcast from William Street Methodist Church, Sydney. Rev. W. Coleman, minister. 12.15 p.m. (approx.): From the Studio. "Sun" news service. 12.30 p.m.: Studio music. 2.0 p.m.: G.P.O. clock and chimes. Close down.

**AFTERNOON SESSION.**

Announcer: Basil Kirke.

3 p.m.: Organ recital from the Arcadia Theatre, Chatswood. Organist, Nicholas Robins. (a) Overture, "Morning, Noon, and Night." (b) "Valse Dramatique." (c) "Serenade" (Drigo). (d) Favorite old melodies of bygone days. Studio music. (e) "Morning Mood" (Grieg). (f) "The Death of Ase" (Grieg). (g) Intermezzo, "Fragrance of Spring." (h) "I Gathered a Rose." (i) "Valse in A Minor" (Chopin). 4 p.m.: From the band rotunda, Manly Beach. The Manly Municipal Military Band, conducted by Mr. James Pheloung. 5 p.m.: G.P.O. clock and chimes. Close down.

**EVENING SESSION.**

Announcer: Basil Kirke.

6 p.m.: G.P.O. clock and chimes. Children's sacred session, conducted by Uncle David, the children's chaplain. Introducing Uncle David. A chorus for the young folk to learn. A Bible story. An old favorite hymn that mother sings. Family prayer and recitation of the Lord's Prayer. Good-night and the children's benediction. 6.20 p.m.: Letters and stories, conducted by Uncle Bass. 6.30 p.m.: Organ and orchestral recital, broadcast from Newtown Congregational Church. Organist, Mr. Penn Hughes. Leader of the orchestra, Miss Maud Housen. 7 p.m.: Evening service, broadcast from Newtown Congregational Church. Minister, Rev. Mearns Massie. 8.30 p.m.: From the band rotunda, Manly Beach. The Manly Municipal Military Band, conducted by Mr. James Pheloung. 9.30 p.m.: From the studio. Lance Jeffree, tenor. "Onaway, Awake" (Coleridge-Taylor). 9.37 p.m.: Gerald Walenn, violinist. 9.44 p.m.: Lance Jeffree, tenor. (a) "An Island Shelling Song" (Kennedy-Frazer). (b) "You Lovely Thing" (Anderson). (c) "Over the Waters Blue" (Clarke). 9.51 p.m.: Resume of following day's programme. 9.53: Gerald Walenn, violinist. 10.0 p.m.: G.P.O. clock and chimes. National Anthem. Close down.

**2GB, SYDNEY****Sunday, December 16**

10.15 a.m.: Organ music from St. Alban's Church, Redfern. 10.30 a.m.: Morning service. 12 noon: Close down. 5.30 p.m.: Children's session. 7.0 p.m.: Lecture from Adyar Hall. 8.0 p.m.: Sacred concert from Adyar Hall. 10.0 p.m.: Close down.

**2UW, SYDNEY****Sunday, December 16**

10.30 a.m.: Music. 1 p.m.: Close down. 5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7 p.m.: Musical programme. 10 p.m.: Close down.

**3LO, MELBOURNE****Sunday, December 16****MORNING SESSION.**

Announcer: Maurice Dudley.

10.30 a.m.: Bells from St. Paul's Cathedral, Melbourne. 10.45 a.m.: Express train information. British official wireless news from Rugby. News from yesterday's papers. 11.0 a.m.: Morning service from the Independent Church, Collins Street, Melbourne. Hymn. Prayer and Lord's Prayer (repeated). Scripture lesson.



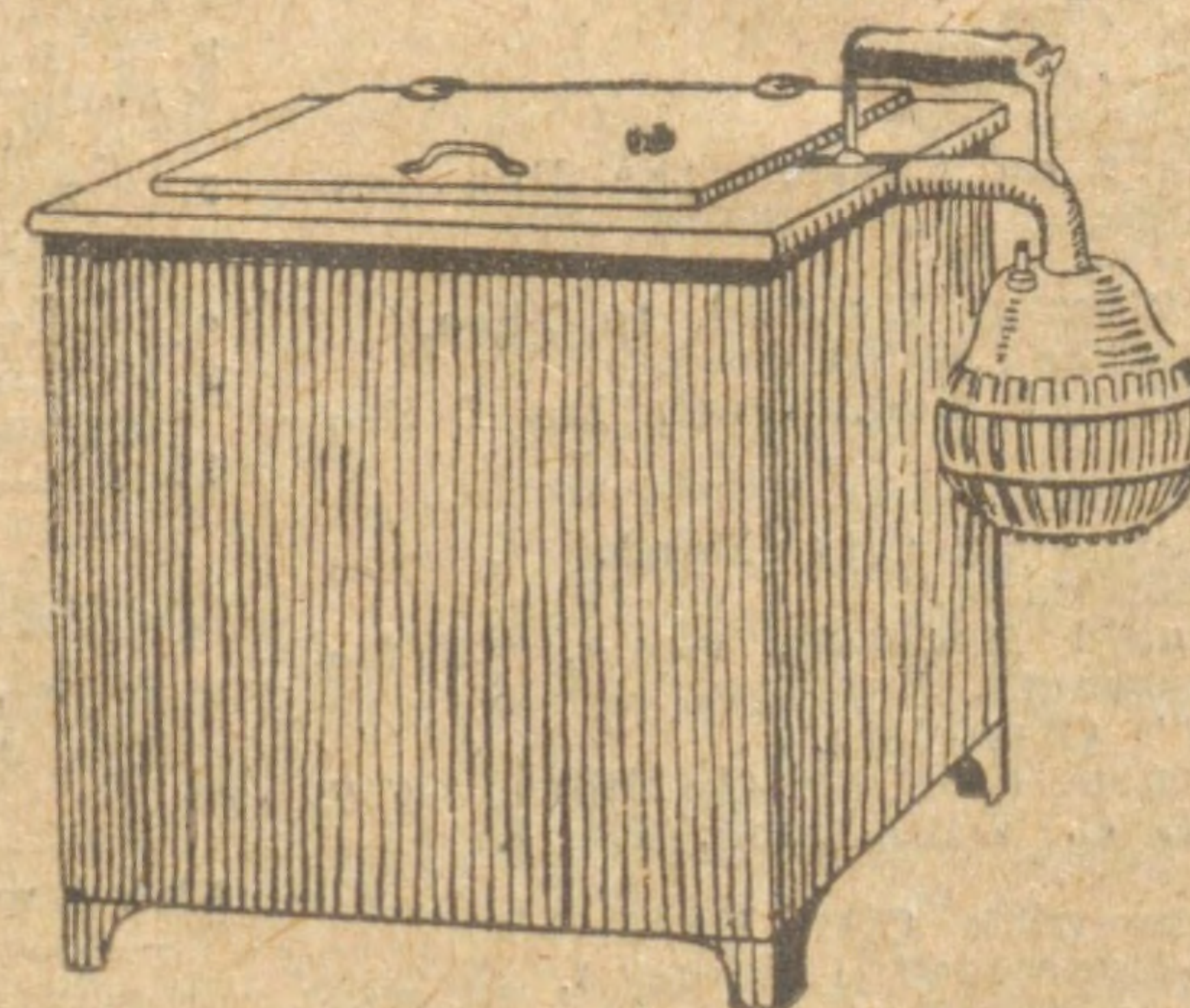
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Hymn. Prayer. Anthem. Notices. Offerings. Hymn. Sermon, Rev. Professor A. E. Albiston, M.A. Hymn. Benediction. 12.15 p.m.: Close down.

## AFTERNOON SESSION.

Announcer: Maurice Dudley.

2.0 p.m.: Sonora recital of the world's most famous records. (1) Choir—"Excerpts from 'The Crucifixion' (Stainer); St. Marylebone Parish Choir (Ronald G. Tomlin, organist and conductor); "The Procession to Calvary," parts 1 and 2; (a) Recitation, "And as Moses Lifted Up the Serpent;" (b) "God So Loved the World;" (a) "Is It Nothing to You?"; (b) "The Appeal of the Crucified," part 1; (a) "The Appeal of the Crucified" (part 2 and conclusion); (b) Recit., "After This;" (c) Hymn, "All for Jesus," last verse. (2) Song, "Tis the Last Rose of Summer" (Moore). Maria Kurenko (soprano). (3) Orchestral, "Wedding March" from "Midsummer Night's Dream" (Mendelssohn), Columbia Symphony Orchestra. (4) Violin solo, "At the Brook"—Au bord d'un Ruisseau (de Boisdoffre), Sascha Jacobsen. (5) Instrumental quartet, "Old Folks at Home" (Foster), Columbia Musical Art Quartet (direction of Sascha Jacobsen). (6) Vocal duet, "The Lord is My Shepherd" (Smart), Lewis James and Elliott Shay (tenor and baritone). (7) Song, "Liebestraut," Love's Faith (Brahms), op. 3, No. 1, Elsa Alsen (soprano). 3.0 p.m.: Pleasant Sunday Afternoon. Wesley Church, Central Mission, Lonsdale Street, Melbourne. Hymn No. 12, "Come Ye That Love the Lord;" prayer, Rev. C. Irving Benson; orchestral selections, G. M. Williams (conductor); hymns No. 23, "I Am Thine, O Lord;" quartette, The Meister Quartette party; orchestra; quartette, The Meister Quartette party; notices, offering; address; National Anthem; benediction; orchestra. 4.30 p.m.: Under the auspices of the Victorian Tree Planters' Association, H. Linaker will speak on "The First Arboretum in the State of Victoria." 4.45 p.m.: Close down.

## EVENING SESSION.

Announcer: Maurice Dudley.

5.45 p.m.: Shipping information. 5.57 p.m.: Answers to letter and birthday greetings by "Billy Bunny." 6.25 p.m.: "Brother Bill," "Ask, Seek, and Knock." 6.45 p.m.: Birthday greetings and programme announcements. 6.47 p.m.: Bells from St. Paul's Cathedral, Melbourne.

## NIGHT SESSION.

Announcer: Maurice Dudley.

Accompanist: Mabel Nelson.

7.0 p.m.: Evening service from St. Paul's Cathedral, Melbourne. Hymn (A. and M.) 414, "Lo! from the Desert Homes." Sentences. Exhortation. General confession. The Absolution. The Lord's Prayer. Versicles and Responses (Ferial). Psalms, 16th evening. First lesson. Magnificat, Bairstow in D. Second lesson. Nunc Dimittis. The Apostles' Creed. Versicles and responses. The Collects. Anthem, "Here on Earth," the Requiem (Brahms). Prayers. Hymn 277, "Nearer, My God, to Thee." The Sermon, the Archbishop. Hymn 52, "Great God, What Do I See and Hear?" The Benediction. 8.30 p.m.: Brunswick City Band. Selection, "Maritana." 8.40 p.m.: Donald M'Beath, violin, "Meditation" (Massenet). "Liebesfreud" (Kreisler). 8.50 p.m.: Lance Fairfax (baritone) (by permission J. C. Williamson, Ltd.). Selected. 8.57 p.m.: Brunswick City Band. "Air Varié—Eventide" (Rimmer). 9.4 p.m.: George Findlay (piano). "Prelude in C Minor" (Chopin). "Sonata op. 27 No. 2"—Moonlight (Bethoven). Adagio Sostenuto. Allegretto. Presto Agitato. 9.19: Brunswick City Band. March, "La Vivandiere" (Rimmer). "Rockdale" (Owen). 9.25 p.m.: Lance Fairfax (baritone). 9.32 p.m.: Donald M'Beath (violin). "Indian Lament" (Dvorak). "Midnight Bells." 9.39 p.m.: Brunswick City Band.

Suite, "Bohemian" (Hume). 9.50 p.m.: "Argus" news service. Announcements. Meteorological information. 9.59 p.m.: Our Great Thought for to-day is:—"They are never alone that are accompanied with noble thoughts"—Sidney. 10.0 p.m.: God Save the King.

## 3AR, MELBOURNE

Sunday, December 16

## MORNING SESSION

10.45 a.m.: Announcements. 11 a.m.: Morning service from the Australian Church, 19 Russell Street, Melbourne. Preacher, Dr. Charles Strong. Hymn (Church Worship) 5: "Again the Morn." Prayer and responses. Hymn 461. Scripture reading. Chant 7: "The Narrow Way." Scripture reading. Anthem 37: "In Thee O Lord" (Himmel). Service IV. (Church worship). Hymn (Church worship) 15: "Fellow Workers With God." Address: "THE LARGER VIEW." Hymn (supplement) 57. Parting hymn. Announcements. Offertory. Organ Music. Prayer. Benediction. Church worship service IV. Organ music. 12.15 p.m.: Close down.

## AFTERNOON SESSION.

3 p.m.: Superphonic harmonics. 4.30 p.m.: Close down. 5 p.m.: "BRER RABBIT" in a Special Children's Session. 5.30 p.m.: Close down.

## NIGHT SESSION.

Announcer: Frank Hatherley.

Accompanist: Vera Howe.

7 p.m.: Evening Service from Cairns Memorial Presbyterian Church, East Melbourne. Christmas Service. Doxology, Invocation, Hymn 29, "It came upon the midnight clear." Lesson. Prayer. Notices. Offertory. Pastoral Symphony from "The Messiah." Lord's Prayer. Hymn 31, "O come, all ye faithful." Sermon. Prayer. Selections from Handel's Oratorio, "The Messiah." Hymn 28, "Hark! the Herald Angels sing." Benediction. Organist, Miss F. F. Thurman. Soloists: Miss Louise Thornton (soprano), Mrs. Aberly (contralto), Mr. A. J. Etheridge (tenor), Mr. Frank Thomas (bass). Conductor, Mr. R. J. Oehr. 8.30 p.m.: The Strad Trio. "Trio C Minor" (Lavater), "Variazioni, Allegretto Scherzando," "Andante, Allegro Moderato." 8.45 p.m.: Bessie Banks, soprano. "My Prayer" (Squire), "Land of Long Ago" (Lilian Ray). 8.52 p.m.: The Strad Trio. Two violins: "Air for G String" (Bach), "Minuet" (Haydn), "Tambourin" (Possee), "Variations" (Tartini-Kreisler). 9.2 p.m.: E. Mason Wood, baritone, "Nightfall at Sea" (Phillips), "The Ringers" (Lohr). 9.9 p.m.: A. S. Kenyon. Ethnology of the Australian Aboriginal: (1) The aboriginal, what he is, what he eats, and how he gets it." 9.24 p.m.: Bessie Banks, soprano. "She is Far from the Land" (Lambert), "Now Sleeps the Crimson Petal" (Quilter). 9.31 p.m.: The Strad Trio. Trios: "Cannon" (Louis Lavater), "Styrienne" (Louis Lavater). 9.37 p.m.: E. Mason Wood, baritone. "A Sailor's Prayer" (Clarke), "The Port of St. Mary's" (Lohr). 9.44 p.m.: The Strad Trio. Cello: "Hungarian Rhapsody" (Popper), trio, "Extract from Rosamunde" (Schubert). 9.54 p.m.: News; announcements. 9.58 p.m.: Our Australian Good Night Quotation. 10 p.m.: God Save the King.

## 4QG, BRISBANE

Sunday, December 16

## MORNING SESSION

11.0 a.m.: From City Congregational Church—Morning service. 12.15 p.m.: Close down.

## AFTERNOON SESSION

3.15 p.m.: From the Botanic Gardens—Band concert. 4.30 p.m.: Close down.

## EARLY EVENING SESSION

6.30 p.m.: From the Studio—Greetings from little listeners and replies to letters.

## NIGHT SESSION

7.0 p.m.: From the City Congregational Church—Children's service. 7.30 p.m.: Evening service. From Wickham Park—Band concert. 9.30 p.m.: Close down.

## 5CL, ADELAIDE

Sunday, December 16

## MORNING SESSION.

Announcer: Athol Lykke.

10.45 a.m.: Peals of Bells from the Adelaide Town Hall. 11 a.m.: G.P.O. Chimes. 11.1 a.m.: Divine Service from Rose Park Congregational Church. Invocation, Hymn 136, "All Hail the Power." Scripture reading. Solo, Mr. W. Aiston. Hymn 31, "Saviour Sprinkle Many Nations." Scripture Reading, Hymn 79, "The Race that Longs in Darkness." Sermon, "A message to men in obscurity." Preacher, Rev. H. Watts Grimmett. Hymn 80, "Oh, come all ye faithful." Solo, Mr. W. Aiston. Organist, Linda Klotz. Singing led by Rose Park Choir. 12.15 p.m.: British Official Wireless news. 12.20 p.m.: Close down.

## AFTERNOON SESSION.

Announcer: Athol Lykke.

3 p.m.: G.P.O. chimes. 3.1 p.m.: An address from Exhibition Building by Mr. W. Stuart Booch, from Denver (Colorado), on "Christian Science, its Discovery and Demonstration." 4 p.m.: Chimes and close down.

## EVENING SESSION.

Announcer: Athol Lykke.

6 p.m.: G.P.O. chimes. 6.1 p.m.: S.A. Railway information. 6.2 p.m.: "Auntie Peggy" in songs and greetings. 6.30 p.m.: "The Bird Lady" and the Junior Choir, in choral selections and stories.

## NIGHT SESSION.

Announcer: Athol Lykke.

7 p.m.: G.P.O. chimes. 7.1 p.m.: A Choral Service relayed from Malvern Methodist Church, "The Messiah," by Handel. Preacher, Rev. W. A. Dunn. Organist, Mr. Fred. Pilgrim. Soloists: Miss Phyllis Webb, Miss Una Andrew, A.M.U.A., Mr. Lindsay Jessop, Mr. Lewis Dame, Mr. Arnold Matters, A.M.U.A., Mr. Ray Wood, Mr. J. Williamson. 8.35 p.m.: Station Orchestra, overture, "Mirella" (Gounod). 8.43 p.m.: Rita Watson, soprano, "The Enchantress" (Hatton), "The Wild Rose" (Schubert). 8.50 p.m.: Tom King, pianist, "Chanson" (original composition). 8.54 p.m.: Keith Clarke, lyric tenor, "A Dream" (Bartlett), "Adieu, Marie." 9.1 p.m.: Station Orchestra, suite, "Moon Moths" (Kussner). 9.8 p.m.: Rita Watson, soprano, "Evening Hymn" (Purcell), "Abide with Me" (Liddle). 9.15 p.m.: Station Orchestra, "Malaguena" from the opera, "Bobadil" (Moszkowski). 9.22 p.m.: Keith Clarke, lyric tenor, Selected Solos. 9.29 p.m.: Station Orchestra, intermezzo, "Naila" (Delibes). 9.33 p.m.: Rita Watson, soprano, "Ring, Bel's Ring" (Day). 9.37 p.m.: Station Orchestra, selection "The Last Waltz" (Strauss). 9.45 p.m.: D. H. Nicholls, talk on "Frances Willard." 10 p.m.: G.P.O. chimes. 10.1 p.m.: Meteorological information. 10.2 p.m.: Our Good Night Thought, "The imagination gallops; the judgment merely walks."—Fr. 10.3 p.m.: God Save the King.

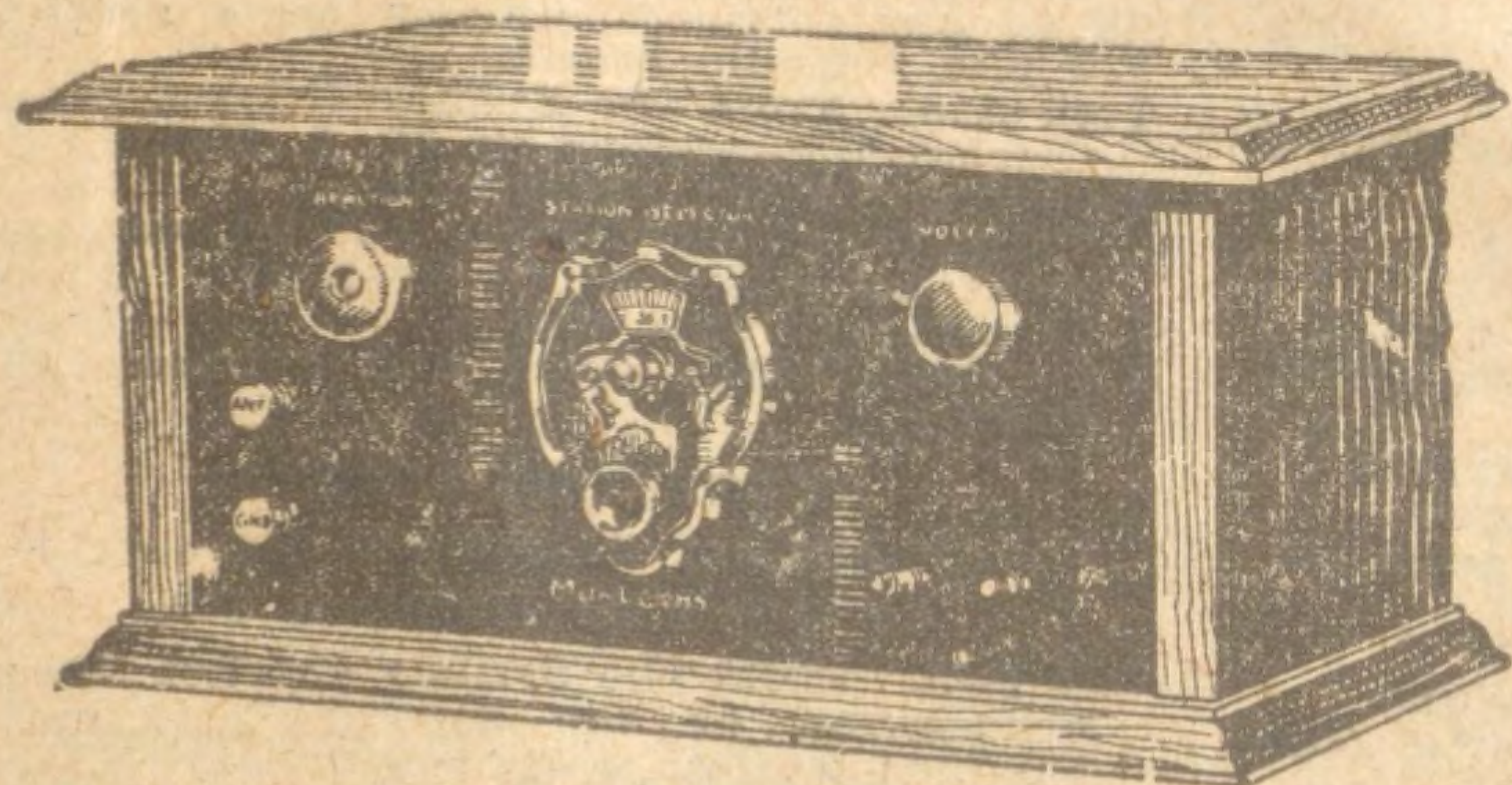
## 6WF, PERTH

Sunday, December 16

10.25 a.m.: Tune in. 10.30 a.m.: Special half-hour for the enthusiastic listener. 11.0 a.m.: Morning Service relayed from St. Andrew's Church, Perth; preacher, Rev. Geo. Tulloch. 12.15 p.m.: Close down. 3.30 p.m.: Tune in. 3.35 p.m.: Music and Song—Musical programme from the studio, including vocal and instrumental artists. 4.30 p.m.: Close down. 7.0 p.m.: Tune in. The evening transmission is broadcast on 104.5 metres, as well as the usual wave length. 7.5 p.m.: Children's bedtime stories, by Mr. Robert Edmondson. 7.30 p.m.: Evening Service relayed from St. George's Cathedral, Perth. 8.45 p.m.: A Relay—After-church service and concert, relayed from Queen's Hall, Perth. 10.5 p.m.: Close down. 104.5 METRE TRANSMISSION. Simultaneous broadcast on 104.5 metres of programme given on 1250 metres, commencing at 7 p.m.



# Christmas Bargains in RADIO



## This Splendid Three-Valve Set . . . £9/9/-

Wonderful value! A set that makes an ideal gift for all the family. Perfect reception, true to life tone in ample volume. Gives splendid loud speaker reception. Strongly built, in polished cabinet. Complete with speaker, valves, batteries, aerial equipment. Price, £9/9/.

## Battery Chargers

No heavy lifting of your battery to a service station, when you own one of these. You get longer battery life and best reception always. Simply plug in from the electric light socket. Charges at 1/2 amp. Secure this popular Fuller Trickle Charger unit now. PRICE . . . . . 60/-

## Accumulator Cases

If he carries an accumulator, here is an excellent little gift which will be greatly appreciated. Strong metal folding battery carriers. Price, each . . . . . 2/6

Besides the Radio Gift Suggestions quoted here, Murdoch's have a complete range of modern day electrical apparatus:—Gifts of distinction and perennial usefulness.

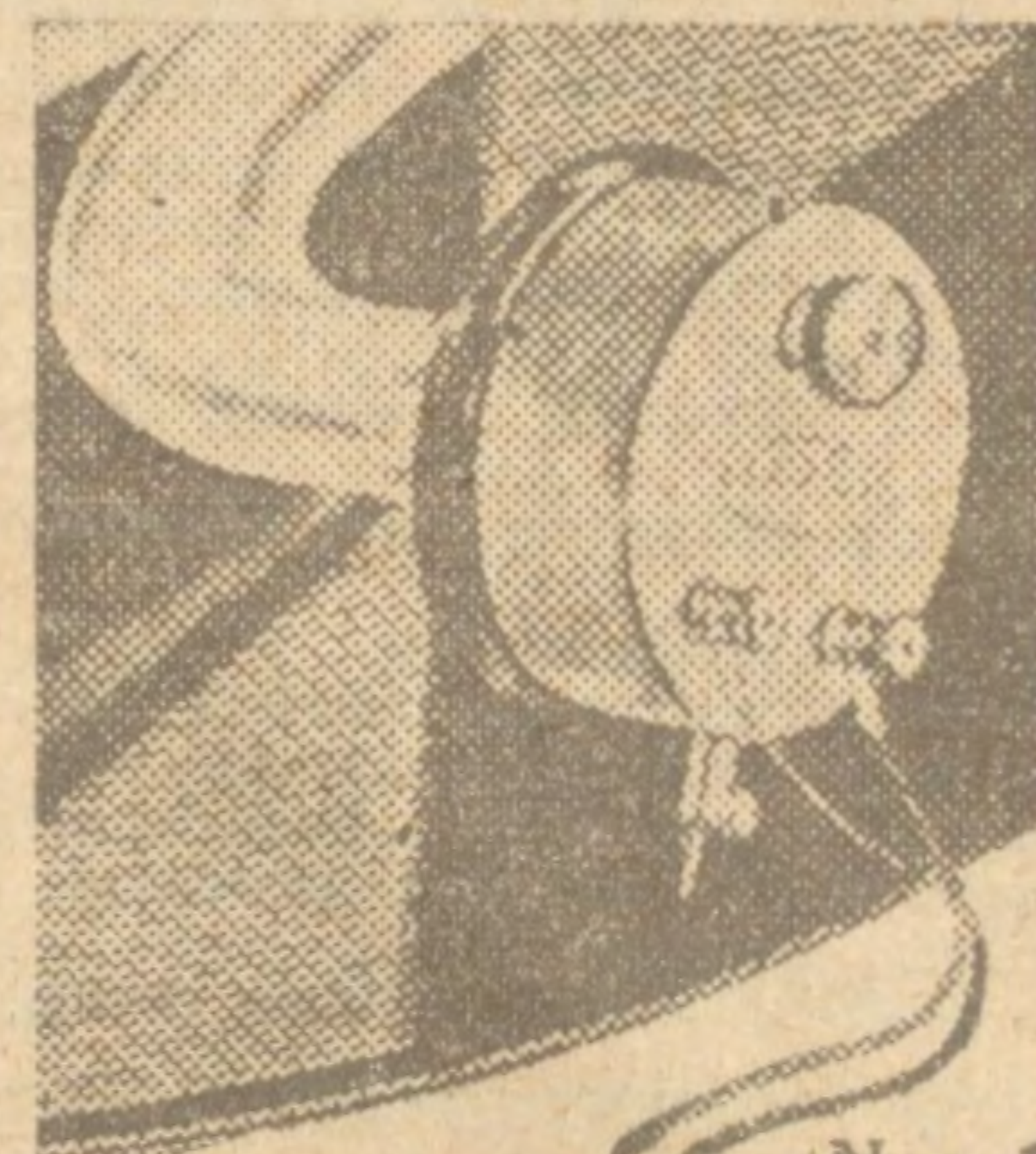
## —at Murdoch's

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Radio is so popular at Christmas time; a Radio gift means hearty approval from the recipient and many hours of added happiness, not only during Yuletide, but throughout the year.

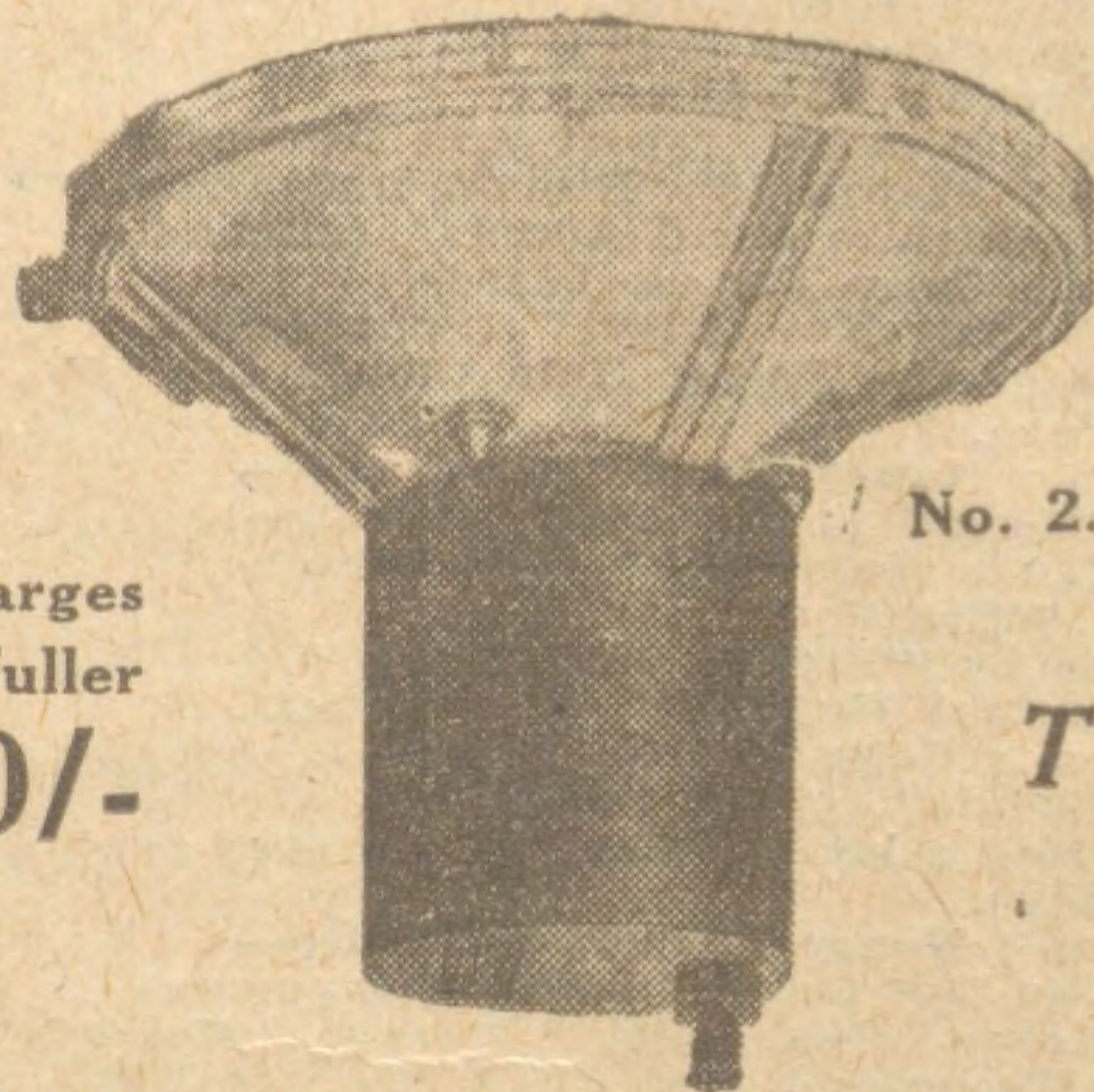
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The "Lissen" electric Pick-up—a wonderful unit which amplifies your Phonograph music to any degree of loudness, per medium of your Radio Set. Reproduces low notes on your records, and brings out hidden beauty in your records. It also eliminates needle scratch—enabling you to use your old records. 17/6. (As Illustrated.)



No. 1

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# MURDOCH'S IN PARK STREET LTD. SYDNEY

"Specialists in all Matters Pertaining to the Science of Radio."



**7ZL, HOBART****Sunday, December 16****MORNING SESSION.**

10.45 a.m.: Bells from Trinity Church, Hobart. 11.0 a.m.: Transmission from Chalmers Street Methodist Church. 12.30 p.m.: Close down.

**AFTERNOON SESSION.**

3.30 p.m.: G.P.O. clock chimes the hour. 3.31 p.m.: Transmission from the Hobart Beaumaris Zoo. A band concert by the Municipal Band (conductor, L. M. Barnett). 4.30 p.m.: Close down.

**EARLY EVENING SESSION.**

6.15 p.m.: Chorus singing (conductor, Trevor M. Morris, of Children's Special Service Mission. 6.45 p.m.: Bertha Southey Brammall will tell a story to the children, "The New Gabriel." 6.55 p.m.: M'elie Columbia broadcasts.

**EVENING SESSION.**

7.0 p.m.: Transmission from the Memorial Congregational Church, Brisbane Street, Hobart. 8.25 p.m.: Transmission from St. David's Park, Hobart, a band concert. 9.40 p.m.: From the studio. News session. 9.50 p.m.: Our Tasmanian good-night. God Save the King. Close down.

**Monday, December 17****New South Wales Broadcasting Company, Limited****2FC SERVICE****EARLY MORNING SESSION.**

Announcer: A. S. Cochrane.

7 a.m.: "Big Ben" and announcements. 7.2 a.m.: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda. 7.5 a.m.: "Sydney Morning Herald" summary. 7.10 a.m.: Shipping intelligence; mail services. 7.12 a.m.: Studio music. 7.22 a.m.: Investment market, mining sharemarkets; metal quotations. 7.28 a.m.: Wool sales; breadstuffs markets; inter-State markets; produce markets. 7.35 a.m.: Studio music. 8 a.m.: "Big Ben." Close down.

**MORNING SESSION.**

Announcer: A. S. Cochrane.

10 a.m.: "Big Ben" and announcements. 10.2 a.m.: Pianoforte selection. 10.10 a.m.: "Sydney Morning Herald" news service. 10.25 a.m.: Studio music. 10.30 a.m.: A talk by the 2FC racing commissioner. 10.45 a.m.: A talk on "Home Cooking and Recipes," by Miss Ruth Furst. 11 a.m.: "Big Ben"; A.P.A. and Reuter's cable services. 11.5 a.m.: Close down.

**MIDDAY SESSION.**

Announcer: A. S. Cochrane.

12 noon: "Big Ben" and announcements. 12.1 p.m.: Stock Exchange, first call. 12.3 p.m.: Official weather forecast; rainfall. 12.5 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia. 1.30 p.m.: From the studio, Stock Exchange, second call. 1.32 p.m.: Weather forecast. 1.34 p.m.: "Evening News" midday news service; Producers' Distributing Society's report. 1.42 p.m.: Rugby wireless news. 1.45 p.m.: Studio music. 1.57 p.m.: Cricket scores. 2 p.m.: "Big Ben." Close down.

**AFTERNOON SESSION.**

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

2.30 p.m.: Programme announcements. 2.32 p.m.: Educational session for the schools—Pianoforte recital by Ewart Chapple. Miss B. Macaulay will speak on "Your Son"—"Early School Days." 3 p.m.: "Big Ben"; pianoforte reproduction. 3.15 p.m.: Popular music. 3.30 p.m.: Greta Callow, soprano—(a) "Elf and Fairy" (Densmore).

(b) "The Fairy Shoon" (Craske Day). 3.37 a.m.: Lulla Fanning, musical entertainer. 3.44 p.m.: Cricket scores, second test match, England v. Australia. 3.45 p.m.: "Teacups Chatter," by Doreen Walsh. 4 p.m.: "Big Ben." Greta Callow, soprano—(a) "Earth's Voices" (Schubert). (b) "Laughing Song" (Jacobs). 4.7 p.m.: Lulla Fanning, musical entertainer. 4.15 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia. 5 p.m.: From the studio, "Big Ben." Close down.

Note:—Cricket description will be carried on through 2BL service till stumps drawn at 6 o'clock.

**EARLY EVENING SESSION.**

Announcer: A. S. Cochrane.

5.40 p.m.: The chimes of 2FC. 5.45 p.m.: The children's session, conducted by the "Hello Man." Letters and stories. Music and entertainment. Bruce and Leslie Penman (vocal duets). 6.30 p.m.: Dalgety's market reports (wool, wheat, and stock). 6.40 p.m.: Fruit and vegetable markets. 6.43 p.m.: Stock Exchange information. 6.45 p.m.: Weather and shipping news. 6.48 p.m.: Rugby wireless news. 6.50 p.m.: Late sporting news. 7 p.m.: "Big Ben"; late news service. 7.10 p.m.: The 2FC Dinner Quartette, conducted by Mr. Horace Keats—(a) "Bolero" (Moskowski). (b) "Au Printemps" (Nevin). (c) "Intermezzo" (Arensky). (d) "Ballet Egyptian" (Luigini). (e) Bacarolle (Tchaikovsky). (f) "Back in Your Own Back Yard" (Jolson).

**EVENING SESSION.**

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40 p.m.: Programme announcements. 7.45 p.m.: Pianoforte reproduction. 7.50 p.m.: Cricket resume for New Zealand listeners. 7.52 p.m.: Popular music. 8 p.m.: "Big Ben." A concert programme arranged by the Josef Kretschmann Club. Artists include: Miss Hilda Boyle, Miss Hilda Walker, Madame Bennet North, Madame Betts Vincent, Mr. Montgomery Stuart, Professor Randall Woodhouse, Miss Edith Kilminster, Miss May Craven, and Mr. Wilfred Thomas. 9.30 p.m.: Weather report and forecast. 9.32 p.m.: Sketch by "Brenda and Bruce," "A Blackfriars Road Adonis" (Michael). 9.45 p.m.: Colin Ferret, basso—(a) "I Will Not Grieve" (Schumann). (b) "O'er the Forest Rain Clouds Lower" (Horbay). 9.52 p.m.: Nance Marley, contralto—(a) "Hush'd is My Lute" (Phillips). (b) "Turn Ye to Me" (Old Scotch). 10 p.m.: "Big Ben." Sketch by "Brenda and Bruce," "Neglectful Husband" (Muskerry). 10.13 p.m.: Colin Ferret, basso—(a) "Sylvia" (Oley Speaks). (b) "Had a horse a finer no one ever saw" (Horbay). 10.20 p.m.: Nance Marley, contralto—(a) "Do Not Go, My Love" (Hageman). (b) "None But the Weary Heart" (Tchaikowsky). 10.27 p.m.: To-morrow's programme. 10.30 p.m.: National Anthem. Close down.

**2BL SERVICE****Monday, December 17****MORNING SESSION.**

Announcer: A. C. C. Stevens.

8 a.m.: G.P.O. clock and chimes. Metropolitan weather report. 8.1 a.m.: State weather report. 8.2 a.m.: Studio music. 8.15 a.m.: G.P.O. clock and chimes. News service from the "Daily Telegraph Pictorial." 8.25 a.m.: Studio music. 8.30 p.m.: G.P.O. clock and chimes. Studio music. 8.35 a.m.: Information; mails; shipping; arrivals, departures, and sailings. 8.38 a.m.: News service from the "Daily Telegraph Pictorial."

8.45 a.m.: G.P.O. clock and chimes. Studio music. 9.0 p.m.: G.P.O. clock and chimes. Studio music. 9.30 a.m.: Half an hour with silent friends. 10.0 a.m.: G.P.O. clock and chimes. Close down.

**MIDDAY SESSION.**

Announcer: J. Knight Barnett.

11.0 a.m.: G.P.O. clock and chimes. 2BL Women's Sports Association session, conducted by Miss Gwen Varley. 11.30 a.m.: Advertising hints. 11.40 a.m.: Women's session, conducted by Mrs. Cranfield. 12.0 noon: G.P.O. clock and chimes. Special ocean forecast and weather report. 12.3 p.m.: Studio music. 12.30 p.m.: Shipping and mails. 12.35 p.m.: Market reports. 12.45 p.m.: Cricket scores, second Test match, England v. Australia. 12.48 p.m.: "Sun" midday news service. 1.0 p.m.: Studio music. 1.30 p.m.: From the Sydney Cricket Ground, Cricket impressions by M. A. Noble. 1.35 p.m.: From the studio. Talk to children and special entertainment for children in hospital. 1.57 p.m.: Cricket scores. 2.0 p.m.: G.P.O. clock and chimes. Close down.

**AFTERNOON SESSION.**

Announcer: J. Knight Barnett.

Accompanist: Kathleen Roe.

2.15 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia. 4.0 p.m.: Cricket impressions by M. A. Noble. 4.5 p.m.: From the studio, Kathleen Roe, pianoforte solos, "Preludes in A flat Major, D flat Major, G Major" (Chopin). 4.13 p.m.: Gwen Neate, songs at the piano. 4.20 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams. 4.30 p.m.: A talk by Captain Fred. Aarons, "Pheneas, the Navigator." 4.45 p.m.: Kathleen Roe, pianoforte solo, "Baccarolle" (Chopin). 4.50 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams. 5.0 p.m.: G.P.O. clock and chimes. From the Sydney Cricket Ground, description of the second Test match, England v. Australia.

**EARLY EVENING SESSION.**

Announcer: J. Knight Barnett.

6.0 p.m.: Children's session. Letters and stories. Announcer: Basil Kirke. 6.30 p.m.: "Sun" news and late sporting. 6.40 p.m.: 2BL dinner quartette. (a) "The Enchanted Valley" (Buccalosi). (b) "Pas des Voiles" (Delibes). (c) "Au Bord d'un Ruisseau" (Boisdeffre). (d) "The Belle of New York" (Kerker). (e) "The Busy Bee" (Bendix). (f) "Get Out and Get Under the Moon" (Shay). 7.10 p.m.: Cricket scores, second Test match, England v. Australia. 7.12 p.m.: 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. Grain and fodder report ("Sun"). Dairy produce report ("Sun"). 7.25 p.m.: Mr. Pim and Miss Pam in advertising talks and nonsense. 7.55 p.m.: Programme and other announcements.

**EVENING SESSION.**

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

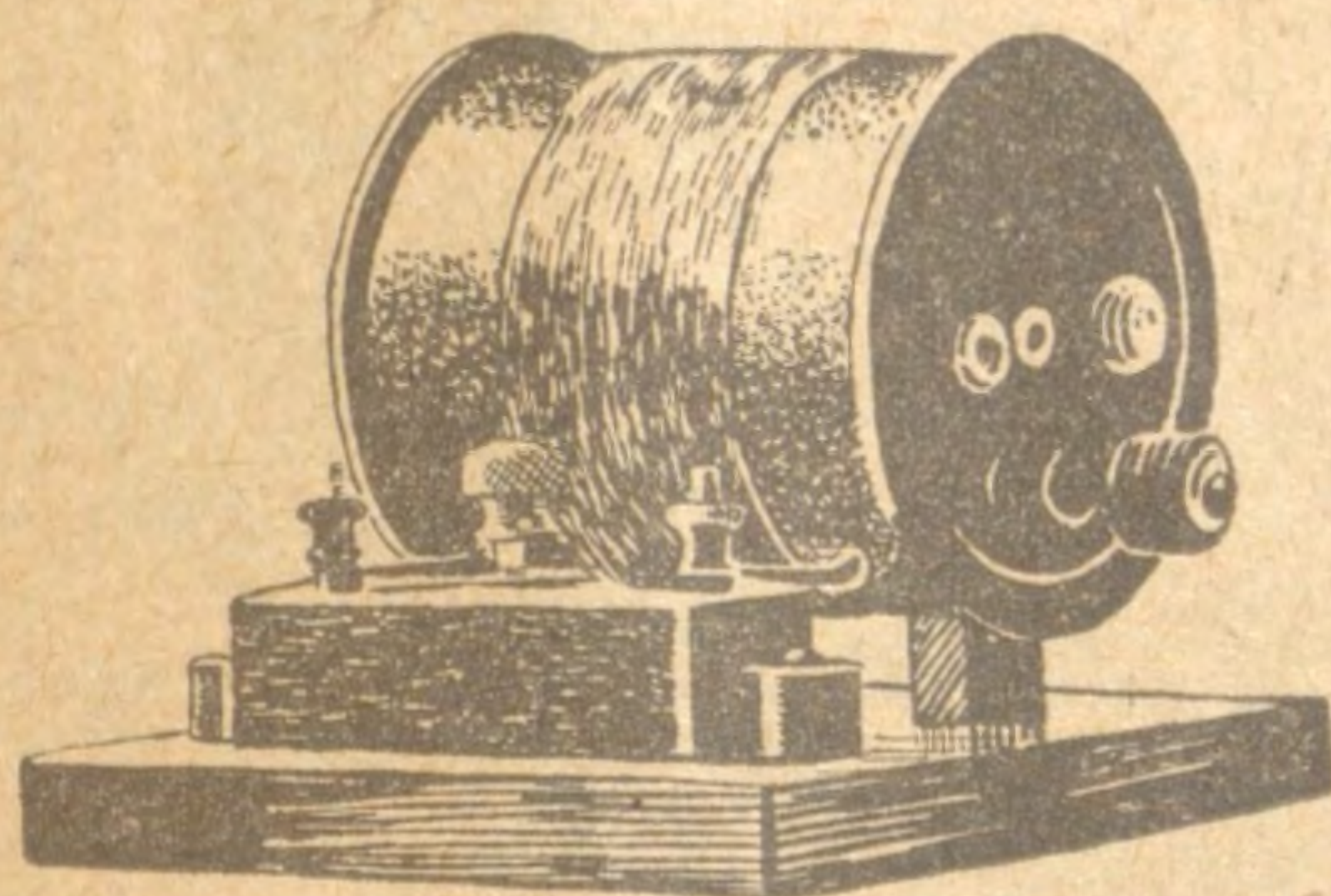
8.0 p.m.: G.P.O. clock and chimes. From King's Cross Theatre, The King's Cross Theatre Orchestra, conducted by E. J. Roberts. 8.20 p.m.: From the studio. Alex Whitson (baritone). (a) "Why Shouldn't I?" (Russell). (b) "The Bachelors of Devon" (Craske-Day). 8.27 p.m.: From the Mosman Town Hall, Mosman Municipal Band. (a) March, "Distant Greeting" (Doring). (b) Selection, "Legion of Honor" (Court). (c) Polka, "Amateur" (Greenwood). 8.47 p.m.: From the studio. Alex Whitson (baritone). (a) "When I'm Home Again" (Daniel Wood). (b) "Youth" (Allitsen). 8.54 p.m.: African Tales, told by F. C. Jones. 9.9 p.m.: Weather report and forecast, by courtesy of Government Meteorologist. 9.11 p.m.: From the Mosman Town Hall, Mosman Municipal Band.



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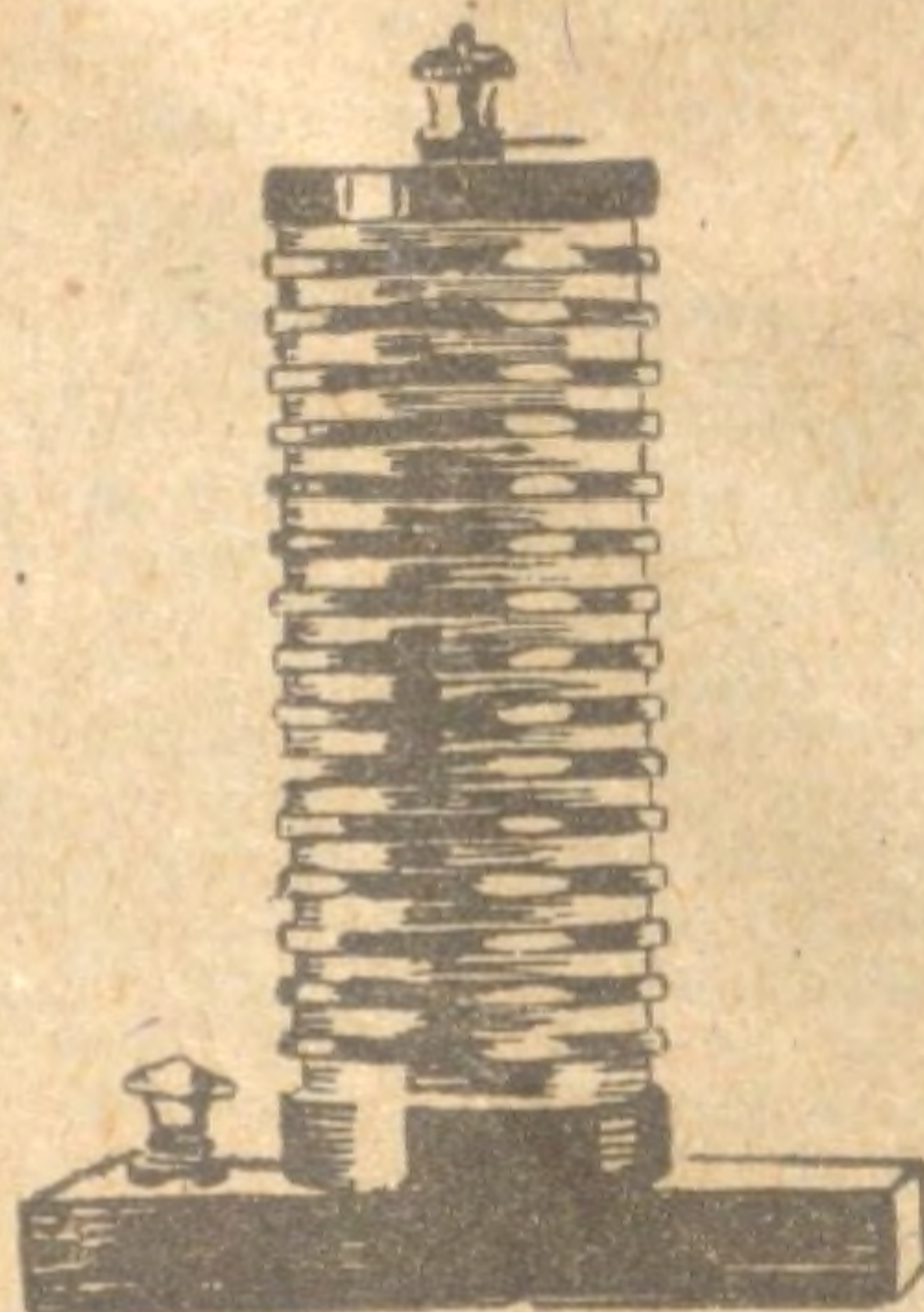
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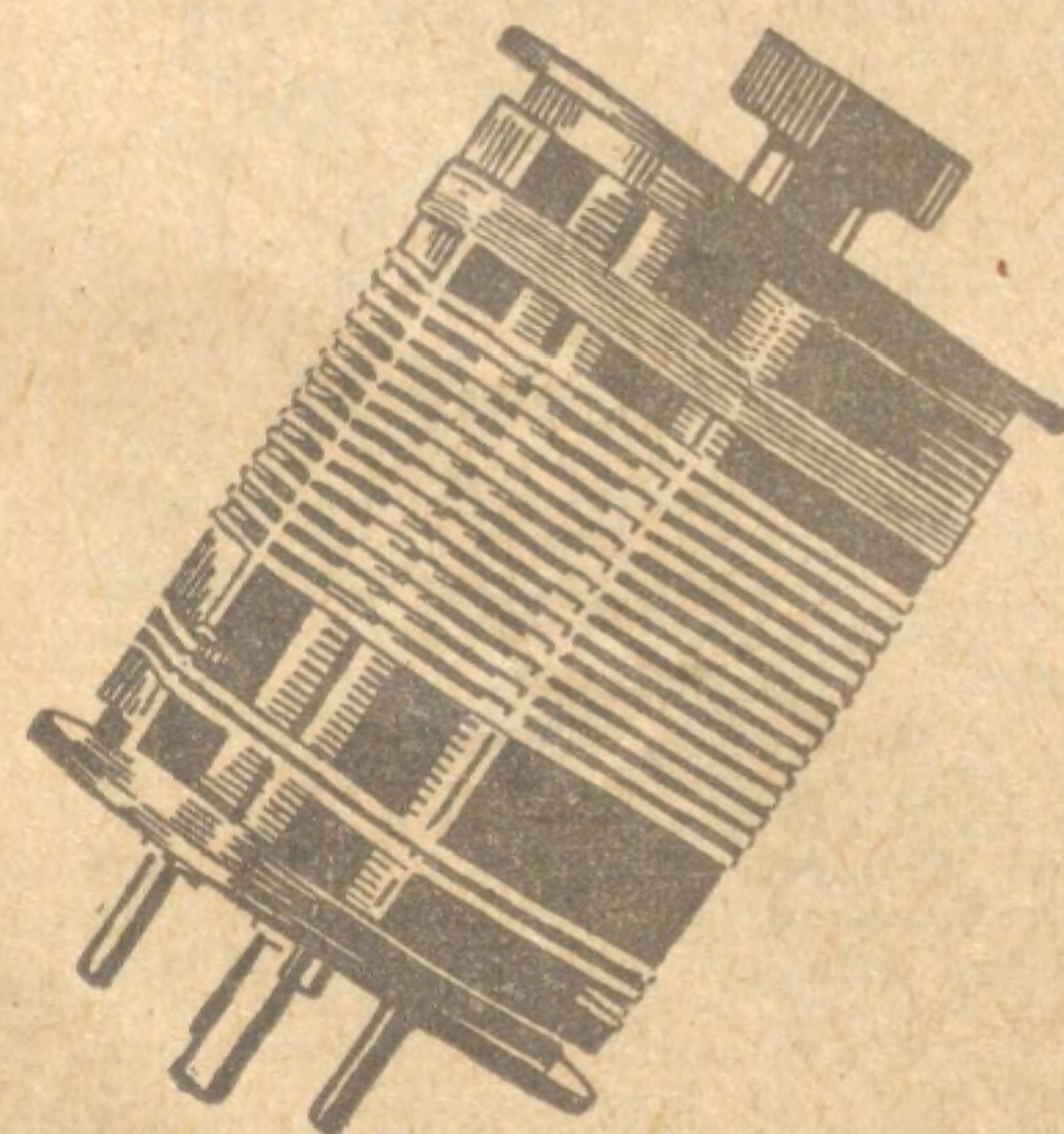
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In Conjunction with their Associated Company

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MA 1966



- (a) "March of Mannikins" (Fletcher).  
 (b) Selection, "Lilac Time" (Ord-Hume).  
 (c) Two Step, "Glad-eye" (Bucalossi).  
 9.31 p.m.: From the studio.  
 Art Leonard in popular songs.  
 2.40 p.m.: Concert programme arranged by the Josef Kretschmann Club. Artists include:  
 Miss Hilda Boyle.  
 Miss Hilda Walker.  
 Madame Bennett North.  
 Madame Betts Vincent.  
 Mr. Montgomery Stuart.  
 Professor Randall Woodhouse.  
 Miss Edith Kilminster.  
 Miss May Craven.  
 Mr. Wilfred Thomas.  
 10.10 p.m.: From the King's Cross Theatre.  
 The King's Cross Orchestra, conducted by E. J. Roberts.  
 10.30 p.m.: From the studio. The Savoyans' Dance Band, with popular choruses by Art Leonard.  
 10.57 p.m.: Resume of following day's programme and announcements.  
 10.59 p.m.: The Savoyans' Dance Band.  
 11.30 p.m.: National Anthem. Close down.

## 2GB, SYDNEY

Monday, December 17

- 10.0 a.m.: Music. 10.10 a.m.: Happiness talk by A. E. Bennett. 10.20 a.m.: Music. 10.30 a.m.: Women's session by Miss Helen J. Beegling. 11.30 a.m.: Close down. 2.0 p.m.: Music. 2.5 p.m.: Women's radio service by Mrs. Dorothy Jordan. 2.50 p.m.: Music. 3.0 p.m.: Talk. 3.15 p.m.: Close down. 5.30 p.m.: Children's session by Uncle George. 7.0 p.m.: Stock and market reports by New Zealand Loan and Mercantile Agency, Ltd. 7.15 p.m.: Music. 8.0 p.m.: Sid and Molly Owen and Joyce Slatyer, instrumentalists. 8.15 p.m.: Songs by Miss Florence Gordon. 8.25 p.m.: Items by the Newtown Band, conductor, Mr. C. Bignall. 9.0 p.m.: Weather report and address. 9.15 p.m.: Sid and Molly Owen and Joyce Slatyer. 9.25 p.m.: Songs by Miss Florence Gordon. 9.35 p.m.: Items by the Newtown Band. 10.10 p.m.: Orchestral items. 10.30 p.m.: Close down.

## 2UW, SYDNEY

Monday, December 17

### MIDDAY SESSION

- 12.30 p.m.: To-day's anniversary. 12.32 p.m.: Music. 1.0 p.m.: G.P.O. clock and chimes. 1.1 p.m.: Music. 2.0 p.m.: Talks to women. 2.15 p.m.: "Cheerio Talk." 2.30 p.m.: Close down. 4.30 p.m.: Musical programme.

### EVENING SESSION

- 5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7.0 p.m.: G.P.O. clock and chimes. 7.1 p.m.: Music. 7.10 p.m.: News items, etc. 7.30 p.m.: Musical interlude. 7.35 p.m.: Psychology Talk. 8.0 p.m.: G.P.O. clock and chimes. 8.1 p.m.: 9.1 p.m.: Comments on foreign affairs by Mr. J. M. Prentice. 9.10 p.m.: Music and request numbers. 10.0 p.m.: Close down.

## 3LO, MELBOURNE

Monday, December 17

### EARLY MORNING SESSION.

- 7.15 a.m.: Express train information. 7.16 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports. Market reports. General news. Shipping. Sporting information. 8.0 a.m.: Melbourne Observatory time signal. 8.1 a.m.: Morning melodies. 8.15 a.m.: Close down.

### MORNING SESSION.

Announcer: C. J. O'Connor.

- 10.50 a.m.: Sporting. Eric Welch will speak on to-morrow's races at Moonee Valley. 11.0 a.m.: 3LO's Different Dainties for the Daily Dinner. To-day's radio recipe, Christmas cake. 11.1 a.m.: Miss Olga Parker, stories to tell the children, "Santa Claus in Summer." 11.20 a.m.: Musical interlude. 11.25 a.m.: Under the auspices of the Boy Scouts' Association, Mr. W. D. Kennedy will speak on "The Value of Camping to the Boy." 11.40 a.m.: Musical interlude. 11.45 a.m.: Under the auspices of the St. John Ambulance Association, Miss Edith Wells will speak on "Home Nursing."

### MIDDAY SESSION.

- Midday news session. 12.0 noon: Melbourne Observatory time signal. Express train information. 12.1 p.m.: British official wireless news from Rugby. Reuter's and the Australian Press Association cables. "Argus" news service. 12.15 p.m.: Newmarket stock sales. Special report by John M'Namara and Co. 12.20 p.m.: Community singing, transmitted from the King's Theatre, Russell Street, Melbourne. Conductor, G. J. Mackay. Senia Chostiakoff, tenor (late principal tenor soloist of the famous Don Cossacks Choir). Serenade, "Night of Love" (Abta), "The Star" (Rogers). Gertrude Hutton (contralto), "Wake, Love of Mine" (Gordon), "Memories" (Cadman). 1.45 p.m.: Stock Exchange information. Meteorological information. Weather forecast for Victoria. New South Wales, Tasmania, and South Australia, ocean forecasts, river reports. 1.55 p.m.: Close down.

### AFTERNOON SESSION.

Announcer: C. J. O'Connor.

- 2.0 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. 4.0 p.m.: Sonora recital of the world's most famous records. 4.15 p.m.: Description of the Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 5.0 p.m.: "Herald" news service. Stock Exchange information. 5.10 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 6.0 p.m.: Stumps scores. During the afternoon progress results of the second Test match, England v. Australia, at Sydney, will be given every half-hour, commencing at 1 p.m.

### EVENING SESSION.

Announcer: Maurice Dudley.

- 6.5 p.m.: Answers to letters and birthday greetings by "Billy Bunny." 6.30 p.m.: Captain Donald Maclean, "More Pirate Adventures." 6.45 p.m.: "Billy Bunny" will entertain for a while.

### NIGHT SESSION.

Announcer: Maurice Dudley.

Accompanist: Agnes Fortune.

- 7.5 p.m.: Stock Exchange information. 7.15 p.m.: Special report by John M'Namara and Co. Official report of the Newmarket stock sales by the Associated Stock and Station Agents, Bourke Street, Melbourne. Fish Market reports by J. R. Borrett, Ltd. Rabbit prices. River reports. Market reports by the Victorian Producers' Co-operative Company, 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. 7.30 p.m.: News session. Stumps scores, Sheffield Shield cricket match, Victoria v. Queensland; also of the second Test match, England v. Australia, in Sydney. 7.43 p.m.: Birthday greetings. Out of the Past. 7.46 p.m.: Under the auspices of the Department of Agriculture. Mr. W. C. Rugg, Poultry Expert, will speak on, "Poultry Keeping: Improving the Flock." 8.0 p.m.: A Maker of History. 8.1 p.m.: Royal Victorian Liedertafel. Conductor: Mansley Greer. Accompanist: Wm. Burrell. Christmas Concert (transmitted from Town Hall, Melbourne). Royal Victorian Liedertafel. Part song, "Festival Song" (Mendelssohn). Colin Thomson (tenor). "Silent Noon" (Vaughan Williams). Choir of boys and Royal Victorian Liedertafel. Carols, (a) "Sleep, Holy Babe" (Rev. J. Dykes). (b) "The Manger Throne" (J. Stegall). Donald M'Beath (violin). "Preislied" (Wagner-Wilhelmy). Colin Thomson and Royal Victorian Liedertafel. Cantata, "Nun of Nidaros" (Dudley Buck). W. A. Bossence (baritone). "The Rat Catcher" (Hugo Wolf). Royal Victorian Liedertafel. Part song, "Ring Out, Wild Bells" (Percy Fletcher). 9.10 p.m.: Captain Donald MacLean. "The Jolly Roger." 9.25 p.m.: The Station Orchestra. Selection, "Merrie England" (German). 9.35 p.m.: Ida Walker (mezzo-contralto). "In the Silence" (Loughborough). "I Sometimes Wonder" (Gladys Rosa).

- 9.42 p.m.: Bertha Jorgensen (violin). "Scherzo" (Van Goens). 9.50 p.m.: Senia Chostiakoff (tenor). "The Love" (Vrangel). "I Pitch My Lonely Caravan at Night" (Coates). 9.57 p.m.: The Station Orchestra. Selected, "Tom Jones" (German). 10.7 p.m.: "Argus" news service. Meteorological information. British official wireless news from Rugby. Announcements. Results of second Test match, England v. Australia, at Sydney. Eric Welch's selections for the Moonee Valley races. 10.17 p.m.: The Station Orchestra. Suite, "Dornroschen" (Tschaiakowsky). 10.22 p.m.: Roy Ryan, entertainer, will whistle— "Russian Lullaby." "Miss Annabelle Lee." 10.27 p.m.: Senia Chostiakoff (tenor). "The Red Sarafan," Russian folk song. Selected. 10.34 p.m.: The Station Orchestra. Two Entr'actes (Vincent Thomas). 10.39 p.m.: Roy Ryan, entertainer, will whistle— "Lay My Head Beneath a Rose." "High, High, Up in the Hills." 10.44 p.m.: Ida Walker (mezzo-contralto). "By the Waters of Minnetonka" (Lieurance). "From the Land of Sky Blue Waters" (Cadman). 10.51 p.m.: The Radi-o-Aces. "Without You, Sweetheart" (Henderson). "After My Laughter Came Tears" (Turk). "Day Dreams" (Hallam). 11.0 p.m.: Our Great Thought for to-day. 11.1 p.m.: Radi-o-Aces. "Brainstorm" (Sanders). "Jeannine" (Gilbert). "Dream House" (Foxe). "Tiger Rag" (Moore). "That's My Weakness Now" (Steph). "Get Out and Get Under the Moon" (Tobias). "Sleepy Baby" (Kahn). "The Prune Song" (Crumit). "Sincerely I Do." "Sally Rose" (Friend). "Good-night Waltz." "Good-night Chorus." 11.40 p.m.: Close down.

## 3AR, MELBOURNE

Monday, December 17

### MORNING NEWS SESSION.

- 10 a.m.: G.P.O. Clock says "Ten." 10.1 a.m.: "Age" Stock Exchange report, London metal market. 10.10 a.m.: "Age" market reports—farm and station produce, fruit, fish, vegetables, etc. 10.25 a.m.: "Age" shipping reports, ocean forecast. 10.30 a.m.: Mail notices; express train information. 10.59 a.m.: Weather forecast.

### MORNING MUSICAL SESSION.

- 11 a.m.: Radi-o-Aces. "One Alone" (Romberg). "A Little Change of Atmosphere" (Brown). "I wanna go voo, voo voo" (Brown). "Down upon the Sands" (Hamy). "Mallika"—reel (Collins). "You said 'Goodnight,' but you meant 'Good-bye'" (Kahn). "The Desert Song" (Romberg). Cricket. 11.30 a.m.: Description of cricket match, Victoria v. Queensland, at M.C.C., by Mel Morris. 1.15 p.m.: British Official Wireless. 1.30 p.m.: Close down.

### AFTERNOON SESSION.

Announcer: Frank Hatherley.

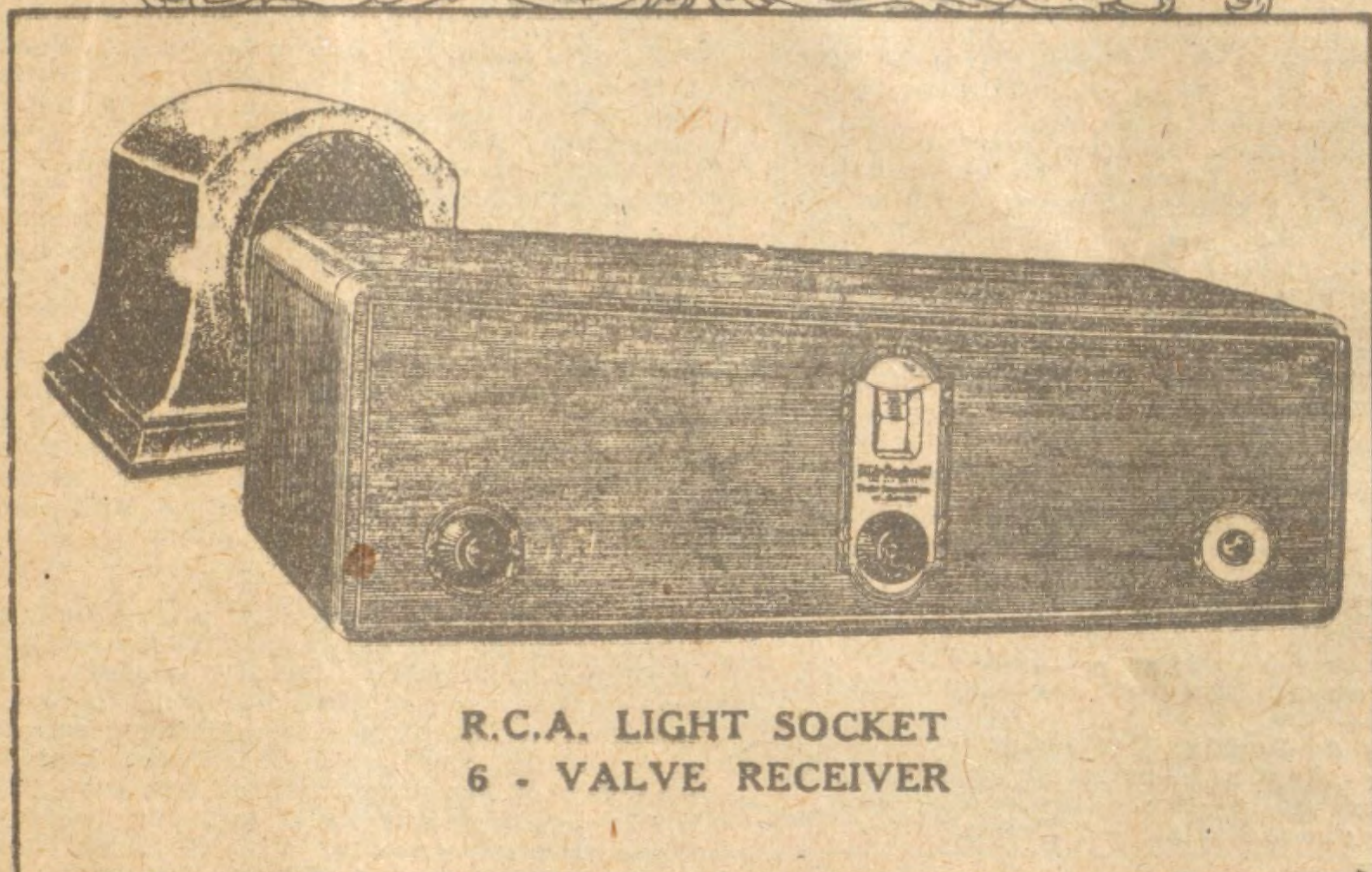
Accompanist: Agnes Fortune.

- 2.15 p.m.: The Station Orchestra. Selection, "Tell Me More" (Bershin). 2.25 p.m.: Syd. Burchall, baritone, "Laugh, Clown, Laugh" (Fiore). "Ne'er do Well." 2.32 p.m.: The Station Orchestra, suite, "Pipes of Pan" (Logan). 2.42 p.m.: Ida Walker, Mezzo Contralto, "Love went a-riding" (Bridge). "O Lovely Night" (Ronald). 2.49 p.m.: The Station Orchestra. "Frolics and Fancies" (Adams). "Dream Melody" (Herbert). 2.54: Roy Ryan, Siffleur. "On a Dew, Dew, Dewy Day." "Imitations." 3.1 p.m.: The Station Orchestra, suite, "Russet and Gold" (Sanderson). "Nocturne" (Harganoff). 3.11 p.m.: Agnes Fortune, "Nocturne" G. Minor (Chopin). 3.21 p.m.: Hetty Thompson, contralto. "Summer Rain" (Willeby). "A Heap of Rose Leaves" (Willeby). 3.28 p.m.: Tasma Tiernan, Cello, "Nocturne E Flat" (Chopin). 3.35 p.m.: The Station Orchestra, "Silhouettes" (Hadley). 3.45 p.m.: Bertha Jorgensen, violin. "The Deluge" (Saint-Saens). 3.52 p.m.: The Station Orchestra, selected. 4.1 p.m.: Hetty Thompson, contralto, "My Rosary for You" (Ball). "God send you back to me" (Adams). 4.8 p.m.: The Station Orchestra, "Scenes Pittoresques" (Massenet). 4.18 p.m.: The Station Orchestra, suite, "Harvest Time"

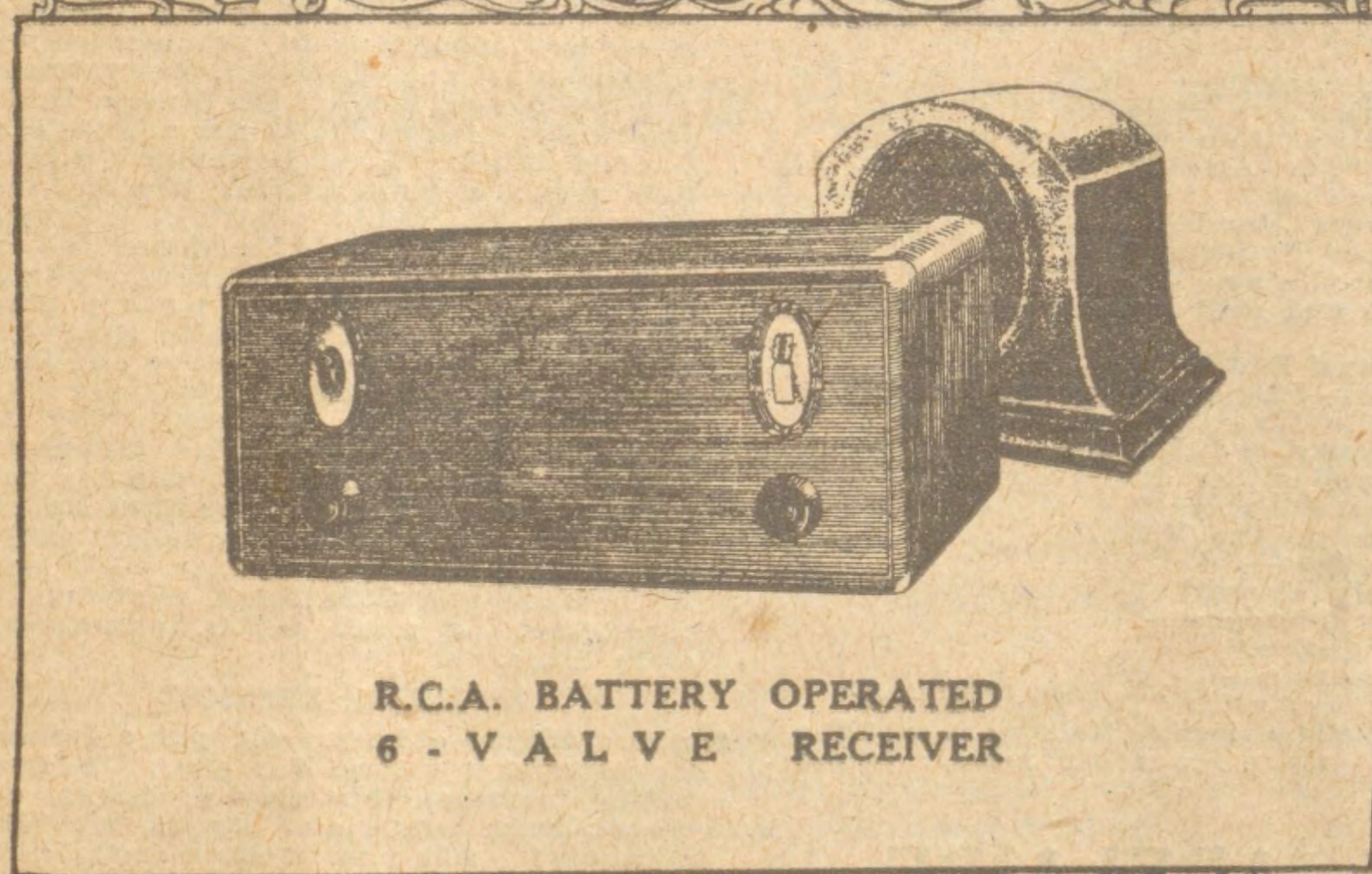


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(Haydn Wood). 4.35: Ida Walker, mezzo-contralto, "Trees" (Rasbach), "Take, O take those lips away" (Warlock). 4.42 p.m.: The Station Orchestra, selected. 4.47 p.m.: Roy Ryan, siffleur, "Sunshine." "Breeze." 4.54 p.m.: The Station Orchestra, selected. 5.0: Close down.

## EVENING SESSION.

Announcer: John Stuart.

6 p.m.: Sweet solace from the Seraphina.  
7.55 p.m.: Results of cricket match, Victoria v. Queensland, at M.C.G.

## NIGHT SESSION

Announcer: John Stewart.

Accompanist: Reg. Brown.

8.0 p.m.: E. C. H. Taylor—  
"School Life and School Sport."  
8.15 p.m.: H. L. Wood, M.A., of the Department of Commerce, University of Melbourne, will speak under the auspices of The League of Nations Association, on "Power and Policy in the Pacific."  
8.30 p.m.: Mr. H. Webb, Tasmanian Government Tourist Officer, will speak on "The Tasmanian Railways."  
8.40 p.m.: The Radi-o-aces—  
"Blue Berry Land" (Bryan).  
"Delirium" (Schutt).  
"Felix the Cat" (Naustraum).  
8.50 p.m.: Rita Hilton, Soubrette—  
"I Wish I Was a Kid Again" (Alistyne).  
8.53 p.m.: The Radi-o-aces—  
"Polly" (Zamecnik).  
"Back in Your Own Back Yard" (Jolson).  
"Let a Smile be Your Umbrella" (Fair).  
9.3 p.m.: Austin Peters, the Prince of Jest-ers—  
"The Meanderings of Monty—Monty on the General Outlook, etc."  
9.6 p.m.: The Radi-o-aces—  
"Tell Me To-night" (Little).  
"Mary Ann" (Davis).  
"I'm Sorry, Sally" (Kahn).  
9.16 p.m.: Freda Treweek, Mezzo Soprano—  
"The Valley of Laughter."  
9.19 p.m.: The Radi-o-aces—  
"Dream House" (Fox).  
"Jeannine" (Gilbert).  
"Red Head" (Ermbey).  
9.29 p.m.: Rita Hilton, Soubrette—  
"I Want a 'Yes' Boy" (Friend).  
9.32 p.m.: The Radi-o-aces—  
"Rose of Monterey" (Guy).  
"Sentimental Baby" (Davis).  
"In My Bouquet of Memories" (Lewis).  
9.43 p.m.: Austin Peters, the Prince of Jest-ers—  
"The Meanderings of Monty: Monty on Politics, and All That Sort of Thing."  
9.45 p.m.: The Radi-o-aces—  
"Jazz Master," Piano Solo (Mazeral).  
"Love Affairs" (Robinson).  
"Don't Cry, Baby" (Norton).  
9.55 p.m.: Freda Treweek, Mezzo-Soprano—  
"I Want to be Ready," arr. by Hugo Frey.  
9.58 p.m.: The Radi-o-aces—  
"Constantinople" (Carlton).  
"My Melancholy Baby" (Norton).  
"Anything You Say."  
10.8 p.m.: Austin Peters, the Prince of Jest-ers—  
"The Meanderings of Monty: Monty on Bananas."  
10.11 p.m.: The Radi-o-aces—  
"In a Bamboo Garden" (Donaldson).  
"We'll Have a New Home in the Morn-ing" (Buck).  
"Down Home—Rag" (Sweetman).  
10.21 p.m.: Rita Hilton, Soubrette—  
"Peter" (Friend).  
10.25 p.m.: "Age" news service, exclusive to 3AR.  
Cricket results. Weather forecast.  
Acceptances for Wednesday's races.  
10.30 p.m.: Our Australian Good-night Quo-tation.  
10.31 p.m.: God Save the King.

## 4QG, BRISBANE

Monday, December 17

## EARLY MORNING SESSION

(Announcer: J. Tyson.)

7.43 a.m.: Time signals. 7.45 a.m.: News service supplied by courtesy of "The Daily Mail." 8.0 a.m.: Some electric records. 8.15 a.m.: News service supplied by courtesy of "The Courier." 8.30 a.m.: Close down.

## MORNING SESSION.

(Announcer: Rita M'Auliffe.)

11.0 a.m.: Music. 11.5 a.m.: Social news. 11.15 a.m.: Lecture: "A Trip to Melbourne and Back," by "Traveller." 11.30 a.m.: Music. 11.35 a.m.: More social news. 11.45 a.m.: Music. 12.0 (noon): Close down.

## MIDDAY SESSION.

(Announcer: R. Wight.)

1.0 p.m.: Market reports and weather in-formation. 1.20 p.m.: From the Paris

Cafe—Lunch-hour music. 2.0 p.m.: Close down.

## AFTERNOON SESSION.

(Announcer: H. Humphreys.)

3.0 p.m.: From the Tivoli Theatre—Or-chestral music by the Tivoli Operatic Or-chestra, under the baton of Mr. C. Groves. 3.30 p.m.: From the Studio—Mail train run-ning times. A programme of electrically reproduced records. 4 p.m.: From the Tivoli Theatre—Orchestral music. 4.15 p.m.: From the Studio—This afternoon's news. 4.30 p.m.: Close down.

## EARLY EVENING SESSION.

(Announcers: R. Wight and H. Humphreys.)

6.0 p.m.: From the Studio—Mail train run-ning times; mail information; shipping news. 6.5 p.m.: From the Paris Cafe—Dinner music. 6.25 p.m.: From the Studio—Com-mercial announcements. 6.30 p.m.: Bedtime stories conducted by "The Sandman." 7.0 p.m.: News in brief. 7.5 p.m.: Stock Exchange news. 7.6 p.m.: Metal quotations. 7.7 p.m.: Market reports. 7.25 p.m.: Fenwick's stock re-port. 7.30 p.m.: Weather information. 7.40 p.m.: Announcements. 7.43 p.m.: Stan-dard time signals. 7.45 p.m.: Lecture: "The Children's Music Corner," conducted by "The Music Man."

## NIGHT SESSION.

(Announcer: H. Humphreys.)

A full programme by the Brisbane Citizens' Band (Conductor, Mr. A. Kaeser)—  
Citizens' Band—  
March—"My Regiment."  
Overture—"Martha."  
J. D. Abrahamis (baritone)—selected.  
Cornet and euphonium duet (accompanied by the Band—  
"Berceuse de Jocelyn" (Goddard).  
B. F. Kelly (flautist)—selected.  
The Citizens' Band—  
Morceau characteristic—"Vision."  
A. Kaeser—  
Cornet zither solo—selected item.  
Misses Gosmer and Gilles—  
Pianoforte duet—"Valse Brillante" (Mosz-kowsky).  
Saxophone Quartette—  
Popular Southern Melodies.  
9 a.m.: Metropolitan weather forecast.  
Lecture: "The Alsatian Dog"—by Mr. L. C. Marienthal.  
The Citizens' Band—  
Valse—"Les Patineurs."  
Messrs. Brodie and Kaeser—  
Trombone and euphonium duet—"Ora Pro Nobis."  
The Citizens' Band—  
Tone poem—"Sanctuary of the Heart."  
B. F. Kelly (flautist)—selected item.  
Messrs. Newy and Kaeser—  
Clarinet and zither duet—selected.  
The Citizens' Band—  
"Invitation to the Valse."  
Trombone Solo—  
"Adelaide" (Kaeser).  
The Citizens' Band—  
March—"Aeolus."  
A. K. Chapman—  
An astronomy talk: "The Red Planet."  
10.6 p.m.: "The Daily Mail" news, "The Courier" news, weather news. Close down.

## 5CL, ADELAIDE

Monday, December 17

## MORNING SESSION.

Announcer: G. R. Lamprell.

11 a.m.: G.P.O. chimes. 11.1 a.m.: Orches-tral music; H.M.V. recording; Berlin State Opera Orchestra, "The Magic Flute" over-ture. 11.10 a.m.: New Light Symphony Or-chestra, "The Glow Worm" (Lincke). 11.15 a.m.: "Economist," "Kitchen Craft and Menu Talk." 11.35 a.m.: Choral interlude, on the Sonora. Choir of St. Margaret's, Westminster, (a) "Lead Us, Heavenly Father" (Filitz), b) "Sevenfold Amen" (Stainer). "The Voice that Breathed O'er Eden" (Gauntlett). 11.45 a.m.: Talk on the work of the Royal Institution for the Blind, by Mr. Harold Raymond (country organiser).

## MIDDAY SESSION.

12 noon: G.P.O. chimes. 12.1 p.m.: Voca-entr'acte. Popular ballads by H.M.V. celebrity artists. John M'Cormack (tenor). "Somewhere a Voice is Calling" (Tate). "Far Away Bells" (Gordon). John M'Cor-mack sings these two ballads with great charm. The record is an important one, for the great tenor has given us in "Somewhere a Voice is Calling" one of his most popular successes. 12.15 p.m.: The "Advertiser" general news service.

12.35 p.m.: British official wireless news. Orchestral music on H.M.V. recordings. 12.40 p.m.: London Symphony Orchestra (conducted by Sir Edward Elgar, O.M.), "Chanson de Nuit, Op. 15, No. 2" (El-gar). "Chanson de Nuit, Op. 15, No. 1" (Elgar). 12.50 p.m.: S.A. railway in-formation. 12.51 p.m.: S. C. Ward and Co.'s Stock Exchange information. 12.56 p.m.: Meteorological information. 12.58 p.m.: International cricket scores, second Test match, at Sydney. 1 p.m.: G.P.O. chimes. 1.1: International cricket scores, second Test match, at Sydney. 1.2 p.m.: The Bijou Trio, "Prelude in C Minor" (Pachulski), "Yester Dreams" (Zamec-nik). 1.10 p.m.: Harry Worden, baritone, "The Pirate" (Turner), "Nelson's Gone a Sailing" (Lohr). 1.16 p.m.: Sobel Penny, pianist, "Waltz" (Chopin), "Anitra's Dance" (Grieg). 1.25 p.m.: Stella Sobels, soprano, "You in a Gondola" (Clarke), "The Nautch Girl" (Oliver). 1.30 p.m.: The Bijou Trio, "Habonera" (Chopin), "Slave Song" (Butler). 1.40 p.m.: Harry Worden, baritone, "Two and Twenty Sailormen" (Taylor), "For the Green" (Lohr). 1.46 p.m.: The Bijou Trio, "Marche Militaire" (Bridge), "Valse Brillante" (Chopin). 1.54 p.m.: Stell Sobels, soprano, "At Dawn-ing" (Cadman), "A Little Winding Road" (Ronald). 1.57 p.m.: Meteorological in-formation. 1.58 p.m.: International cricket scores, second Test match, at Syd-ney. 2 p.m.: G.P.O. chimes and close down.

## AFTERNOON SESSION.

3 p.m.: G.P.O. chimes. 3.1 p.m.: Interna-tional cricket scores, second Test match, at Sydney. 3.3 p.m.: Variety concert. We have pleasure in introducing to South Australian listeners Ada Althouse, soprano and pianist, and Leslie McCallum, baritone and flautist, in instrumental numbers. 3.11 p.m.: Sydney Burchall, popular baritone, "The Piper" (Steel), "Little Irish Girl" (Lohr). 3.18 p.m.: Harry Hutchins, violinist, "Chanson Louis" (Kreisler), "Pra-vane" (Kreisler). 3.25 p.m.: Vocal re-cital by Mona Nugent, winner of 3LO scholarship at Melba Conservatorium. A nautical interlude on the Sonora, H.M.V. recordings. Part 1. 3.32 p.m.: Coldstream Guards Band, "Rule Britannia" (Arne). 3.36 p.m.: Peter Dawson, bass-baritone, "Asleep in the Deep" (Petrie). 3.40 p.m.: Eli Hudson, piccolo, "Hornpipe Medley." 3.44 p.m.: Harry Dearth, bass, "Skipper of the Mary Jane." 3.49 p.m.: Winnie Hudson, piccolo, "The Deep Blue Sea" (Brewer). 4.40 p.m.: Sydney Hollister, humorist, in a humorous interlude. 4.48 pm: Mona Nugent, soprano, "The Ash Grove" (Welsh), "Ave Maria" (Schubert). 4.58 p.m.: Sydney Burchall, popular bar-itone, "The Lute Player," "Reuben Ranzo." 4.56 p.m.: International cricket scores, second Test match, at Sydney. 4.58 p.m.: S. C. Ward and Co.'s Stock Exchange in-formation. 5 p.m.: G.P.O. chimes and close down.

## EVENING SESSION.

6 p.m.: G.P.O. chimes. 6.1 p.m.: Interna-tional cricket scores. 6.2 p.m.: Children's happy moments, birthday greetings, cor-respondence, songs and stories, by "Miss Wireless." 6.30 p.m.: Sonora recital: din-ner music, by celebrated H.M.V. artists. 6.57 p.m.: International cricket scores. 7 p.m.: G.P.O. chimes. 7.1 p.m.: S. C. Ward and Co.'s Stock Exchange informa-tion. 7.6 p.m.: General market reports. 7.10 p.m.: Mr. R. Hill (senior dairy in-structor) will speak, under the auspices of the Government Agricultural Department, on "Pastures." 7.30 p.m.: The 5CL Twink-ler Boys' Club, address by "The Twinkler" (Mr. F. J. Mills).

## NIGHT SESSION.

Announcer: J.-L. Norris.

8 p.m.: G.P.O. chimes. A silver band and choral concert.  
8.1 p.m.: Holden's Silver Band—March, "Blencatica" (Rimmer); overture, "Napo-leon" (Bilton).  
8.9 p.m.: Clayton Choral Society—"To the Death" (Wheeler), "Down in Yon Summer Vale" (Wood), "Softly Fall the Shades of Evening" (Hatton).  
8.22 p.m.: An introduction to South Austra-lian listeners of Ada Althouse and Leslie McCallum, in flute and piano selections.  
8.30 p.m.: Sidney Burchall (baritone), "Border Ballad" (Cowan), "Barber of Turin" (Weatherley).  
8.37 p.m.: Holden's Silver Band, selection, "Musical Snapshots" (Trenchard).  
Another introduction to South Australian listeners of





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8.47 p.m.: Mona Nugent (vocalist), "Recitative and Air de Lia" (Debussy), "Hedge Roses" (Schubert).  
 8.53 p.m.: Holden's Silver Band—popular "Dancing Tambourin" (Greer); two-step, "Vashti" (Rimmer).  
 9 p.m.: G.P.O. chimes.  
 9.1 p.m.: Meteorological information.  
 9.2 p.m.: Overseas grain report.  
 9.3 p.m.: Resume on international cricket, by "Willow."  
 9.7 p.m.: Clayton Choral Society—"Song of the Pedlar" (Williams), "Meg Merrilies" (Boughton), "The Traction Engine" (Marchant).  
 9.14 p.m.: Sydney Hollister, (humorist), in droll humor.  
 9.24 p.m.: Holden's Silver Band—solo, "Garden of Happiness" (Wood); dance, "Jazzina" (Hume).  
 9.30 p.m.: Althouse and M'Callum (vocal entertainers), in vocal specialties.  
 9.38 p.m.: Holden's Silver Band—Morceau, "Dreamland Bells" (Hawzell); intermezzo, "The Cuckoos" (Lithgow).  
 9.45 p.m.: Sydney Burchall (baritone), "The Rover" (Barker), "Song Down Every Roadway" (Wood).  
 9.51 p.m.: Holden's Silver Band—Valse, "Smiles, Then Kisses."  
 9.56 p.m.: Mona Nugent (vocalist), "Chanson Indane" (Korsakov).  
 10.3 p.m.: Holden's Silver Band, "Merchant of Venice" (Rassi).  
 10.9 p.m.: Clayton Choral Society—an Eriksay love lilt, solo sustained by Mr. W. Douglas, "Come to the Fair" (Martin).  
 10.15 p.m.: "Advertiser" general news service.  
 10.22 p.m.: British official wireless news.  
 10.26 p.m.: International cricket scores.  
 10.28 p.m.: Meteorological information.  
 10.29 p.m.: Our good-night thought.  
 10.30 p.m.: By courtesy of 3LO, Melbourne, music by the famous Radi-o-Aces.  
 11.10 p.m.: God Save the King.

## 6WF, PERTH

Monday, December 17

12 noon: Tune in. 12.5 p.m.: Musical programme, including pianoforte selections by Miss Audrey Dean. 12.47: Markets, news, and cables. Results will be given of the second Test match between the English Eleven v. Australian Eleven, played at Sydney. 1.0 p.m.: Time signal. 1.1 p.m.: Weather notes, supplied by the Meteorological Bureau of West Australia. 1.2 p.m.: Lunch-hour Music—Brunswick Panatrophe hour, relayed from Messrs. Musgrove's, Limited, Concert Hall, Perth. 2.0 p.m.: Close down. 3.0 p.m.: Further results of the second Test match, between the English Eleven v. Australian Eleven. 3.35 p.m.: Afternoon Tea Concert, relayed from the Carlton Cafe, Perth. Vocal and instrumental interludes from the studio. 5.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 5.5 p.m.: Close down. 6.45 p.m.: Tune in. The evening transmission is broadcast on 104.5 metres, as well as the usual wave length. 6.48 p.m.: Stories for the kiddies by Uncles Henry and Duffy. Uncle Henry will talk to the boys. 7.5 p.m.: Items by the Studio Trio. 7.30 p.m.: Stocks, markets, news. 7.45 p.m.: Talk by Lieut.-Col. Le Souef, Director of the Zoological Gardens, South Perth. 8.0 p.m.: Time signal. 8.1 p.m.: Weather notes supplied by the Meteorological Bureau of West 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. Geo. S. Mellor. 9.0 p.m.: Late news items, by courtesy of "The Daily News" Newspaper Co.; ships within range announcement; weather report and forecast; station announcements. 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

Monday, December 17

### MID-DAY SESSION.

Announcer: Jack Broadbent.

11.30 a.m.: His Master's Voice in moments merry and musical. 11.34 a.m.: Special midlands weather forecast. 11.35 a.m.: His Master's Voice in moments merry and musical. 11.55 a.m.: Tasmanian stations

9 a.m. weather report. 12 noon: G.P.O. clock chimes the hour. 12.1 p.m.: Shipping information. Ships within wireless range. Mail notices. Commercial news. 12.8 p.m.: His Master's Voice in moments merry and musical. 12.11 p.m.: British official wireless news. 12.20 p.m.: His Master's Voice in moments merry and musical. 12.29 p.m.: Announcements. 12.33 p.m.: His Master's Voice in moments merry and musical. 12.55 p.m.: "Mercury" news service. Produce sales held at railway. 1.10 p.m.: His Master's Voice in moments merry and musical. 1.30 p.m.: Close down.

### AFTERNOON SESSION.

Announcer: Jack Broadbent.

3.0 p.m.: G.P.O. clock chimes the hour. 3.1 p.m.: His Master's Voice in moments merry and musical. 3.4 p.m.: Weather information. 3.5 p.m.: His Master's Voice in moments merry and musical. 3.15 p.m.: An all-star programme by the Discus Ensemble. Fritz Kreisler, violin, "Scheherabade," Dance Orientale" (Rimsky-Korsakov), "Molly on the Shore" (Grainger); Alma Gluck, soprano, "Bohemian Cradle Song" (Hubicka-Metana), "Song of the Chimes" (Worrell); Mischa Elman, violin, "Country Dance" (Beethoven), "Hungarian Dance No. 7 A Minor" (Brahms-Joachim).

### AFTERNOON SESSION.

Enrico Caruso, tenor, "Serenade de Don Juan," parts 1 and 2 (Tchaikowsky); Spencer Shaw, grand organ, "Tannhauser March" (Wagner), "Finlandia" (Sibelius); Elsie Baker, contralto, "Old Folks at Home" (Foster), "Home, Sweet Home" (Bishop); Reginald Goss Custard, F.R.C.O., "Fugue in G Minor" (Bach), "Prelude in G Minor" (Bach); Robert Radford, baritone, "When I was a tiny Boy"—"Merry Wives of Windsor," "Four Jolly Sailors" (German); Harry Goss Custard, organ, Kingsway Hall, London. "Grand Cheour" (Dubois), "Spring Song;" John McCormack, tenor, "Beneath the Moon of Lombardy" (Craxton), "Take, oh, Take Those Lips Away" (Bennett). 4.15 p.m.: Fashion talk, "Aunt Edna" will speak on "Christmas Novelties." 4.30 p.m.: Close down.

### EARLY EVENING SESSION.

6.15 p.m.: His Master's Voice in Moments Merry and Musical. 6.45 p.m.: Little Sheila Carroll, elocutionist, will recite to the wee folk, recitation "Selected." 7.0 p.m.: Answers to letters and birthday greetings by "Uncle David." 7.5 p.m.: His Master's Voice in Moments Merry and Musical. 7.15 p.m.: News session—"Mercury" special Tasmanian news service; Railway auction produce sales, held at Railway; weather information; Hobart Stock Exchange quotations; announcements.

### EVENING SESSION.

Announcer: Jack Broadbent.

7.30 p.m.: Geo. Collis, Tasmania's champion wrestler, will speak on "Physical Culture." 7.45 p.m.: Ross Wilkins will speak on "Motor Cars." 8 p.m.: G.P.O. clock chimes the hour. 8.1 p.m.: Fifty Years Ago To-day. 8.6 p.m.: A studio concert, arranged by Madam Voila Pearce—duet, Phyllis Trotter and Vera Meikle, "Qui Vive" (Gade); Enid Bradley, soprano, "Selected"; Nita Wood, elocutionist, "Selected"; Ena Jolley, piano solo, "Poet and Peasant" (Suppe); David Feirclough, violinist, "Londonderry Air" (Kreisler), "Minuet" (Hayden); Len Dowding, baritone, "Selected," "Selected"; Nita Wood, piano solo, "Mazurka" (Chopin); Mrs. Pierce Keating, soprano, "Selected"; Ken Owen, Saxophone, "Selected"; Eric Stranger, baritone, "Selected"; Ena Jolley, pianist, "Rustle of Spring" (Sinding); Len Dowding, baritone, "Selected," "Selected." Geo. Ricketts, clarinet solo, "Selected." The Royal Autocar Club of Tasmania safety message. Mrs. Pierce Keating, soprano, "Selected," "Selected"; Molly David, piano solo, "Balancelle" (Wachs); Piano Trio, Kathleen, Phyllis Trotter, and Myra Mayne, "Tambour Evant" (Durand); Mrs. Pierce Keating, soprano, "Selected"; His Master's Voice in Moments Merry and Musical. 9.50 p.m.: News session—"Mercury" special news service; British official wireless news; Tasmanian district weather report. 10 p.m.: G.P.O. clock chimes the hour. 10.1 p.m.: Our Tasmanian good-night thought. 10.2: "God Save the King." 10.3 p.m.: Close down.

## Tuesday, December 18

New South Wales Broadcasting Company, Limited

## 2FC SERVICE

### EARLY MORNING SESSION.

Announcer: A. S. Cochrane.

7.0 a.m.: "Big Ben" and announcements.  
 7.2 a.m.: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda.  
 7.5 a.m.: "Sydney Morning Herald" summary.  
 7.10: Shipping intelligence, mail services.  
 7.12 a.m.: Studio music.  
 7.22 a.m.: Investment market, mining share markets, metal quotations.  
 7.28 a.m.: Wool sales, breadstuffs markets, inter-State markets, produce markets.  
 7.35 a.m.: Studio music.  
 8.0 a.m.: "Big Ben." Close down.

### MORNING SESSION.

Announcer: A. S. Cochrane.

10.0: "Big Ben," and announcements.  
 10.2: Pianoforte reproduction.  
 10.10 a.m.: "Sydney Morning Herald" news service.  
 10.25: Studio music.  
 10.30 a.m.: Last minute sporting information by the 2FC racing commissioner.  
 10.40 a.m.: Studio music.  
 10.50 a.m.: Pianoforte reproduction.  
 11.0 a.m.: "Big Ben." A.P.A. and Reuter's cable services.  
 11.5 a.m.: Close down.

### MIDDAY SESSION.

Announcer: A. S. Cochrane.

Note: Race results from Menangle Park races will be transmitted as received.  
 12.0 noon: "Big Ben" and announcements.  
 12.1 p.m.: Stock Exchange, first call.  
 12.3 p.m.: Official weather forecast, rainfall.  
 12.5 p.m.: From the Sydney Cricket Ground. Description of the second test match, England v. Australia.  
 1.30 p.m.: From the studio. Stock Exchange, second call.  
 1.32 p.m.: Weather forecast.  
 1.34 p.m.: "Evening News" midday news service.  
 Producers' Distributing Society's report.  
 1.42 p.m.: Rugby wireless news.  
 1.45 p.m.: Studio music.  
 1.57 p.m.: Cricket scores.  
 2.0 p.m.: "Big Ben." Close down.

### AFTERNOON SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

2.30 p.m.: Programme announcements.  
 2.32 p.m.: Educational session for the schools: Musical recital.  
 Tales re-told by C. H. Bertie.  
 3.0 p.m.: "Big Ben."  
 From Christ Church, St. Laurence. Organ recital arranged by Christian Hellemann.  
 (a) "Overture to Egmont" (Beethoven).  
 (b) "Cantilene" (Dubois).  
 (c) "Gavotte" (Merkel).  
 (d) "Scherzo" (Lemaigre).  
 3.20 p.m.: From the Studio: Lulla Fanning, musical entertainer.  
 3.27 p.m.: From Christ Church, St. Laurence: Organ recital arranged by Christian Hellemann.  
 (a) "Grand Chorus" (Dubois).  
 (b) "Intermezzo" (Mascagni).  
 (c) "La Coquette" (Hellemann).  
 3.40 p.m.: From the studio: Lulla Fanning, musical entertainer.  
 3.45 a.m.: Cricket scores, second test match, England v. Australia.  
 3.46 p.m.: "Teacups Chatter," by Doreen Walsh.  
 4.0 p.m.: From Christ Church, St. Laurence: Organ recital arranged by Christian Hellemann.  
 (a) "Prelude to Act III." (Lohengrin), (Wagner).  
 (b) "O, Star of Eve" (Wagner).  
 (c) "Grand March" (Rienzi) (Wagner).  
 4.15 p.m.: From the Sydney Cricket Ground: Description of the second Test match, England v. Australia.  
 5.0 p.m.: "Big Ben." Close.  
 Note:—Cricket description will be carried on through 2BL service till stumps drawn at 6 o'clock.

### EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

5.40 p.m.: The Chimes of 2FC.  
 5.45 p.m.: The children's session, conducted by the "Hello Man." Letters and stories.  
 Music and entertainment.

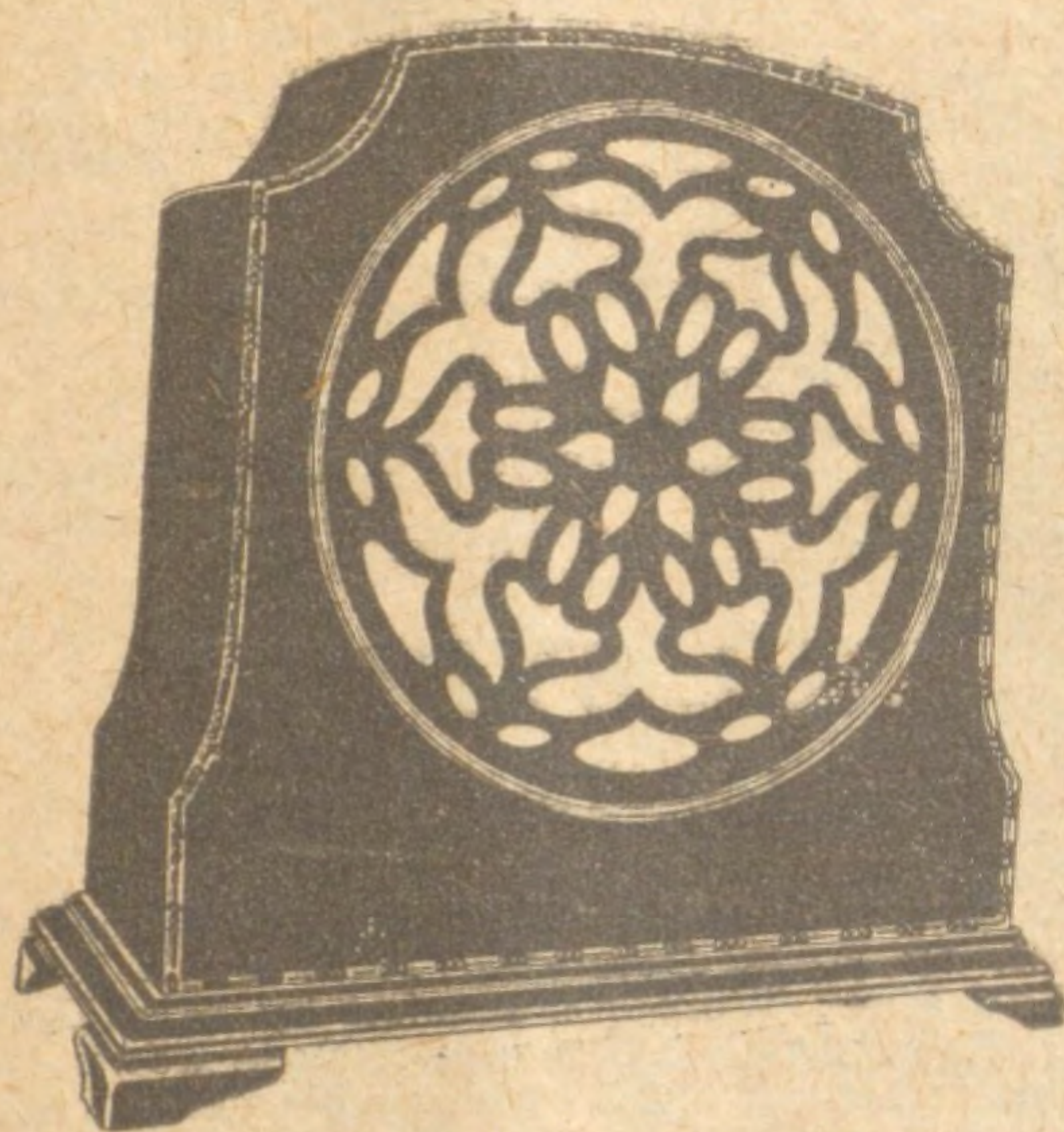


# USE THE AMPLION

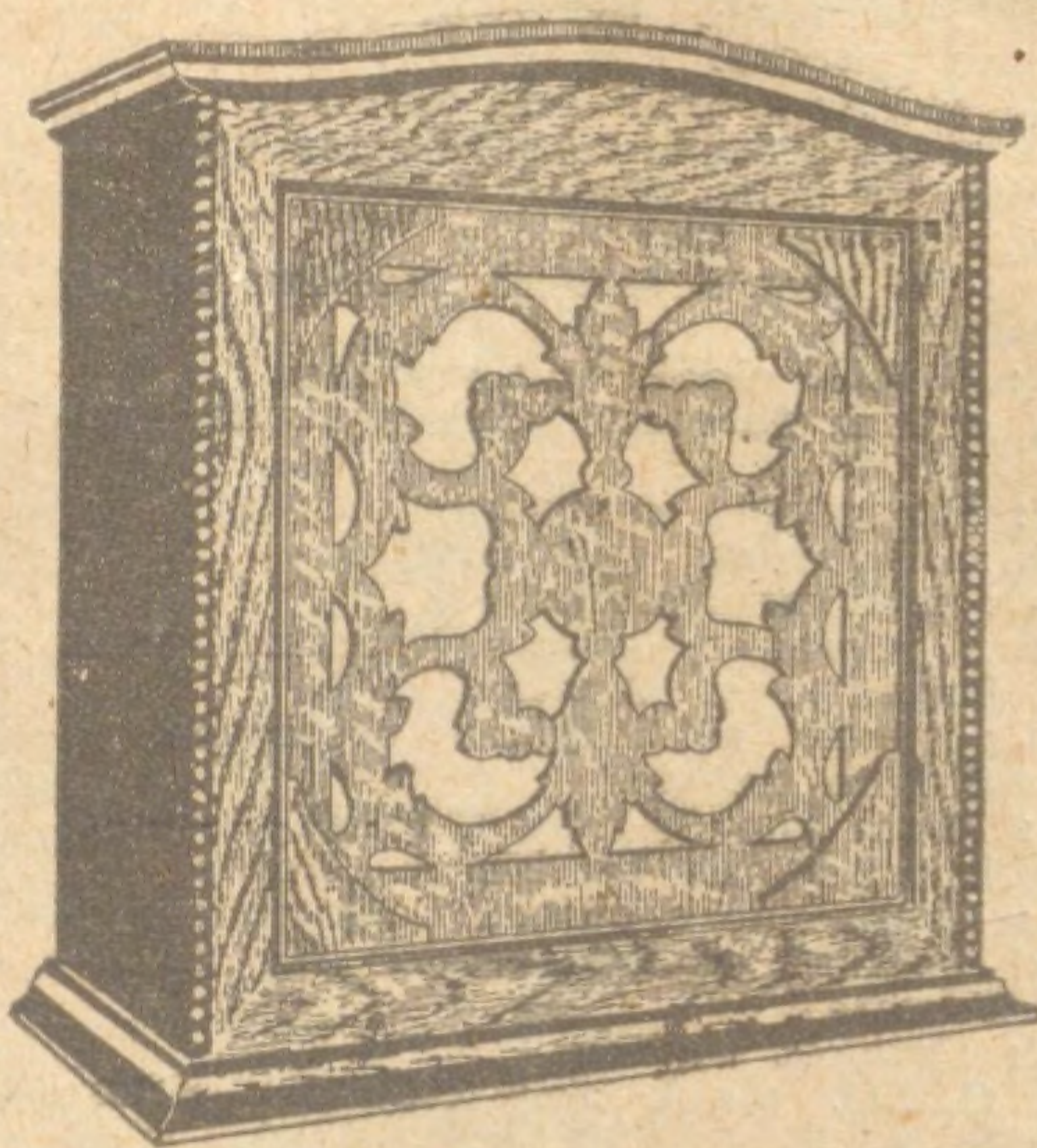
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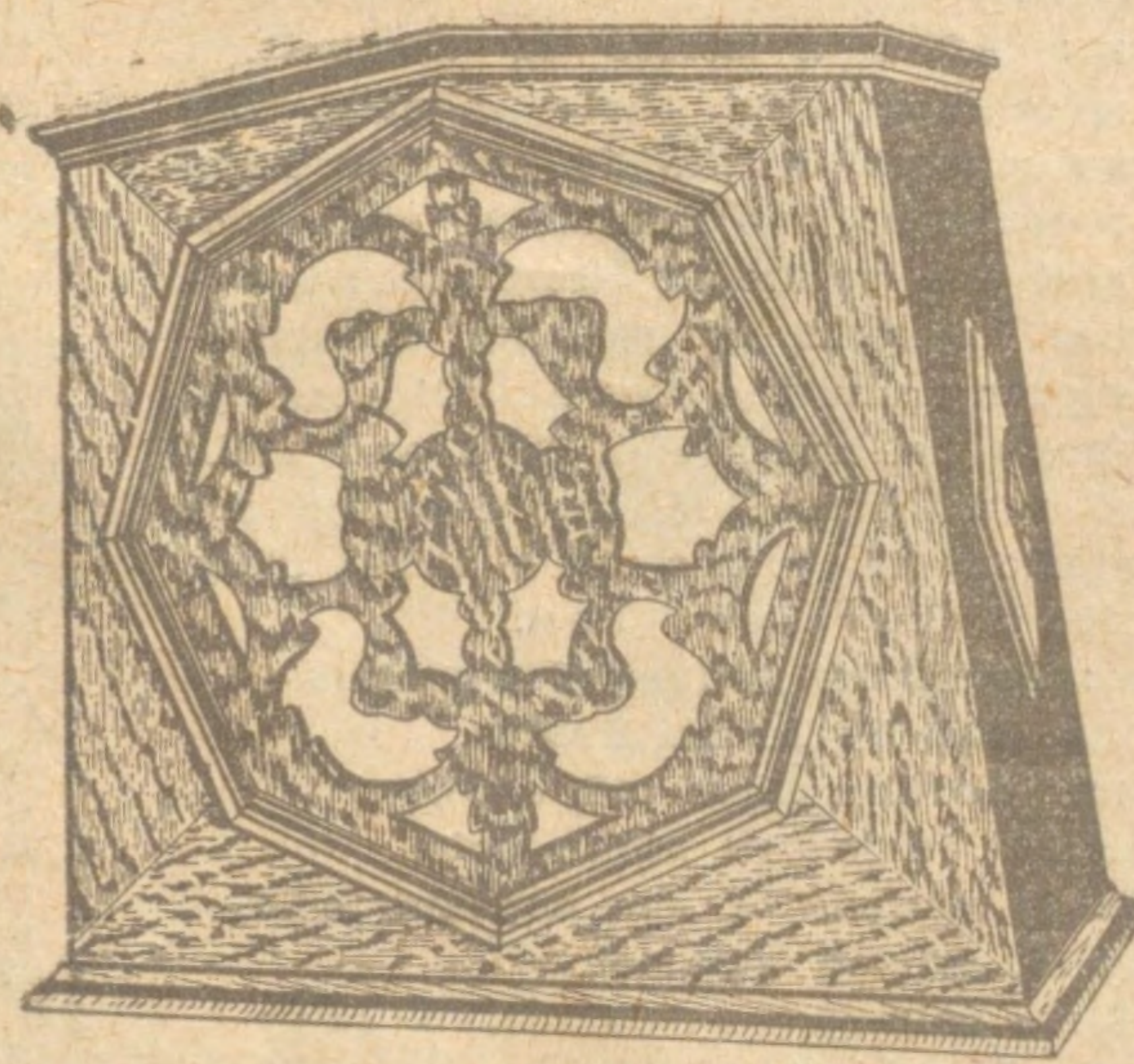
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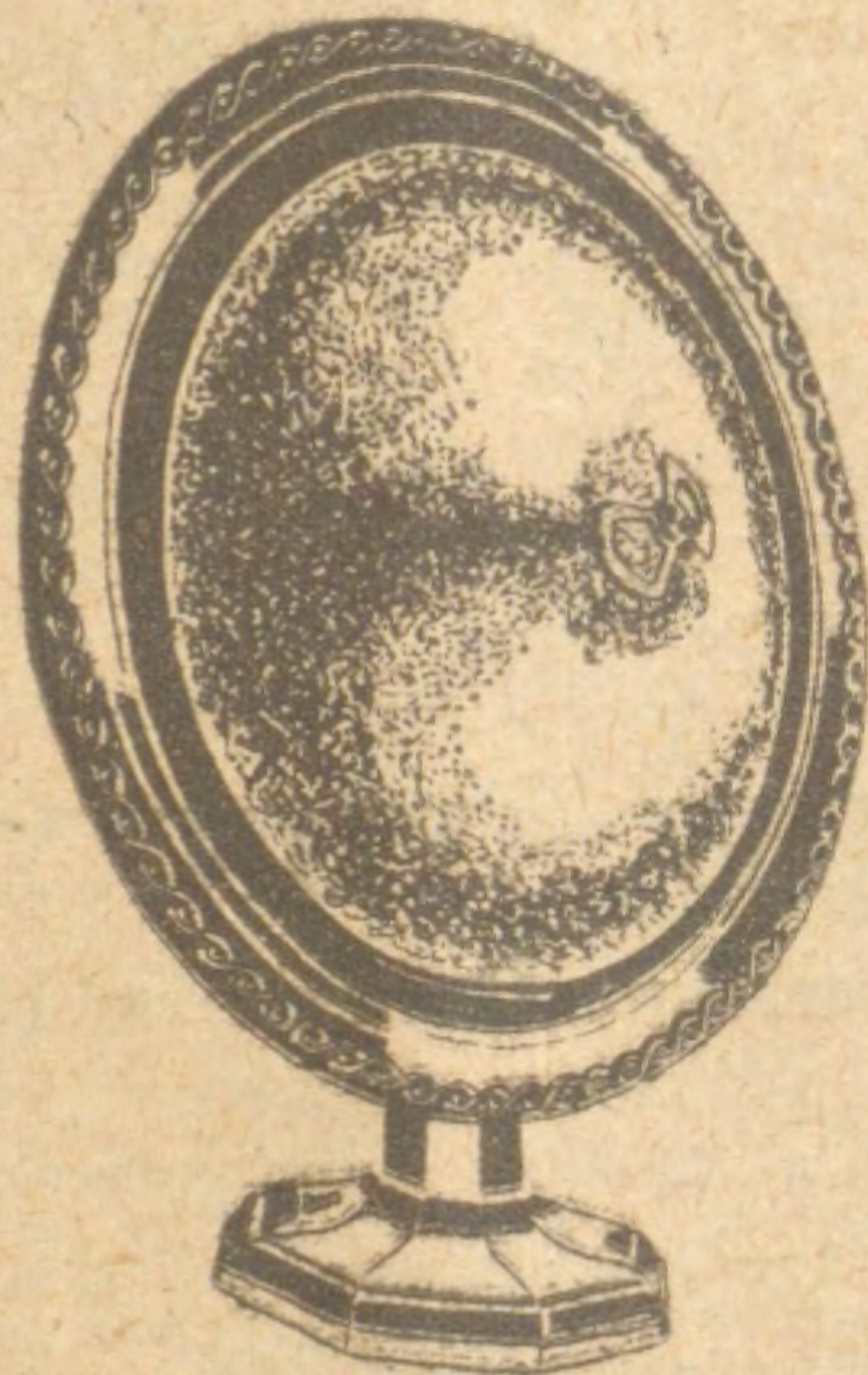
Chippendale Mahogany (Sen.)  
Model AC.9  
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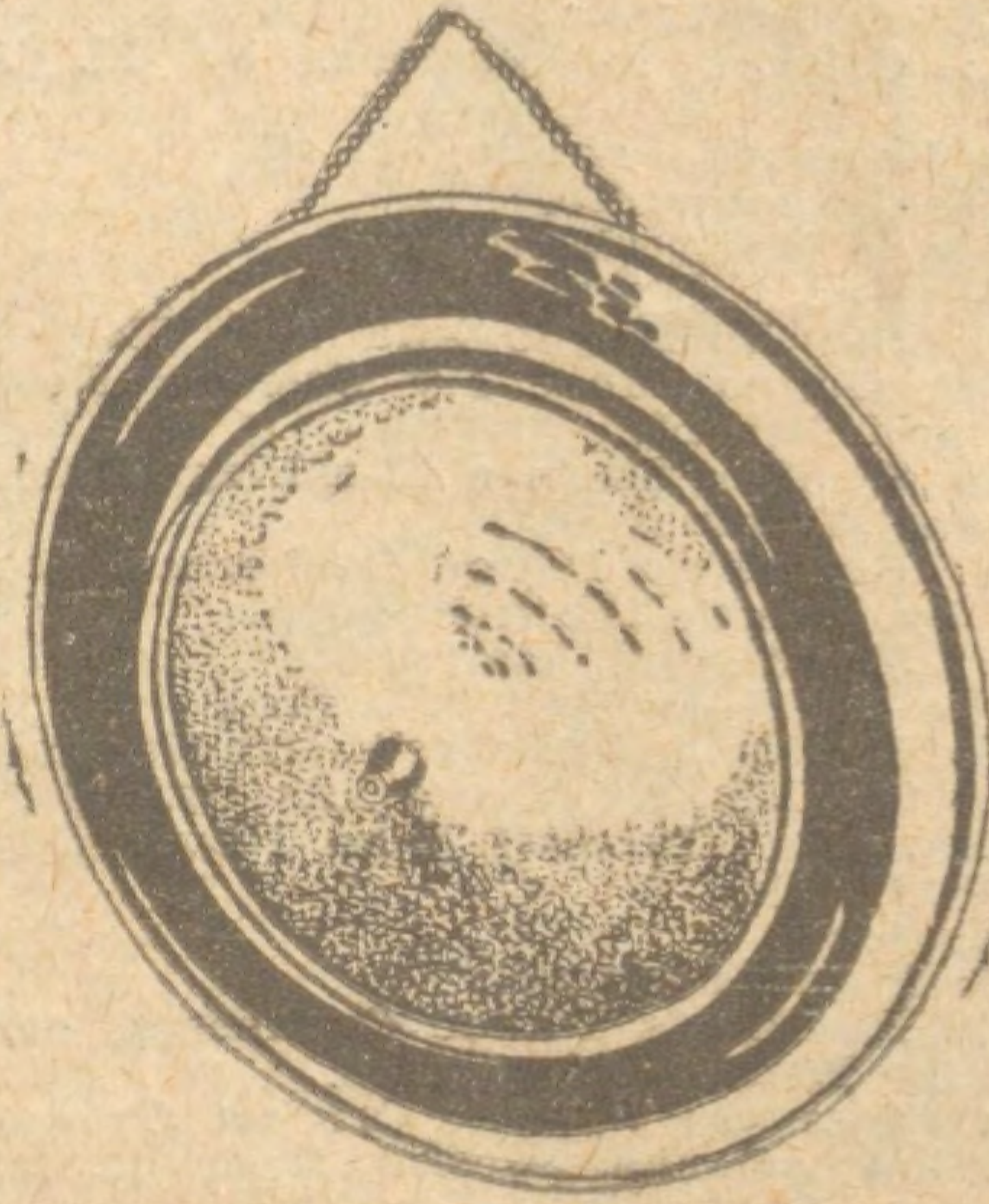
Jacobean Oak (Sen.)  
Model AC.7  
£7/15/-



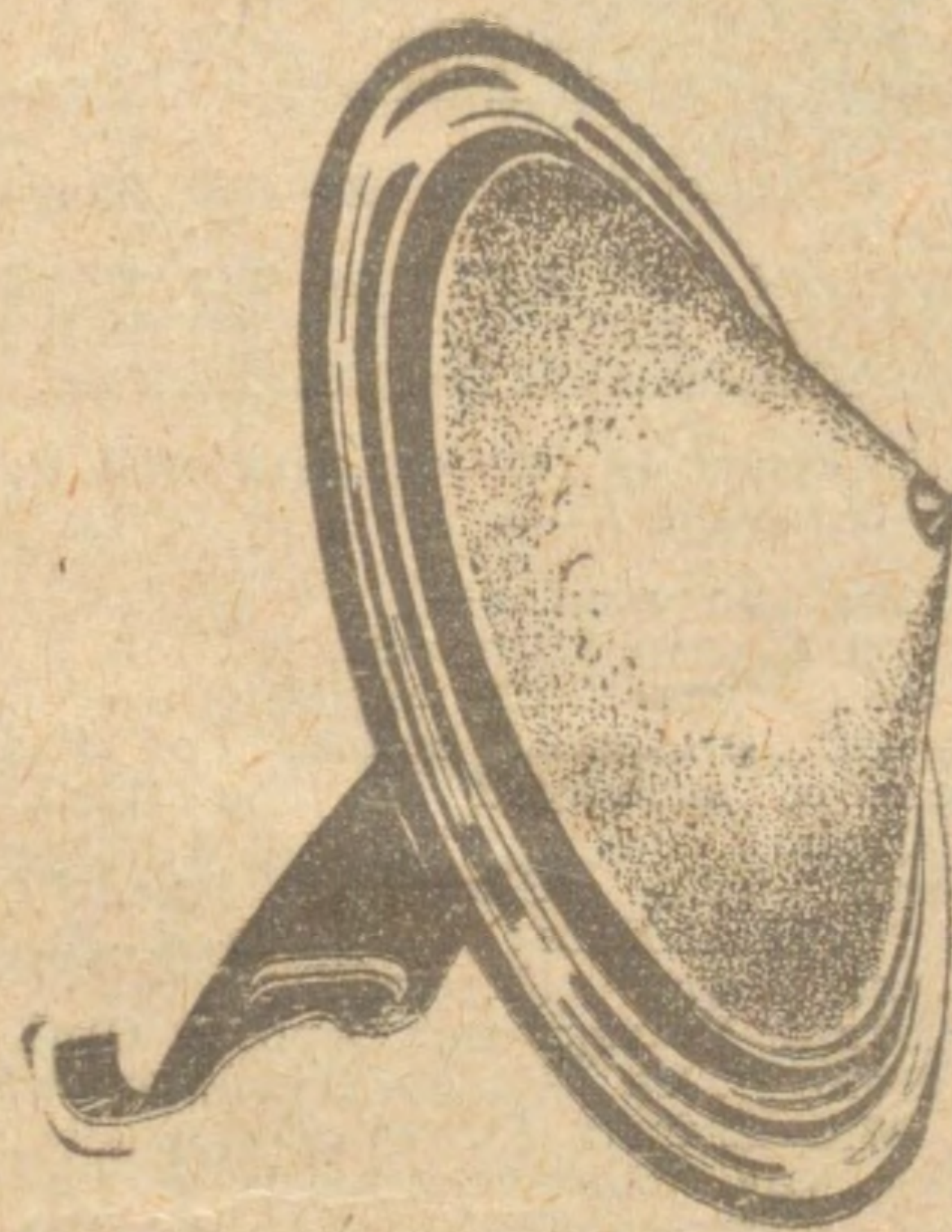
Dark Oak (Sen.)  
Model AC.5  
£7/10/-



Senior Silver Open Cone  
Model AC.3  
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Junior Bronze Hanging Cone  
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SYDNEY



- 6.30 p.m.: Dalgety's market reports (wool, wheat, and stock).  
 6.40 p.m.: Fruit and vegetable markets.  
 6.43 p.m.: Stock Exchange information.  
 6.45 p.m.: Weather and shipping news.  
 6.48 p.m.: Rugby wireless news.  
 6.50 p.m.: Late sporting news.  
 7.0 p.m.: "Big Ben" late news service.  
 7.10 p.m.: The 2FC Dinner Quartette, conducted by Horace Keats:  
 (a) "Suushine" (Berlin).  
 (b) "Chant Sans Paroles" (Tchaikowsky).  
 (c) "By the Tamarisk" (Coates).  
 (d) "The Chocolate Soldier" (Strauss).  
 (e) "Celeste Aida" (Verdi).  
 (f) "Beautiful" (Shay).

## EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

## FINAL CONCERT OF THE RADIO EISTEDDFOD, CONDUCTED BY THE NEW SOUTH WALES BROADCASTING CO., LIMITED.

- 7.35 p.m.: After a series of elimination tests extending over three months, the 200 competitors in the 34 sections have been reduced to one finalist in each section, and the public are to have an opportunity to-night of hearing the winners, either from the Town Hall concert, or through the studios of 2FC and 2BL. During the course of the evening the presentation of prizes will take place from the Sydney Town Hall.

- 7.40 p.m.: From the Sydney Town Hall—Organ recital by Lilian Frost.

8.8 p.m.: Section 2, mixed choir.

Section 16, champion violin solo.

Section 7, winner of the soprano solo.

Section 5, mixed quartet.

Pianoforte solo—

Minnie Hamblett, English pianist (first appearance in Australia),  
 "Three Spanish Dances" (Albeniz and Granados).

Section 10, winner of the tenor solo.

Section 18, cello solo.

Section 1, church choir.

Section 26, impromptu announcer.

Section 12, winner of the bass solo.

Section 32, best original Australian pianoforte composition.

Section 34, winner of the grand vocal championship.

## PRESENTATION OF PRIZES TO THE COMPETITORS AND THE WINNERS OF THE PUBLIC VOTING CONTEST.

Note.—The balance of the concert will be broadcast through 2BL.

- 9.15 p.m.: From the studio—

Weather report and forecast.

From the Conservatorium of Music—

2nd part of the final concert of the 1928 season, arranged by the Royal Apollo Club.

Part songs, (a) "Slumber Sweetly, Dearest" (Eisenhofer), Apollo Club.  
 (b) "Last Night" (Kjerulf).

Mr. Adam Young and Apollo Club.  
 Baritone Solo, "The Village Blacksmith" (Weiss), Mr. Alfred Cunningham.

Part songs, (a) "Sanctissima,"  
 (b) "O Christmas Night" (A. Adam), Apollo Club.

Soprano Soli (a) "The Soldier's Bride" (Rachmaninoff Schirmer).  
 (b) "In the Silence of Night,"

Miss Muriel Barlow.  
 Pianoforte Duet, "Oukrainische Rhadsodie" (Liapounow),

Miss Minnie F. Hamblett, assisted by Mr. Arnold Mote (two pianos).

Part song, "Ring Out, Wild Bells" (Fletcher), Mr. Alfred Cunningham and Apollo Club, with tubular bell accompaniment.

- 10.15 p.m.: From the studio—

The Studio Dance Band, conducted by Cec. Morrison.

- 10.30 p.m.: Len Maurice in the newest song hits.

- 10.37 p.m.: The Studio Dance Band, conducted by Cec. Morrison.

- 10.57 p.m.: To-morrow's programme and announcements.

- 10.59 p.m.: The Studio Dance Band, conducted by Cec. Morrison, with vocal choruses by Len Maurice.

- 11.30 p.m.: National Anthem. Close down.

## 2BL SERVICE

Tuesday, December 18

## MORNING SESSION.

Announcer: A. C. C. Stevens.

- 8.0 a.m.: G.P.O. clock and chimes.  
 Metropolitan weather report.  
 8.1 a.m.: State weather report.  
 8.2 a.m.: Studio music.  
 8.15 p.m.: G.P.O. clock and chimes.  
 News from the "Daily Telegraph Pictorial."  
 8.25 a.m.: Studio music.  
 8.30 p.m.: G.P.O. clock and chimes.  
 Studio music.  
 8.35 a.m.: Information, mails, shipping, arrivals, departures, and sailings.  
 8.38 a.m.: News from the "Daily Telegraph Pictorial."  
 8.45 a.m.: G.P.O. clock and chimes.  
 Studio music.  
 9.0 a.m.: G.P.O. clock and chimes.  
 Studio music.  
 9.30 a.m.: Half and hour with silent friends.  
 10.0 a.m.: G.P.O. clock and chimes. Close down.

## MIDDAY SESSION.

Announcer: J. Knight Barnett.

Note.—Race results from Menangle races will be broadcast by courtesy of the "Sun" newspapers.

- 11.0 a.m.: G.P.O. clock and chimes.  
 2BL's Women's Sports Association session, conducted by Miss Gwen Varley.  
 11.30 a.m.: Advertising hints.  
 11.40 a.m.: Women's session, conducted by Mrs. Cranfield.  
 12.0 noon: G.P.O. clock and chimes.  
 Special ocean forecast and weather report.  
 12.3 p.m.: Pianoforte reproduction.  
 12.30 p.m.: Shipping and mails.  
 12.35 p.m.: Market reports.  
 12.45 p.m.: Cricket scores, second Test match, England v. Australia.  
 12.48 p.m.: "Sun" midday news service.  
 1.0 p.m.: Studio music.  
 1.30 p.m.: From the Sydney Cricket Ground, Cricket impressions by M. A. Noble.  
 1.35 p.m.: From the studio. Talk to children and special entertainment for children in hospital.  
 1.57 p.m.: Cricket scores.  
 2.0 p.m.: G.P.O. clock and chimes. Close down.

## AFTERNOON SESSION.

Announcer: J. Knight Barnett.

Accompanist, Kathleen Roe.

- 2.15 p.m.: From the Sydney Cricket Ground, Description of the second Test match, England v. Australia.  
 4.0 p.m.: Cricket impressions, by M. A. Noble.  
 4.5 p.m.: From the studio.  
 Mary Neal, contralto.  
 (a) "Non e Ver" (Mattei).  
 (b) "Mifanwy" (Forster).  
 4.12 p.m.: Sid Montague and His Ukulele.  
 (a) "I'm Gonna Meet My Sweetie Now" (Davis and Greer).  
 (b) "No Wonder She's a Blushing Bride" (Mills and Dubin).  
 4.20 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
 4.30 p.m.: Mary Neal, contralto.  
 (a) "The Auld House" (Nairne).  
 (b) "Ye Banks and Braes" (traditional).  
 4.37 p.m.: Sid Montague and His Ukulele.  
 (a) "Yes, Flo, the Gal Who Never Says No" (Gumble).  
 (b) Selected.  
 4.44 p.m.: Popular music.  
 4.50 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
 5.0 p.m.: From the Sydney Cricket Ground, Description of the second Test match, England v. Australia.

## EARLY EVENING SESSION.

Announcer: Basil Kirke.

- 6.0 p.m.: Children's session.  
 Letters and stories.  
 6.30 p.m.: "Sun" news and late sporting.  
 6.40 p.m.: 2BL Dinner Quartette.  
 (a) "Come" (Leon Dazar).  
 (b) "The Cabaret Girl" (Kern).  
 (c) "Chanson Napolitaine" (d'Ambrosio).  
 (d) "Baccanal" ("Samson et Delila," Saint-Saens).  
 (e) "Bird Songs at Eventide" (Coates).  
 7.10 p.m.: Cricket scores.  
 7.12 p.m.: 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.  
 Grain and fodder report ("Sun").  
 Dairy produce report ("Sun").  
 7.25 p.m.: Mr. Pim and Miss Pam, in advertising talks and nonsense.  
 7.55 p.m.: Programme and other announcements.

## EVENING SESSION.

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

- 8 p.m.: G.P.O. clock and chimes.  
 From the Conservatorium of Music.  
 First part of the final concert of the 1928 season, arranged by the Royal Apollo Club.  
 Part song, "To the Audience" (Hamilton Clark), Apollo Club.  
 Aria, "Even Bravest Heart" ("Faust," Gounod), Mr. Alfred Cunningham.  
 Part song, (a) "Spring's Delights" (Muller).  
 (b) "The Song of the Jolly Roger" (Candish), Apollo Club.  
 Soprano solo, recit. et air de Lia, "L'Annee en Vain Chasse l'Annee," from the opera "L'Enfant Prodigue" (Debussy).  
 Miss Muriel Barlow.  
 Cantata, "King Olof's Christmas" (Dudley Buck), Mr. Alfred Cunningham and Apollo Club.  
 9.5 p.m.: From the studio. Weather report and forecast.  
 A talk on "Cricket" by Hyam Marks.  
 9.15 p.m.: From the Sydney Town Hall.  
 Second part of the final concert of the Radio Eisteddfod, conducted by the New South Wales Broadcasting Company, Ltd.  
 Organ solo, march, Lilian Frost.  
 Section 4, female choir.  
 Section 21, saxophone solo.  
 Section 8, winner of the mezzo solo.  
 Section 14, champion pianoforte solo.  
 Section 9, winner of the contralto solo.  
 The 2FC Light Music Four, "Monsieur Beaucaire" (Messenger).  
 Section 6, male quartet.  
 Section 33, best original Australian violin composition.  
 Section 22, dance band.  
 Section 3, male choir.  
 The 2FC Light Music Four, "Lohengrin" (Wagner).  
 10.30 p.m.: National Anthem.

## 2GB, SYDNEY

Tuesday, December 18

- 10.0 a.m.: Music. 10.10 a.m.: Happiness talk by A. E. Bennett. 10.20 a.m.: Music.  
 10.30 a.m.: Women's session by Miss Helen J. Beeegling. 11.30 a.m.: Close down. 2.0 p.m.: Music. 2.5 p.m.: Women's radio service by Mrs. Dorothy Jordan. 2.50 p.m.: Music. 3.0 p.m.: Talk. 3.15 p.m.: Close down. 5.30 p.m.: Children's session by Uncle George. 7.0 p.m.: Stock and market reports by New Zealand Loan and Mercantile Agency, Ltd. 7.15 p.m.: Music. 8.0 p.m.: 2GB Instrumental Trio—Miss Ada Brook, Mr. Cecil Berry, Mr. Cedric Ashton. 8.20 p.m.: Songs by Mr. Robert Scott. 8.30 p.m.: Cello solos by Mr. Cedric Ashton. 8.40 p.m.: Gwen Farmer and her banjo. 8.50 p.m.: Pianoforte solos by Miss Belle Young. 9.0 p.m.: Weather report and address. 9.15 p.m.: Violin solos by Mr. Cecil Berry. 9.30 p.m.: Songs by Mr. Robert Scott. 9.40 p.m.: 2GB Instrumental Trio. 10.0 p.m.: Gwen Farmer and her banjo. 10.10 p.m.: Pianoforte solos by Miss Belle Young. 10.20 p.m.: Orchestral items. 10.30 p.m.: Close down.

## 2UW, SYDNEY

Tuesday, December 18

## MIDDAY SESSION

- 12.30 p.m.: To-day's anniversary. 12.32 p.m.: Music. 1.0 p.m.: G.P.O. clock and chimes. 1.1 p.m.: Music. 2.0 p.m.: Talks to women. 2.15 p.m.: "Cheerio Talk." 2.30 p.m.: Close down. 4.30 p.m.: Musical programme.

## EVENING SESSION

- 5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7.0 p.m.: G.P.O. clock and chimes. 7.1 p.m.: Music. 7.10 p.m.: News items. 7.30 p.m.: Musical interlude. 7.35 p.m.: Literary talk. 8.0 p.m.: G.P.O. clock and chimes. 8.0 till 9.0 p.m.: Mr. Jesse and his Glee Party. 9.0 p.m.: G.P.O. clock and chimes. 9.1 p.m.: Comments on foreign affairs by Mr. J. M. Prentice. 9.10 p.m.: Music and request numbers. 10.0 p.m.: Close down.

## 3LO, MELBOURNE

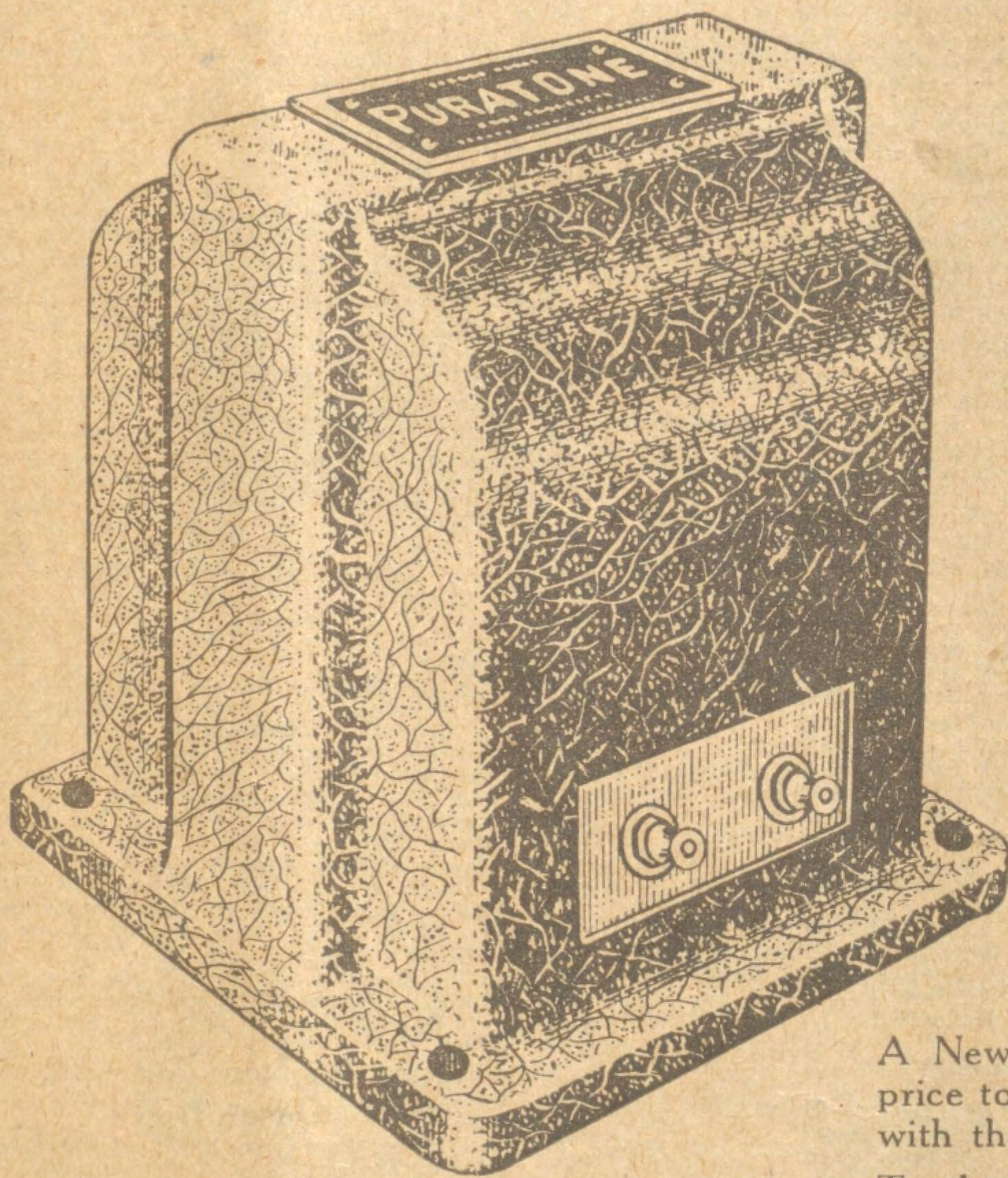
Tuesday, December 18

## EARLY MORNING SESSION.

- 7.15 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports. Market reports. General news. Shipping. Sporting information.



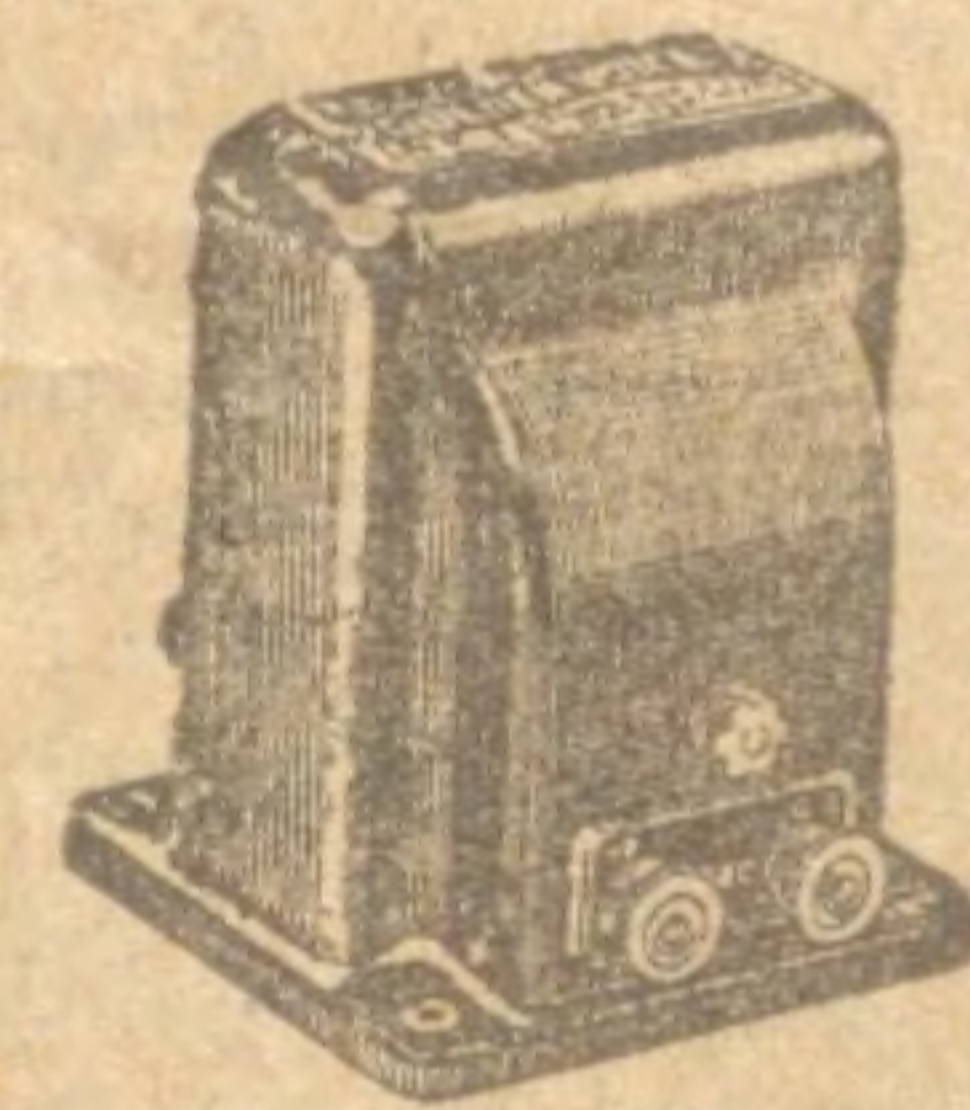
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MELBOURNE



Express train information. 8.0 a.m.: Melbourne Observatory time signal. 8.1 a.m.: Morning melodies. 8.15 a.m.: Close down.

## MORNING SESSION.

Announcer: C. J. O'Connor.

10.50 a.m.: Eric Welch will speak on today's races at Moonee Valley. 11.0 a.m.: 3 L.O.'s Different Dainties for the Daily Dinner. To-day's Radio recipe, lemon sago. 11.2 a.m.: Miss E. Noble will speak on "Gas Cookery." 1.15 a.m.: Mrs. Dorothy Silk will speak on "Homecrafts." 11.30 a.m.: Under the auspices of the Travellers' Aid Society, Miss N. Malcolm will give "Advice to Christmas Travellers." 11.45 a.m.: Description of Sheffield Shield match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor.

## MIDDAY SESSION.

12.0 noon: Melbourne Observatory time signal. Express train information. 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. 12.15 p.m.: Newmarket stock sales. Special report by John M'Namara and Co. 12.20 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. Announcer: C. J. O'Connor. 1.15 p.m.: Stock Exchange information. Meteorological information. Weather forecast for Victoria, Tasmania, South Australia, and New South Wales. Ocean forecasts. River reports. Rainfall. 1.25 p.m.: Sonora recital of the world's most famous records. 1.45 p.m.: Close down.

## AFTERNOON SESSION.

Announcer: C. J. O'Connor.

1.58 p.m.: Description of Hurdle Race, two miles, at Moonee Valley, by Eric Welch. 2.5 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. by Rod M'Gregor. 2.28 p.m.: Description of Two-year-old Handicap, five furlongs, at Moonee Valley. 2.35 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 2.53 p.m.: Description of Welter Plate, six furlongs, at Moonee Valley Races. 3.5 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 3.38 p.m.: Description of Queen Victoria Highweight Handicap, 9½ furlongs, at Moonee Valley Races. 3.45 p.m.: Description of cricket, Victoria v. Queensland, at M.C.C. 4.0 p.m.: Sonora recital. 4.18 p.m.: Description of Trial Mile at Moonee Valley Races. 4.25 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 4.48 p.m.: Description of Trial Purse, six furlongs, at Moonee Valley Races. 4.55 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. News session. 5.0 p.m.: "Herald" news service. Stock Exchange information. Cricket. 5.10 p.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 6.0 p.m.: Stumps scores. During the afternoon progress scores of the second Test match, England v. Australia, at Sydney, will be given every half-hour, commencing at 1 p.m.

## EVENING SESSION.

Announcer: Maurice Dudley.

6.5 p.m.: Answers to letters and birthday greetings by "Billy Bunny." 6.30 p.m.: Musical interlude. 6.35 p.m.: "Little Miss Kookaburra's" story for the tiny ones is about "The Little Red Hen and the Fox." And then, for the older ones, "A Christmas story."

## NIGHT SESSION.

Announcer: Maurice Dudley.

Accompanist: Agnes Fortune.

6.50 p.m.: Stock Exchange information. 7.0 p.m.: Special report of John M'Namara and Co. Official report of the Newmarket stock sales by the Associated Stock and Station Agents, Bourke Street, Melbourne. Fish 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 Fruit-growers' Association. Retail prices. Wholesale prices of fruit by the Wholesale Fruit Merchants' Association. Citrus fruits. 7.20 p.m.: Result of Geelong wool sales. 7.30 p.m.: News session. Stumps scores, second Test match, England v. Australia, at Sydney; also Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C. 7.43 p.m.: Birthday greetings. 7.45 p.m.: Out of the Past. 7.46 p.m.: Under the auspices of the University Extension Board, Mr. J. Sutton

Crow, of the University Conservatorium of Music, will speak on—

"Should Music be Included in the Educational Curriculum?"

8.0 p.m.: A Maker of History.

8.1 p.m.: Mrs. Norman Brookes will speak on "Cairo."

8.15 p.m.: The Radi-o-Aces.

"The Dance of the Blue Danube" (Fisher).

"Is It Gonna be Long?" (Whiting).

"It Goes Like This" (Caesar).

"My Melancholy Baby" (Norton).

"That's My Weakness Now" (Stept).

"Get Out and Get Under the Moon" (Tobias).

"In a Bamboo Garden" (Donaldson).

"Anything You Say" (Donaldson).

"Fascinating Vamp" (Nussbaum).

Selected.

8.55 p.m.: Hoffman's Dance Band—Waltz, "Nights of Gladness."

9.2 p.m.: Hugh Huxham, tenor—"My Dearest Mary."

9.5 p.m.: Hoffman's Dance Band—Polka, "Dorothy."

9.12 p.m.: Huxham's Serenaders—Quartette, "Estudiantina."

9.15 p.m.: Hoffman's Dance Band—Quadrille, "Welcome Home."

9.35 p.m.: Announcements and greetings to all "Old Timers."

9.40 p.m.: Old-time Choruses—Graham Burgin and the Boys of the Village, introduced by Maurice Dudley—Mrs. Campbell at the piano. Sing up everybody!

"Strike Up the Band."

"In the Good Old Summer Time."

"Little Alabama Coon."

"Just for To-night."

9.46 p.m.: Hoffman's Dance Band—Barn dance, "Kerry Mills."

9.53 p.m.: Edith Huxham, soprano—"A Summer Shower."

9.56 p.m.: Hoffman's Dance Band—Valette, "Mignonette."

10.3 p.m.: Renn Millar, bass—"Rocked in the Cradle of the Deep."

10.6 p.m.: Hoffman's Dance Band—Alberts, "Kalgoorlie."

10.22 p.m.: "Argus" news service; meteorological information; British official wireless news; announcements, sporting notes by "Olympus."

10.32 p.m.: Old Time Choruses—Graham Burgin and the Boys of the Village, introduced by Maurice Dudley; Mrs. Campbell at the piano.

"A Life on the Ocean Wave."

"Sweet Adeline."

"Just as the Sun Went Down."

"My Home Girl."

10.38 p.m.: Hoffman's Dance Band—Schottische, "Any Rags?"

10.43 p.m.: Huxham's Serenaders—Quartette.

10.46 p.m.: Hoffman's Dance Band—Waltz, "Count of Luxembourg."

10.53 p.m.: Dolly Burdett, contralto—"Killarney."

10.56 p.m.: Hoffman's Dance Band—Lancers, "Operatic."

11.14 p.m.: Old Time Choruses—Graham Burgin and the Boys of the Village, introduced by Maurice Dudley; Mrs. Campbell at the piano.

"The Camptown Races."

"The Wabash."

"I'll Stick to the Ship."

"Wait for Me."

11.20 p.m.: Hoffman's Dance Band. Barn Dance, "Golden Slippers."

11.26 p.m.: Hugh Huxham, tenor—"Sadie Ray."

11.29 p.m.: Hoffman's Dance Band—"The Royal Irish."

11.40 p.m.: Our Great Thought for To-day. Close down.

## 3AR, MELBOURNE

Tuesday, December 18

## MORNING NEWS SESSION

10.0 a.m.: G.P.O. Clock says "Ten." 10.1 a.m.: "Age" Stock Exchange reports. London Metal Market. 10.10 a.m.: "Age" market reports—farm and station produce, fruit, fish, vegetables, etc. 10.25 a.m.: "Age" shipping reports. Ocean forecast. 10.30 a.m.: Mail Notices. Express Train information. 10.35 a.m.: "Age" news service, exclusive to 3AR. 10.59 a.m.: Weather forecast.

## MORNING MUSICAL SESSION

Announcer: Frank Hatherley.

Accompanist: Reg. Brown.

11.0 a.m.: The Station Orchestra—Suite, "Erste Italienische" (Becca). "Epilogue" (Maris). 11.15 a.m.: Syd. Burchall, Baritone—"The Longest Way Round" (Pennett). "Reuben Ranzo" (Coates). 11.22 a.m.: The

Station Orchestra—"Symphony No. 11" (Hayden). 11.43 a.m.: Ida Walker, Mezzo Contralto—"The Cloths of Heaven" (Dunhill). "Waiata Poi"—Maori song (Hill). 11.49 a.m.: The Station Orchestra—"Ballet of the Flowers" (Part 3) (Harley). 11.59 a.m.: Reg. Brown, Piano—"Petit Valsante" (Poldini). "Marche Hongroise" (Kowalski). 12.9 p.m.: The Station Orchestra—"Lyrische Suite" (Lenschner). 12.20 p.m.: British Official Wireless. 12.40 p.m.: Syd. Burchall, Baritone—"Gingham Gown" (Penn). "Give Me the Open Road" (Ambrose). 12.47 p.m.: The Station Orchestra—"Andante" (Schubert). "Tarantelle" (Chopin). Selected. 1.5 p.m.: Ida Walker, Mezzo Contralto—"Varuna," Vedic Hymn (Holst). "Raindrops" (Bantock). 1.12 p.m.: The Station Orchestra—"Serenade Mauresque" (Elgar). "Cannonetta" (Hollander). 1.30 p.m.: Close Down.

## AFTERNOON SESSION

Announcer: Frank Heatherley.

2.0 p.m.: The Radi-o-aces—"Dream Kisses" (Fox). "Jeannine" (Gilbert). "Got a Date with a Little Girl" (Tobias). "Sunshine" (Berlin). "A Stolen Melody" (Fisher). "Lauretta" (Lewis). 2.20 p.m.: Freda Treweek, Mezzo Soprano—"My Ships" (Barratt). "The Cuckoo" (Lehmann). 2.27 p.m.: The Radi-o-aces—"Adoree" (Silver). "Dear, On a Night Like This" (Conrad). "Never Before, Never Again" (Chik). 2.37 p.m.: Ralph Thompson, Baritone—"Oh, Land of My Fathers" (James). "Oh, Promise Me" (de Koven). 2.44 p.m.: The Radi-o-aces—"Laugh, Clown, Laugh" (Young). "There's Something About a Rose" (Kahal). "Loved Me" (Wilson). 2.54 p.m.: Jean Brunton, Contralto—"A Fat Lil Feller with His Mammy's Eyes" (Gordon). "Sink, Red Sun" (del Riego). 3.1 p.m.: The Radi-o-aces—"Fascinating Vamp" (Nussbaum). "That's My Weakness Now" (Stept). "Get Out and Get Under the Moon" (Tobias). 3.11 p.m.: Tom Semple, Tenor—"Sally in Our Alley" (Catey). "Come Into the Garden, Maud" (Balfe). 3.18 p.m.: Announcements. 3.28 p.m.: The Radi-o-aces—"What a Baby" (Whiting). "Somebody's Crazy About You" (Murphy). "What do I Care What Somebody Said" (Woods). "Just a Memory" (Henderson). "Lonesome in the Moonlight" (Baer). "Angelia Mia" (Rapee). 3.48 p.m.: Freda Treweek, Mezzo-Soprano—"Hard Trials"—Negro Spiritual. "I've Been in the Storm so Long"—Negro Spiritual. 3.55 p.m.: The Radi-o-aces—"Kiss Before the Dawn" (Perkins). "Parting With You" (Conley). "Chloe" (Kahn). 4.5 p.m.: Ralph Thomson, Baritone—"I Triumph, I Triumph" (Carrisimi). "Bois Epais" (Lully). 4.12 p.m.: The Radi-o-aces—"Lonely in a Crowd" (Greer). "Louisiana" (Schaffer). "Nesting Time" (Nussbaum). 4.22 p.m.: Jean Brunton, Contralto—"You'll Get Heaps o' Lickin's" (Clarke). "Yonder" (Oliver). 4.29 p.m.: The Radi-o-aces—"Just a Year Ago To-night" (Rose). "Because My Baby Don't Mean May-be Now" (Donaldson). "Just Like a Melody Out of the Sky" (Donaldson). 4.39 p.m.: Tom Semple, Tenor—"The Pixie Piper Man" (Elliott). "Lolita" (Peccia). 4.46 p.m.: The Radi-o-aces—"Rain" (Ford). "Mine, All Mine" (Ruby). "Dolores" (Kassell). "Down Where the Sun Goes Down" (Jones). "Don't Keep Me in the Dark, Bright Eyes" (Bryan). 5.0 p.m.: Close down.

## EVENING SESSION

Announcer: John Stuart.

6.0 p.m.: Selections from the repertoires of the World's Master Musicians, reproduced for the multitude. 7.55 p.m.: Cricket Results.

## NIGHT SESSION

8.5 p.m.: "The Messiah" (Handel), by the Choir of the Melbourne Philharmonic Society, assisted by the University Symphony Orchestra. Transmitted from the Town Hall, Melbourne.

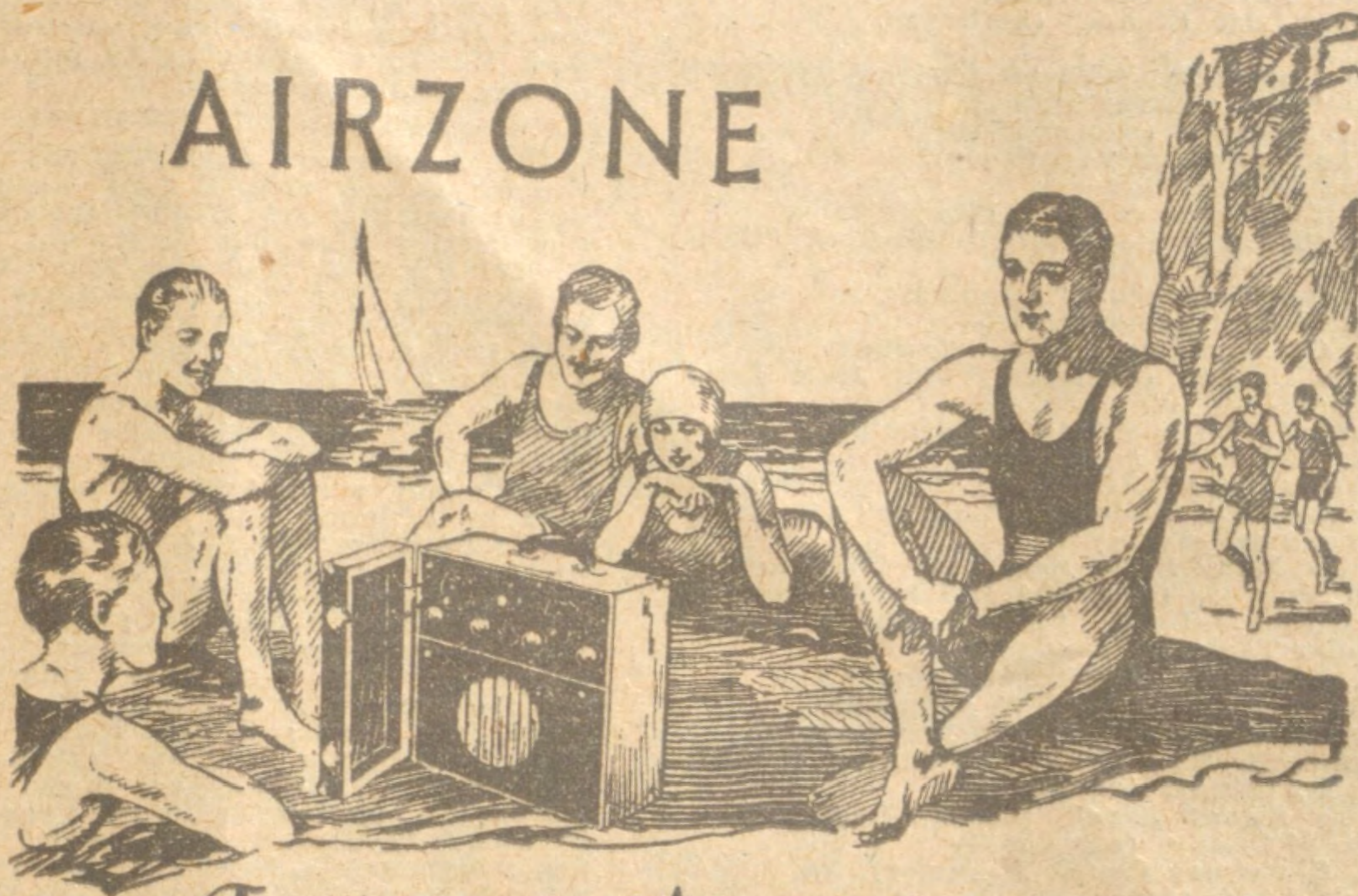
Principal Violin—Miss Connie Ziebell.

## SOLOISTS

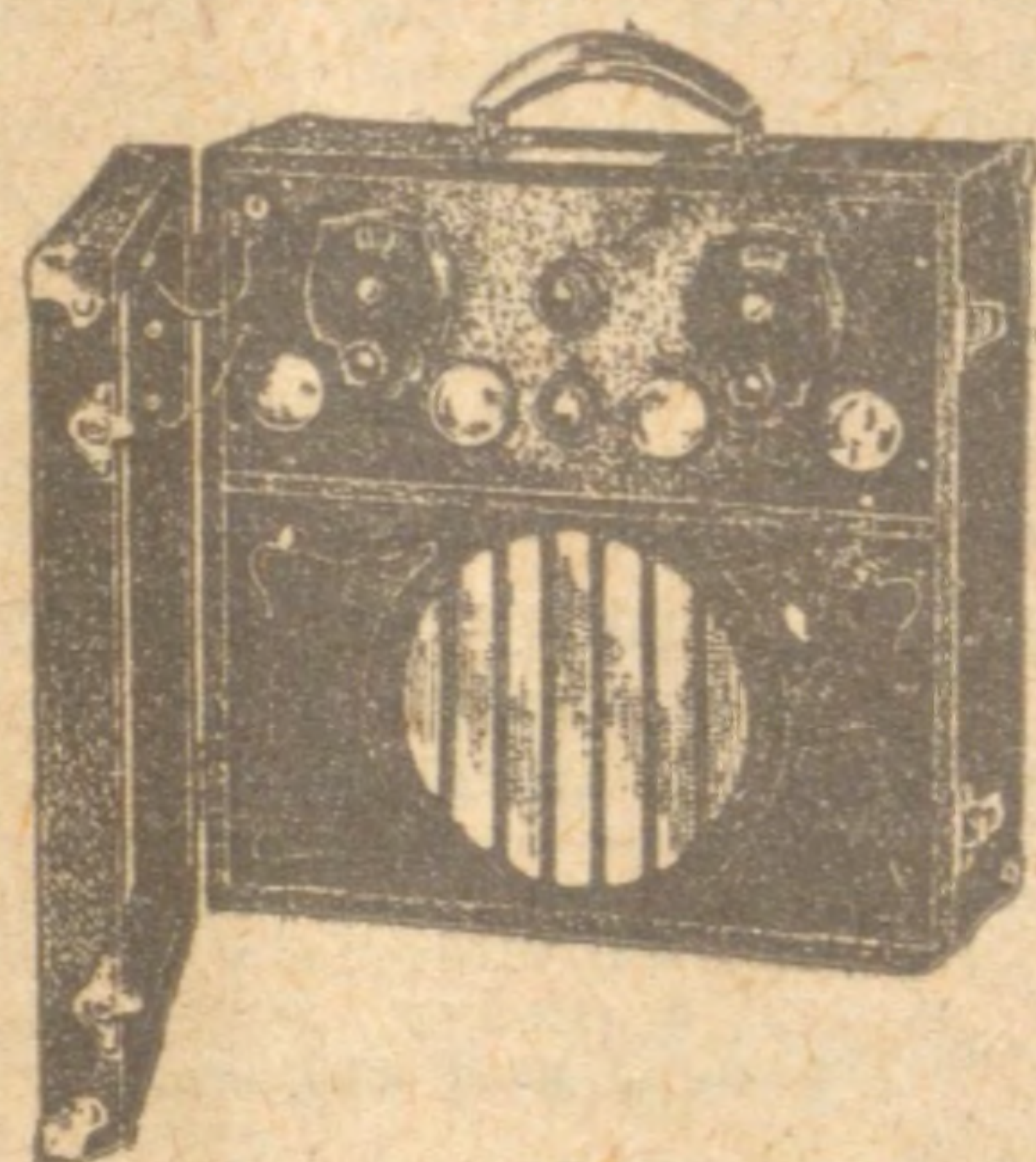
Soprano—Miss Dorothy Humphreys. Contralto—Miss Dawn Harding. Tenor—Mr. Robert Harper. Bass—Mr. Victor Harding. Acting-Conductor—Mr. W. F. G. Steele. Organist—Miss Isabel Adams. 1—Overture—Adagio-Allegro. 2—Recit., "Comfort Ye, My People." 3—Air, "Every Valley Shall be Exalted." 4—Chorus, "And the Glory of the Lord." 5—Recit., Bass, "Thus Saith the Lord." 6—Air, Bass, "But Who May Abide." 7—Recit., Contralto, "Behold! a Virgin Shall Conceive." 8—Air, Contralto, "O Thou That Tellest." 9—Chorus, "O Thou That Tellest." 10—Recit., Bass, "For, Behold Darkness." 11—Air, "The People That Walked." 12—Chorus, "For Unto Us a Child is Born."



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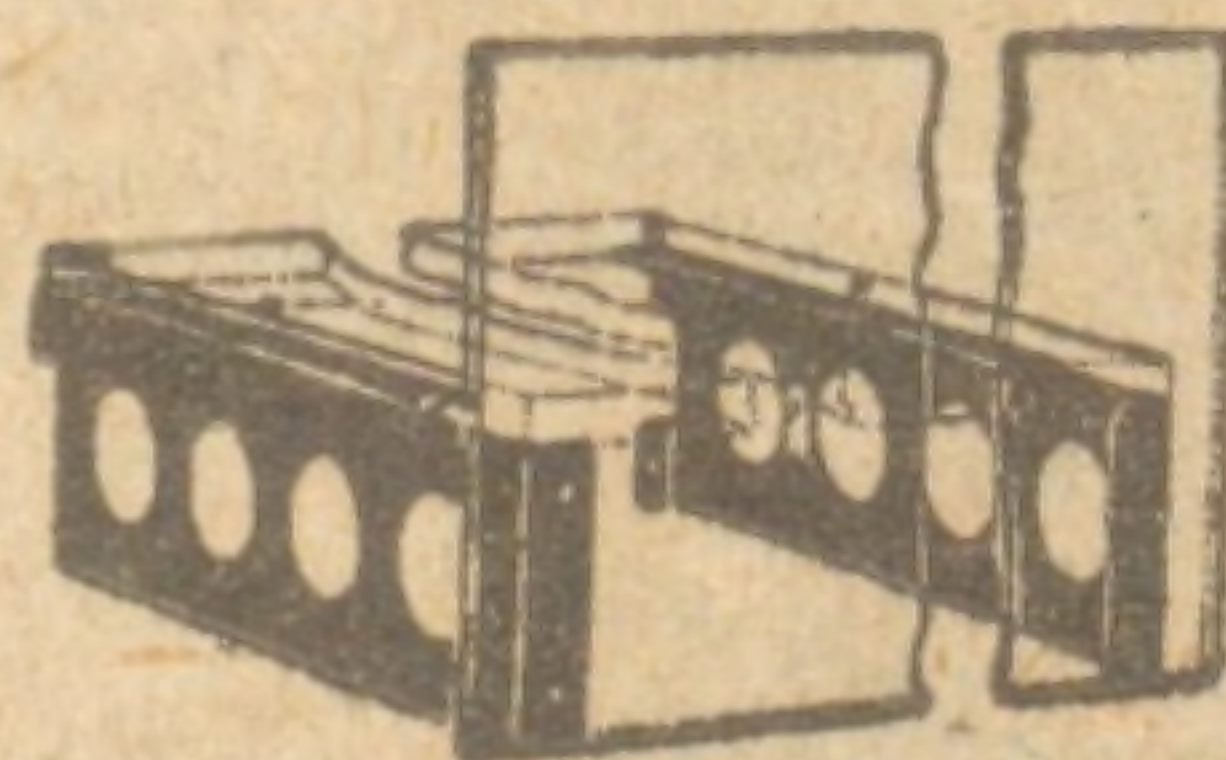
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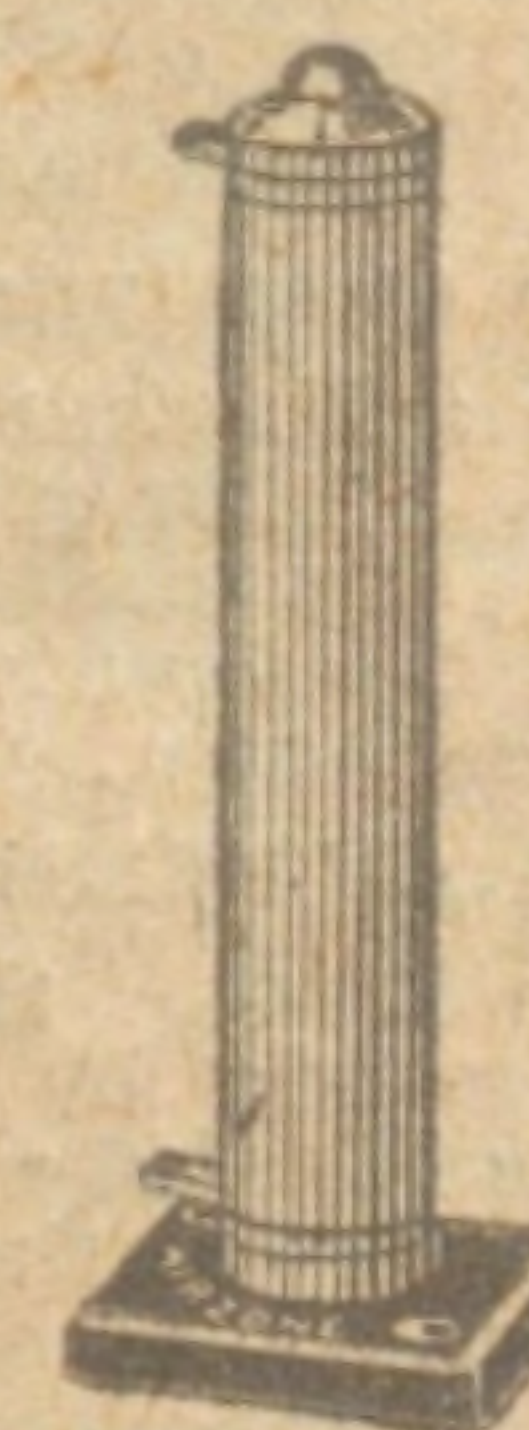
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MELBOURNE



13—Pastoral Symphony, Larghetto.  
 14—Recit., "There Were Shepherds."  
 Recit., Soprano, "And, lo, the Angel of the Lord."  
 15—Recit., "And the Angel Said."  
 16—Recit., "And Suddenly."  
 17—Chorus, "Glory to God in the Highest."  
 18—Air, Soprano, "Rejoice Greatly."  
 19—Recit., Contralto, "Then Shall the Eyes of the Blind."  
 Air, Contralto, "He Shall Feed His Flock."  
 20—Air, Soprano, "Come Unto Him."  
 22—Chorus, "Behold! The Lamb of God."  
 23—Air, Contralto, "He Was Despised."  
 27—Recit., Tenor, "All They That See Him."  
 28—Chorus, "He Trusted in God."  
 29—Recit., "Thy Rebuke Hath Broken."  
 30—Air, Tenor, "Behold and See."  
 31—Recit., Tenor, "He Was Cut Off."  
 32—Air, Tenor, "But Thou Did'st Not Leave."  
 33—Chorus, "Lift Up Your Heads."  
 9.50 p.m.: Ten minutes' interval.  
 From the Studio—Announcements.  
 10.0 p.m.: "The Messiah"—(Continued).  
 Transmission from the Town Hall, Melbourne.  
 40—Air, Bass, "Why Do The Nations."  
 42—Recit., Tenor, "He That Dwelleth in Heaven."  
 43—Air, "Thou Shall Break Them."  
 44—Chorus, "Hallelujah."  
 45—Air, Soprano, "I Know That My Redeemer Liveth."  
 46—Chorus, "Since by Man Came Death."  
 47—Chorus, "By Man Came Also the Resurrection of the Dead."  
 48—Chorus, "For As in Adam All Die."  
 49—Chorus, "Even So in Christ Shall All be Made Alive."  
 56—Chorus, "Worthy Is The Lamb."  
 57—Chorus, "Amen."  
 10.30 p.m.: From the Studio—  
 "Age" News. Announcements. Cricket Results.  
 10.38 p.m.: Our Australian Good-night Quotation.  
 10.40 p.m.: God Save the King.

## 4QG, BRISBANE

Tuesday, December 18

### EARLY MORNING SESSION.

(Announcer: J. Tyson.)

7.43 a.m.: Time signals. 7.45 a.m.: News service supplied by courtesy of "The Daily Mail." 8.0 a.m.: Some electric records. 8.15 a.m.: News service supplied by courtesy of "The Courier." 8.30 a.m.: Close down.

### MORNING SESSION.

(Announcer: Rita M'Auliffe.)

11.0 a.m.: Music. 11.5 a.m.: Social news. 11.15 a.m.: Talk on "Home Crafts," by Mrs. R. L. Reid. 11.30 a.m.: Music. 11.35 a.m.: More social news. 11.45 a.m.: Music. 12.0 (noon): Close down.

### MIDDAY SESSION.

(Announcer: R. Wight.)

1.0 p.m.: Market reports and weather information. 1.20 p.m.: From the Paris Cafe—Lunch-hour music. 1.5 p.m.: From the Brisbane Observatory—Time signals. 2.0 p.m.: Close down.

### AFTERNOON SESSION.

3 p.m.: From the Tivoli Theatre—Orchestral music by the Tivoli Operatic Orchestra, under the baton of Mr. C. Groves. 3.30 p.m.: From the Studio—Mail train running times. A programme of electrically reproduced records. 4.0 p.m.: From the Tivoli Theatre—Orchestral music. 4.15 p.m.: From the Studio—This afternoon's news. 4.30 p.m.: Close down.

### EARLY EVENING SESSION

(Announcers: R. Wight and H. Humphreys.)

6.0 p.m.: From the Studio—Mail train running times; mail information; shipping news. 6.5 p.m.: From the Paris Cafe—Dinner music. 6.25 p.m.: From the Studio—Commercial announcements. 6.30 p.m.: Bedtime stories conducted by "Uncle Ben." 7 p.m.: News in brief. 7.5 p.m.: Stock Exchange news. 7.6 p.m.: Metal quotations. 7.7 p.m.: Market reports. 7.25 p.m.: Fenwick's stock report. 7.30 p.m.: Weather information. 7.40 p.m.: Announcements. 7.43 p.m.: Standard time signals. 7.45 p.m.: Lecture: "Christmas Greetings to Pig Farmers"—by E. J. Shelton (instructor in pig raising).

### NIGHT SESSION.

(Announcer: H. Humphreys.)

A programme arranged by Mr. Sydney May. 8.0 p.m.: From the Studio—  
 Jack Atkinson (baritone),  
 "Beauty's Eyes" (Tosti).

Vera Parker (contralto)—  
 "The Lost Chord" (Sullivan).  
 Carols—  
 (a) "Good King Wenceslas"  
 (b) "I Saw Three Ships."  
 Jill Manners (soprano)—  
 "The Infant Jesus" (Yutu).  
 Jack Land, tenor—  
 Recit., "Comfort Ye" (Handel).  
 Air, "Ev'ry Valley Shall be Exalted" (Handel).  
 Carol—"Bethlehem" (Gounod).  
 Agnes Kerr (contralto)—  
 "A Country Carol" (Old English).  
 Vera Parker (contralto) and Jack Land (tenor)—  
 Duet, "Who is Sylvia?" (Kearton).  
 Pat M'Onigly (soprano)—  
 "Waltz Song" (German).  
 Carol—"The Madonna's Lullaby" (Halsey).  
 John Steel (tenor)—  
 "How Many Hired Servants" (Sullivan).  
 Jill Manners (soprano) and Jack Atkinson (baritone)—Duet, "A Christmas Song" (Colin Taylor).  
 Vera Parker (contralto)—  
 "When All Was Young" (Gounod).  
 9.0 p.m.: Metropolitan weather forecast.  
 Carol—"O Holy Night" (Adam). Soloist, Jack Atkinson (baritone)—  
 "The Sword Song" (Clough-Leigher).  
 Pat M'Onigly (soprano)—  
 "A Christmas Carol" (Kramer).  
 Jack Land (tenor)—  
 "Sally in Our Alley" (Carey).  
 Carol—"Legend" (Tschalkowsky).  
 Jill Manners (soprano)—  
 "Cigarette" (Fraser-Simson).  
 Agnes Kerr (contralto)—  
 "The Holy Child" (Martin).  
 John Steele (tenor)—  
 "A Christmas Lullaby" (Despommier).  
 "Afton Water" (Hume).  
 Carol—"Sleep, Holy Babe" (Dykes).  
 Vera Parker (contralto)—  
 "He Shall Feed His Flock" (Handel).  
 Jill Manners (soprano)—  
 "Come Unto Him" (Handel).  
 Jack Atkinson (baritone)—  
 "The Eastern Heavens" (Edwards).  
 Pat M'Onigly (soprano)—  
 "When Love is kind" (A.L.).  
 Agnes Kerr (contralto)—  
 "The Living God" (O'Hara).  
 Carol, "O Sing Unto God" (Gounod).  
 10.0 p.m.: "The Daily Mail" news, "The Courier" news, "Queenslander" bi-weekly news service for distant listeners.  
 10.30 p.m.: Close down.

## 5CL, ADELAIDE

Tuesday, December 18

### MORNING SESSION

Announcer: J. L. Norris.

11.0 a.m.: G.P.O. chimes. 11.1 a.m.: Ballad and instrumental concert. Sonora recital with Columbia recordings. Sir Hamilton Harty and "The Halle" Orchestra. "Rosamunde" Overture (Schubert). 11.9 a.m.: Ernest M'Kinlay, tenor—"Song of a Locust," "Waiata Maori" (Hill). 11.15 a.m.: "Economist," Kitchen Craft and Menu talk. 11.30 a.m.: Organ recital by Quentin M. M'Lean. Columbia recordings on the "Sonora." "Classica" (arr. Montague Ewing). 11.30 a.m.: "Funeral March of a Marionette" (Gounod). 11.42 a.m.: "Nola" (Arndt). 11.45 a.m.: "Christmas Every Day," a humorous fable (W. D. Howells), by Maggie Tulliver.

### MIDDAY SESSION

12.0 noon: G.P.O. chimes. 12.1 p.m.: Orchestral concert, Columbia recordings. 12.15 p.m.: "The Advertiser" general news service. 12.35 p.m.: British official wireless news. 12.40 p.m.: The Columbia Musical Art Quartet—"Old Folks at Home" (Foster), "Home, Sweet Home" (Bishop). 12.50 p.m.: S.A. Railway information. 12.51 p.m.: S. C. Ward and Co.'s Stock Exchange information. 12.57 p.m.: Meteorological information. 1.0 p.m.: G.P.O. chimes. 1.1 p.m.: Tom King, pianist—"Capriccio" (original composition), "Impromptu" (Arensky). 1.7 p.m.: Syd. Morrell, baritone—"Friend o' Mine" (Sanderson), "Because" (D'Hardelot). 1.14 p.m.: Metronola Dance Band—"The Blue Room" (Rodgers), "Lolita" (Stoneham), "Ice Cream" (Johnson). 1.24 p.m.: Meta Riedel, mezzo—"The Little Old Garden" (Hewitt), "Daddy" (Behrend). 1.30 p.m.: Metronola Dance Band—"Dream Kisses" (Jerome), "Hurry On" (Bannister), "Yesterday" (Wilhite). 1.41 p.m.: Result of Hurdle Race, Moonee Valley Charity Races. 1.42 p.m.: Syd. Morrell, baritone, "I Attempt from Love's Sickness" (Purcell), "Invictus" (Huhn). 1.43 p.m.: Tom King, pianist—"Juba" (Dett). 1.52 p.m.: Meta Riedel, mezzo—"Wert Thou a

Slave" (Kilner), "Waid" (D'Hardelot). 1.53 p.m.: Meteorological information. 1.59 p.m.: International cricket scores, Second Test Match, at Sydney. 2.0 p.m.: G.P.O. chimes, and close down.

### AFTERNOON SESSION

Announcer: J. L. Norris.

3.0 p.m.: G.P.O. chimes. 3.1 p.m.: International cricket scores and Moonee Valley Charity Races results. 3.3 p.m.: Rev. G. E. Hale, B.A., talk on the "The Challenge of Life." 3.17 p.m.: A pianoforte recital by Mona Nugent, Mus.Bac.—"Rhapsodie No. 12" (Liszt), "Griller" (Schumann). 3.24 p.m.: Result of Queen Victoria Highweight, Moonee Valley races. 3.25 p.m.: Sydney Burchall, popular baritone—"Chloe" (Moret), "Wondering" (Gartman). 3.31 p.m.: An instrumental interlude by Althouse and M'Callum of piano and flute selections. 3.39 p.m.: Comedy by Sydney Hollister. 3.49 p.m.: Seth Smith, banjoist—"William Tell" (Rossini), "Cheerio" 3.55 p.m.: Mona Nugent, vocalist—"Withered Flowers" (Tschalkowsky), "Parfum de Rose" (Slaters). 4.1 p.m.: Result of Trial Mile, Moonee Valley races. 4.2 p.m.: Hilda Riemann, violiniste—"Slavonic Dance" (Kreisler), "Rondino" (Kreisler). 4.9 p.m.: Sydney Burchall, popular baritone—"The Sands o' Dee," "I Heard You Go By." 4.16 p.m.: Seth Smith, banjoist—"Royal Trumpeters' March," "Rosetime." 4.22 p.m.: Althouse and M'Callum, entertainers, instrumental selections. 4.29 p.m.: Hilda Riemann, violiniste, "Liebesfreud" (Kreisler), "Orientale" (Cui). 4.35 p.m.: Result of Trial Purse, six furlongs, Moonee Valley races. Twenty minutes with Paul Whiteman and his Orchestra. 4.36 p.m.: Foxtrot, "Evening Star" (Turk). 4.40 p.m.: Foxtrot, "Get Out and Get Under the Moon" (Shay). 4.44 p.m.: Waltz, "Merry Widow" (Lehar). 4.48 p.m.: Foxtrot, "C.O.N.S.T.A.N.T.I.N.O.P.L.E." (Carlton). 4.52 p.m.: Waltz, "My Hero" (Strauss). 4.56 p.m.: S. C. Ward and Co.'s Stock Exchange information. 5.0 p.m.: G.P.O. chimes and close down.

### EVENING SESSION

Announcer: Athol Lykke.

6.0 p.m.: G.P.O. chimes. 6.1 p.m.: Inter-State and International cricket scores, England v. Australia, Second Test Match; Victoria v. Queensland. 6.2 p.m.: Birthday greetings, correspondence, songs, and stories, by "The Wattle Lady." 6.30 p.m.: Musical interlude on the Sonora. Dinner music by world-famous Columbia Orchestras. 6.55 p.m.: Results of Moonee Valley Charity Race meeting. 6.58 p.m.: International and Inter-State cricket scores. 7.0 p.m.: G.P.O. chimes. 7.1 p.m.: S. C. Ward and Co.'s Stock Exchange information. 7.5 p.m.: General market reports. 7.8 p.m.: 5CL's sporting service notes on Port Cup Carnival. 7.20 p.m.: Miss Laurie M'Leod, talk on "The Art of Dancing." 7.30 p.m.: Mr. Harold Raymond, a topical talk. 7.40 p.m.: Dr. Herbert Basedow, M.A., M.P., "An Australian Talk."

### NIGHT SESSION.

8 p.m.: Chimes.

### A STUDIO CONCERT.

8.1 p.m.: Tom King (pianist), "March Hongroise" (Rowalski). 8.3 p.m.: Sydney Burchall (baritone)—"Molly O'Donegal" (Auslin), "The Piper" (Steel). 8.9 p.m.: Althouse and M'Callum, instrumentalists, flute and piano selections. 8.15 p.m.: Sydney Hollister (humorist), in droll humor. 8.22 p.m.: Lizette Foglia (violiniste), "Hejre Kati" (Dubois). 8.29 p.m.: Mona Nugent (soprano)—"Ballateela," from "Pagliacci" (Leoncavallo). "When Daisies Pied" (Arne). 8.33 p.m.: Tom King (pianist)—"Fantasia-stuck" (Pachulski). 8.37 p.m.: Sydney Burchall (baritone)—"Laugh, Clown, Laugh" (Floroto), "Who Knows" (Bale). 8.43 p.m.: Lizette Foglia (violiniste)—"Regrets" (Vieuxtemps). 8.38 p.m.: Althouse and M'Callum (vocal entertainers, in specialties from their repertoire. 8.54 p.m.: A resume on international cricket by "Willow." 8.57 p.m.: Overseas grain report. 8.59 p.m.: Meteorological information. 9.0 p.m.: G.P.O. chimes. Old-time Night, from 3LO Melbourne. 9.1 p.m.: Hoffman's Dance Band—Quadrilla, "Welcome Home." 9.5 p.m.: Announcements and greetings to all "Old Timers."



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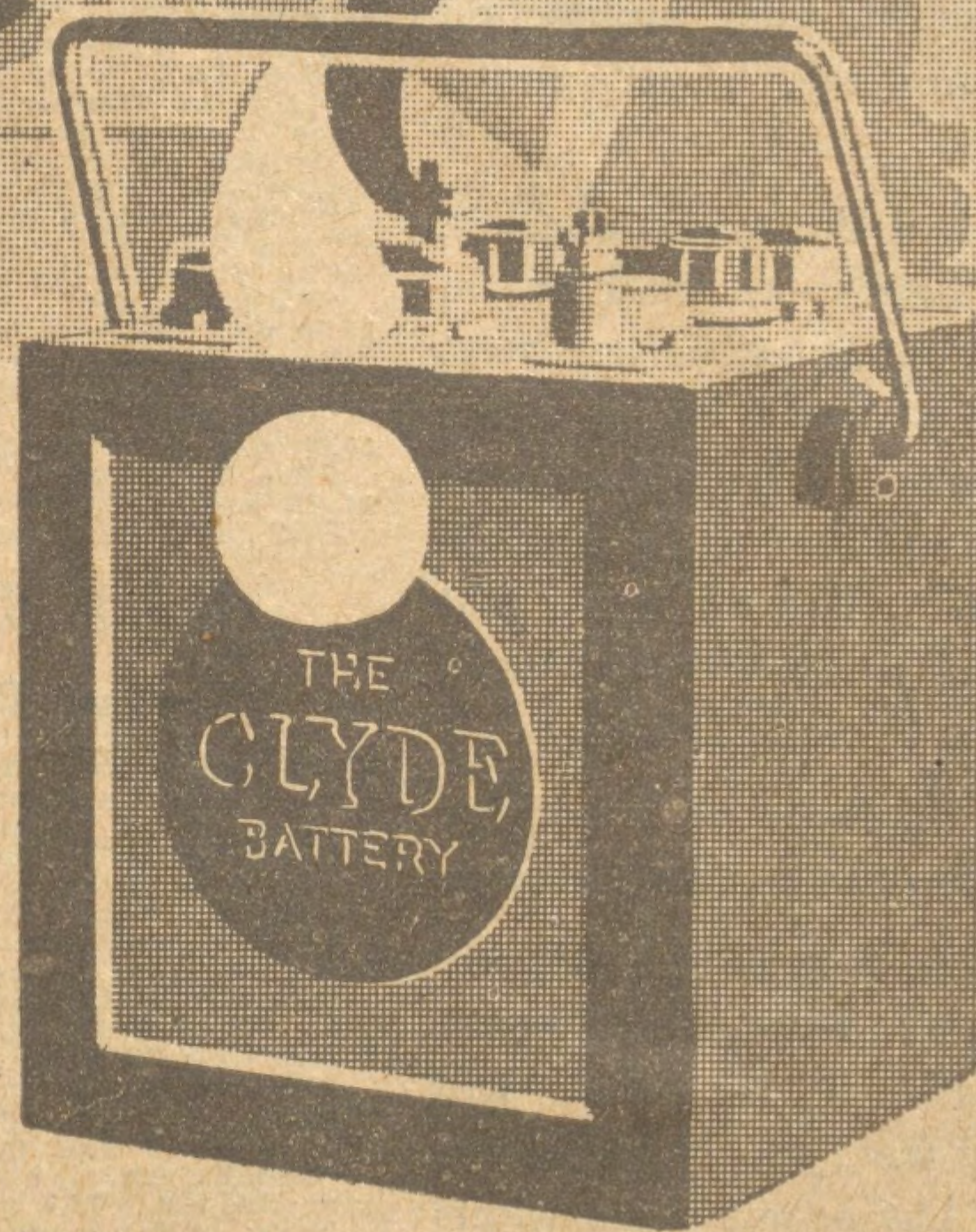
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### ALL THE DIFFERENCE

Dainty, diaphanous, desirable, the summer girl could pack her wardrobe into my vest pocket—without objection on my part.

Whereas the average male wears an outfit originally intended for Antarctic exploration, and in consequence is a panting, perspiring, and pitiable blob.

When the shade temp. passes the Hundred. I yearn for a crepe de Chine outfit, with mousseline de soie trimmings, short pants, and sandals.

Yet if I had the moral courage—and the figure—to walk out in such cool common sense, next day's papers would carry short pars., ending: "The unfortunate man was then taken to the Reception House." The odds are that an outraged male warder would put me in a PADDED cell.

Wild aboriginals or a bathing pool in Japan are our only refuge.

But let the first cold southerly blow in earliest autumn and every woman with a fur coat will straightway wear it. Not that she feels cold, but because she wants to make the other woman feel unhappy.

My view is that every woman should be forced by law to wheel a baby carriage. If she cannot fill it in the usual way, then the New System "Electric 3" would be a more musical substitute.

Who would mind being the mother of a £29½ baby which would broadcast cricket results and sermons. If you like the idea, call at 280 Castlereagh Street and ask for their latest prodigy. It is "entirely dry."

9.10 p.m.: Old-time choruses, Graham Burgin and the Boys of the Village, introduced by Maurice Dudley, Mrs. Campbell at the piano. Sing up, everybody!—"Strike Up the Band," "In the Good Old Summer Time," "Little Alabama Coon," "Just For To-night."

9.16 p.m.: Hoffman's Dance Band—Barn Dance, "Kerry Mills."

9.23 p.m.: Edith Huzham (soprano)—"A Summer Shower."

9.26 p.m.: Hoffman's Dance Band—Valetta, "Mignonette."

9.33 p.m.: Renn Millar (bass)—"Rocked in the Cradle of the Deep."

9.36 p.m.: Hoffman's Dance Band—Alberts, "Kalgoorlie."

9.52 p.m.: Old-time choruses, Graham Burgin and the Boys of the Village, introduced by Maurice Dudley, Mrs. Campbell at the piano—"A Life on the Ocean Wave," "Sweet Adeline," "Just as the Sun Went Down," "My Home Girl."

9.58 p.m.: Hoffman's Dance Band—Schottische, "Any Rags?"

10.3 p.m.: Huzham's Serenaders—Quartette, "Greeting to Spring."

10.6 p.m.: Hoffman's Dance Band—Waltz, "Count of Luxembourg."

10.13 p.m.: Dolly Burdett (contralto)—"Killarney."

10.16 p.m.: Hoffman's Dance Band—Lancers, "Operatic."

10.20 p.m.: From 5CL Studio—5CL's Sporting Service, supplied by "Silvius," including notes on the Port Cup Carnival.

10.34 p.m.: "Advertiser" News Service. Meteorological Information. British Official Wireless News. Sporting Notes by "Silvius."

10.44 p.m.: From 3LO Melbourne—Old Time Choruses—Graham Burgin and the Boys of the Village, introduced by Maurice Dudley—Mrs. Campbell at the piano—"The Camptown Races."

"The Wabash."

"I'll Stick to the Ship."

"Wait For Me."

10.50 p.m.: Hoffman's Dance Band—Barn Dance, "Golden Slippers."

10.56 p.m.: Hugh Huxham, Tenor—"Sadie Ray."

10.59 p.m.: Hoffman's Dance Band—"The Royal Irish."

11.16 p.m.: Our Great Thought for To-day. God Save the King.

### 6WF, PERTH

Tuesday, December 18

12.30 p.m.: Tune in. 12.35 p.m.: Markets, news, and cables. Results will be given of the second Test match between the English Eleven v. Australian Eleven, played at Sydney. 1.0 p.m.: Time signal.

1.1 p.m.: Weather notes, supplied by the Meteorological Bureau of West Australia. 1.2 p.m.: Luncheon Music—The Studio Instrumental Trio, conducted by Mr. Val Smith, selection, "Les Sourires" (Waldteufel); idylle, "De Pierrots" (Brumel). 1.30 p.m.: Close down. 3.0 p.m.: Further results will be given of the second Test match between the English Eleven v. Australian Eleven, played at Sydney. 3.30 p.m.: Music and Song. Talk: "Handbags and Hosiery," by Junette; pianoforte selections by Miss Audrey; vocal and instrumental numbers from the studio. 5.0 p.m.: Further results will be given of the second Test match between the English Eleven v. Australian Eleven. 5.5 p.m.: Close down.

6.45 p.m.: Tune in. The evening transmission is broadcast on 104.5 metres, as well as the usual wave length. 6.48 p.m.: Stories for the kiddies and birthday greetings, by Uncle Percy. 7.5 p.m.: Items by the Studio Trio. 7.30 p.m.: Stocks, markets, news. 7.45 p.m.: Talk: "Books of the Month," by Mr. J. P. Bathgate. 8.0 p.m.: Time signal. 8.1 p.m.: Weather notes supplied by the Meteorological Bureau of West Australia. Station announcements, such as alterations to programmes, etc. 8.3 p.m.: Concert Night—Musical programme from the studio, including vocal and instrumental artists. 9.0 p.m.: Late news items by courtesy of "The Daily News" Newspaper Co.; ships within range announcement; weather report and forecast; station announcements. 10.30 p.m.: Close down.

10.45 p.m.: Close down.

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

104.5 METRE TRANSMISSION

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

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

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

### 7ZL, HOBART

Tuesday, December 18

#### EVENING SESSION.

7.30 p.m.: A "Gas Cookery Talk," by "Regulo." 7.45 p.m.: W. E. Fuller will speak on "Literary Lapses and Library Lists." 8 p.m.: G.P.O. clock chimes the hour. 8.1 p.m.: Fifty years ago to-day. 8.6 p.m.: A band concert by the Pavilion Dance Band and Mlle. Columbia (V. Byrne conductor). Gresham Singers, "O Peaceful Night" (German), "What Ho! What Ho!" (Beale). 8.13 p.m.: Pavilion Dance Band—Fox-trot, "After My Laughter Came Tears" (Tobias); fox-trot, "Good News" (De Sylva); waltz, "Was It a Dream?" (Coslow). 8.22 p.m.: Norman Clarke and his South Sea Islanders—"Lei Lani" (Wreath of Heaven) (Heagney). "Dreamy Hill Bay" (N. Clark). 8.29 p.m.: Pavilion Dance Band—Fox-trot, "Laurietta" (Silver); Yales, "Varsity Drag" (De Sylva); fox-trot, "Without You, Sweetheart" (De Sylva). 8.38 p.m.: Emma Destinnova, soprano, and Dinah Gilly, baritone—"The Wedding," folk song; "My Homeland," folk song (in Czech, with orchestra). 8.45 p.m.: Pavilion Dance Band—Fox-trot, "Like a Virginia Creeper" (Wade); waltz, "Ramona" (Wayne); fox-trot, "Get Out and Get Under the Moon" (Tobias). 8.54 p.m.: Jack Lumsdaine and Len Maurice—"Good-night" (Wood). "That's my Mammy" (Perse). 9.1 p.m.: Auto-car Club of Tasmania safety message. 9.2 p.m.: Pavilion Dance Band—Fox trot, "Little Log Cabin of Dreams" (Hanley); Fox-trot, "Sunshine" (Berlin); "Rio Rita" (Tierney). 9.10 p.m.: Vaughn Leath, baritone—"Dirty Hand, Dirty Face" (Johnson). "Giggling Gertie" (Dreyer). 9.17 p.m.: Pavilion Dance Band—Fox trot, "That's My Weakness Now" (Green); waltz, "Can't You Say I Love You" (Brown), fox trot, "Beautiful" (Shay). 9.26 p.m.: George Ross, baritone, "Plenty of Sunshine" (De Sylva). Gerald Adams, tenor, "Send for Me" (Bibe). 9.33 p.m.: Pavilion Dance Band—Fox-trot, "Adoree" (West); Yales, "Chlo-e" (Song of the Swamp) (Moore); fox trot, "Mary Ann" (Davis). 9.42 p.m.: Seger Ellis, baritone, "Last Night I Dreamed You Kissed Me." Hawaiian Guitar, "Aloha Land." 9.50 p.m.: News session. "Mercury" news service; British official wireless news; Tasmanian District weather report. 10 p.m.: G.P.O. clock chimes the hour. 10.1 p.m.: Our Tasmanian good-night thought. 10.2 p.m.: God Save the King. 10.3 p.m.: Close down.

### Wednesday, Dec. 19

New South Wales Broadcasting Company, Limited

### 2FC SERVICE

#### EARLY MORNING SESSION.

Announcer: A. S. Cochrane.

7 a.m.: "Big Ben" and announcements. 7.2 a.m.: Official weather forecast; rainfall; river reports; temperatures; astronomical memoranda. 7.5 a.m.: "Sydney Morning Herald" summary. 7.10 a.m.: Shipping intelligence; mail services. 7.12 a.m.: Studio music. 7.22 a.m.: Investment market; mining share-markets; metal quotations. 7.23 a.m.: Wool sales; breadstuffs markets; inter-State markets; produce markets. 7.35 a.m.: Studio music. 8 a.m.: "Big Ben." Close down.

#### MORNING SESSION.

Announcer: A. S. Cochrane.

10 a.m.: "Big Ben" and announcements. 10.3 a.m.: Pianoforte reproduction. 10.10 a.m.: "Sydney Morning Herald" news service. 10.25 a.m.: Studio music. 10.45 a.m.: A talk on "Home Cooking and Recipes," by Miss Ruth Furst. 11 a.m.: "Big Ben"; A.P.A. and Reuter's cable services. 11.5 a.m.: Close down.

#### MIDDAY SESSION.

Announcer: A. S. Cochrane.

12 noon: "Big Ben" and announcements. 12.1 p.m.: Stock Exchange, 1st call. 12.3 p.m.: Official weather forecast; rainfall.



12.5 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v Australia.  
 1.30 p.m.: From the Studio, Stock Exchange, second call.  
 1.32 p.m.: Weather forecast.  
 1.24 p.m.: "Evening News" midday news service.  
 Producers' Distributing Society's report.  
 1.42 p.m.: Rugby wireless news.  
 1.45 p.m.: Studio music.  
 1.57 p.m.: Cricket scores.  
 2 p.m.: "Big Ben." Close down.  
 Note:—Race results from Rosebery ponies will be broadcast as received

## AFTERNOON SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

2.30 p.m.: Programme announcements.  
 2.32 p.m.: Musical session for the schools.  
 3 p.m.: "Big Ben"; pianoforte reproduction.  
 3.15 p.m.: Hilda Nelson, mezzo.  
 3.22 p.m.: Popular music.  
 3.30 p.m.: Ethel Muller, contralto—  
 (a) "Take Heart Again" (Meale).  
 (b) Thanks Be to God" (Dickson).  
 3.37 p.m.: Hilda Nelson, mezzo.  
 3.44 p.m.: Cricket scores.  
 3.45 p.m.: A reading.  
 4 p.m.: "Big Ben." Ethel Muller, contralto—  
 (a) "My Ship" (Del Riego).  
 (b) "Morning" (Oley Speaks).  
 4.7 p.m.: Popular music.  
 4.15 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia.  
 5 p.m.: "Big Ben." Close down.  
 Note:—Description of the international cricket will be carried on through 2BL service until stumps drawn at 6 o'clock.

## EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

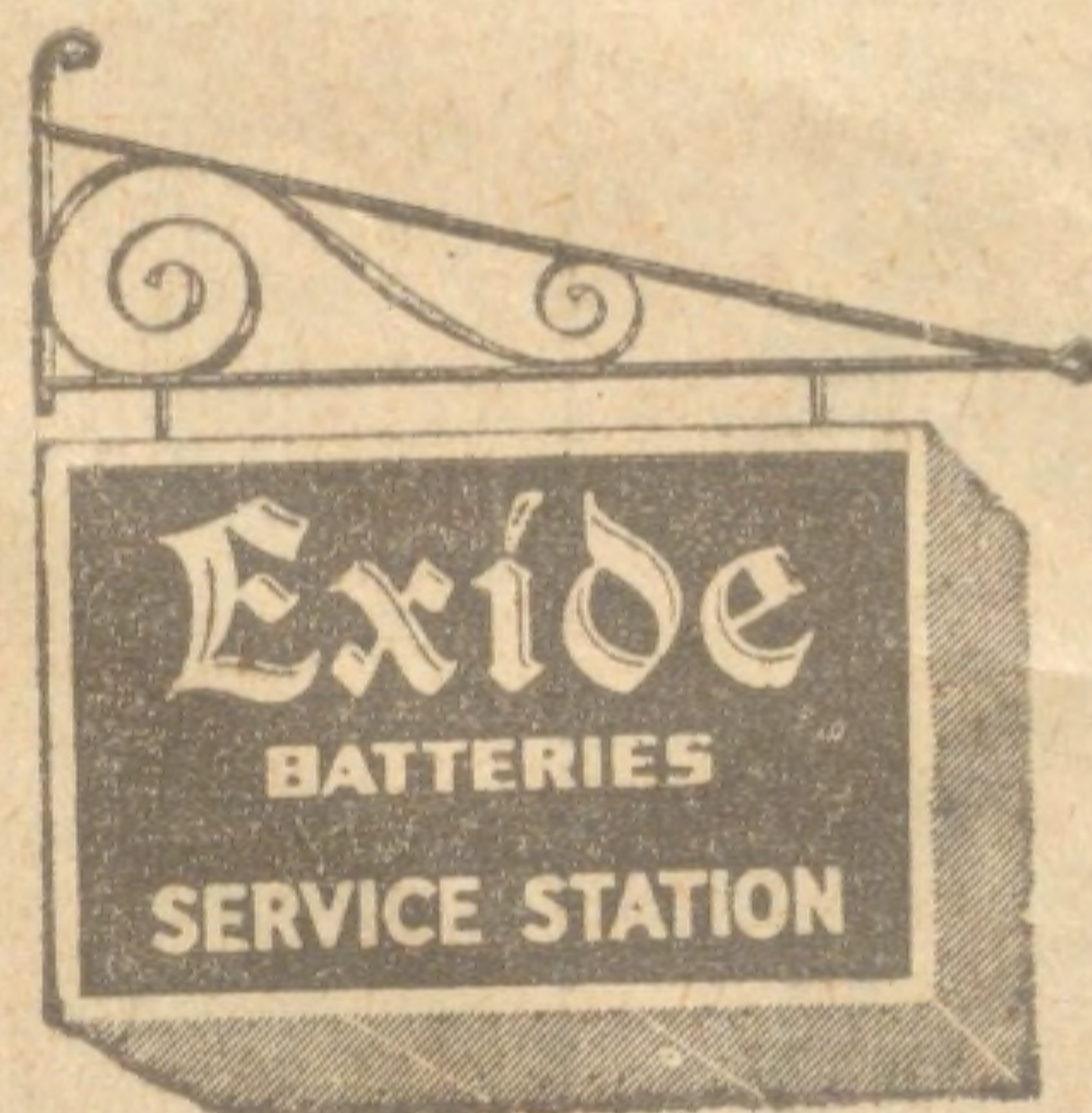
5.40 p.m.: The chimes of 2FC.  
 5.45 p.m.: The "Hello Man" talks to the children, assisted by Uncle Ted and "Sandy".  
 Letters and stories.  
 Music and entertainment.  
 6.30 p.m.: Dalegty's market reports (wheat, wheat, and stock).  
 6.40 p.m.: Fruit and vegetable markets.  
 6.43 p.m.: Stock Exchange information.  
 6.45 p.m.: Weather and shipping news.  
 6.50 p.m.: Late sporting news.  
 7 p.m.: "Big Ben"; late news service.  
 7.10 p.m.: The 2FC Dinner Quartette, conducted by Horace Keats.  
 (a) "Let a Smile be Your Umbrella" (Rain).  
 (b) "Ninna-Nanna" (Micheli).  
 (c) "Scene de Ballet" (Luigini).  
 (d) "The Vagabond King" (Friml).  
 (e) "Der Rosenkavalier" (Strauss).  
 (f) "My Angel" (Rapee).

## EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40 p.m.: Programme announcements.  
 7.45 p.m.: Popular music.  
 7.50 p.m.: Impressions on the international cricket by M. A. Noble.  
 8.0: "Big Ben." The Light Music Four.  
 (a) Selection "Autumn Manouvres" (Kalmann).  
 (b) Suite "Sigurd Jorsalfar" (Grieg).  
 8.20 p.m.: "The Mellow Fellows."  
 8.30 p.m.: Studio production of Oscar Wilde's comedy, "The Importance of Being Earnest," by the H. W. Varna Company.  
 Cast: John Worthing, J.P., H. W. Varna.  
 Algernon Moncrieff, William Hume.  
 Rev. Canon Chasuble, Henry de Witte.  
 Lane (Butler), D. A. Sharp.  
 Merriman, Tim Ferry.  
 Lady Bracknell, Pat Barton.  
 The Hon. Gwendolen Fairfax, Murial Conner.  
 Cecily Cardew, Gwen Lascelles.  
 Miss Prism (Governess), Miss Broadfoot.  
 Act I: Algernon Moncrieff's flat, The Albany, Half Moon Street, W.  
 Act II: Garden of the Manor House, Jack Worthing's.  
 Act. III: Drawing-room at the same Manor House.  
 Time: Present—London.  
 9.30 p.m.: Weather report and forecast.  
 The Light Music Four.  
 (a) "Grand Pas Espagnole" (Glazounow).  
 (b) Selection, "The Flying Dutchman" (Wagner).  
 9.45 p.m.: "The Mellow Fellows."  
 9.55 p.m.: Lucille Bruntnell: "An Old-Fashioned Christmas in England—Pathos and Optimism of the London Embankment."  
 10.5 p.m.: The Light Music Four.  
 (a) "Scene de Ballet" (De Beriot).  
 (b) "Rustling Leaves" (Ewing).  
 10.15 p.m.: "The Mellow Fellows."  
 10.27 p.m.: To-morrow's programme and announcements.



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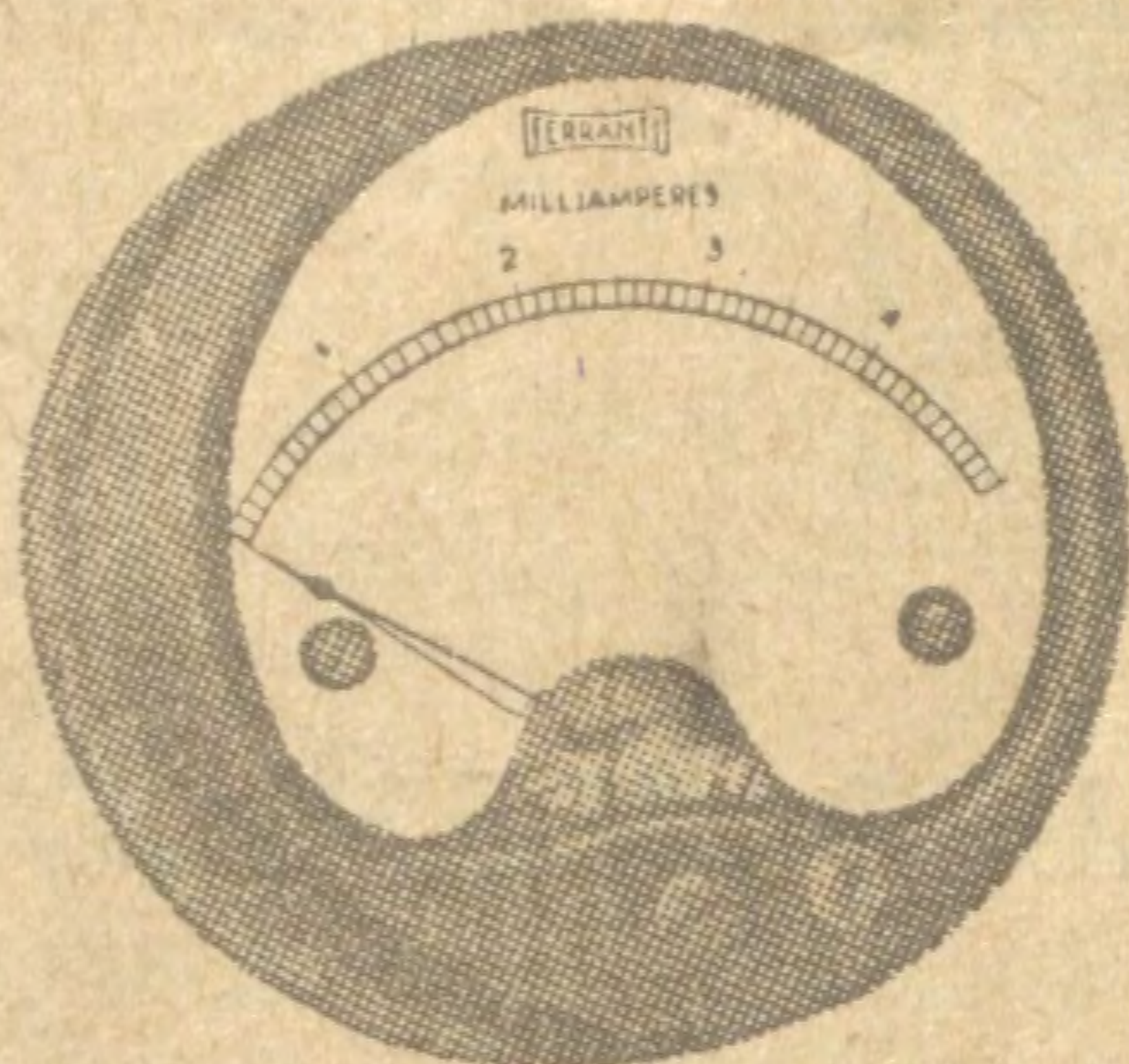
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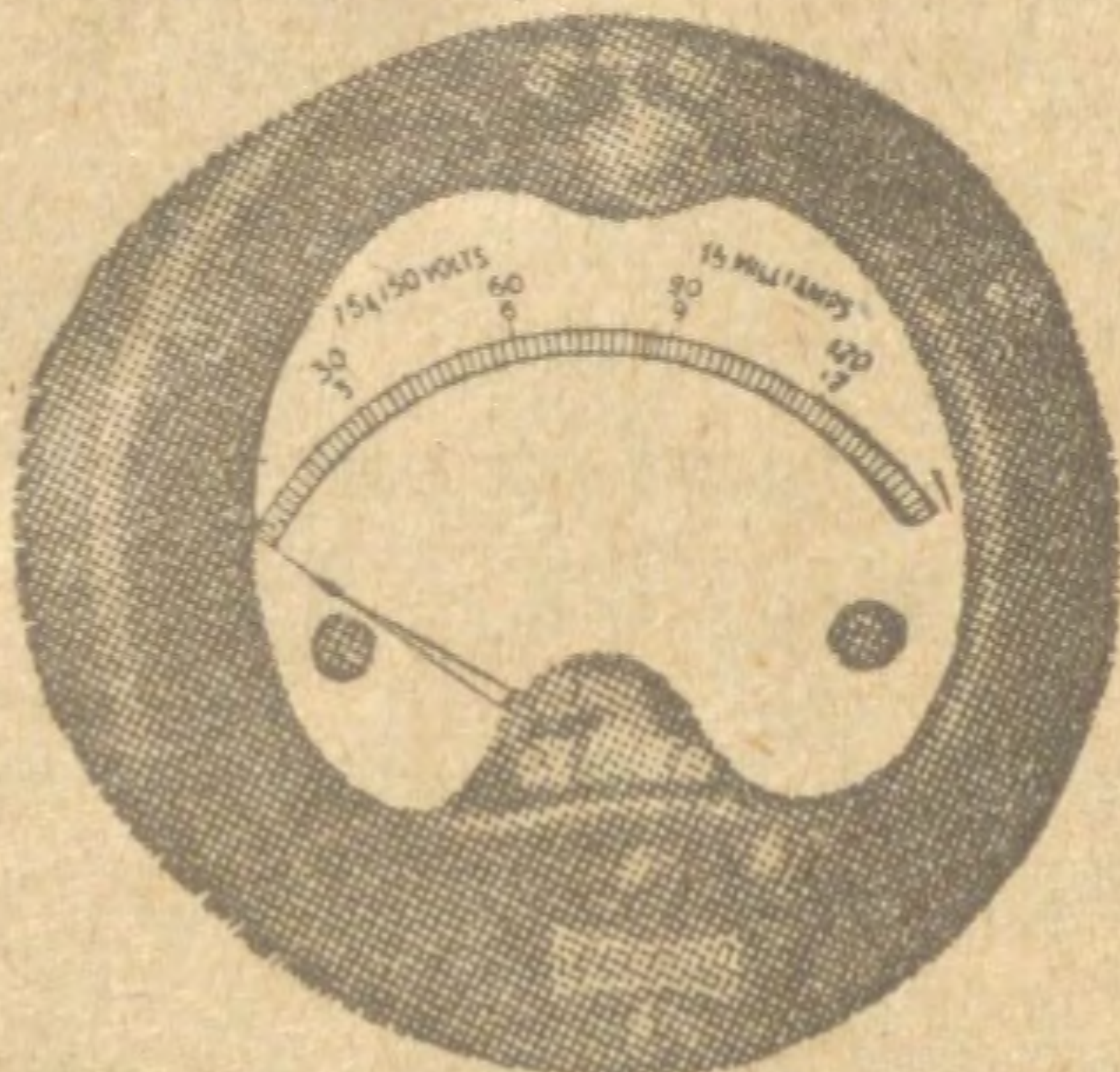
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R2.

10.30 p.m.: Roaming the Ether: The New South Wales Broadcasting Company, Limited, through the courtesy of Amalgamated Wireless, Limited, has presented a novelty each Wednesday night for the last five weeks, when listeners have had an opportunity of visiting various countries by wireless. To-night we will transmit a short programme from 2XAF Schenectady.  
10.40 p.m.: National Anthem. Close.

## 2BL SERVICE

Wednesday, December 19

### MORNING SESSION.

Announcer: A. C. C. Stevens.

8 a.m.: G.P.O. clock and chimes, metropolitan weather report.  
8.1 a.m.: State weather report.  
8.2 a.m.: Studio music.  
8.15 a.m.: G.P.O. clock and chimes, news from the "Daily Telegraph Pictorial."  
8.25 a.m.: Studio music.  
8.30 a.m.: G.P.O. clock and chimes.  
8.35 a.m.: Information, mails, shipping, arrivals, departures, and sailings.  
8.38 a.m.: News from the "Daily Telegraph Pictorial."  
8.45 a.m.: G.P.O. clock and chimes. Studio music.  
9.0 a.m.: G.P.O. clock and chimes. Studio music.  
9.30 a.m.: Half an hour with silent friends.  
10 a.m.: G.P.O. clock and chimes. Close down.

### MID-DAY SESSION.

Announcer: J. Knight Barnett.

11 a.m.: G.P.O. clock and chimes. 2BL Women's Sports Association session, conducted by Miss Gwen Varley.  
11.30 a.m.: Advertising hints.  
11.40 a.m.: Women's session, conducted by Mrs. Cranfield.  
12 noon: G.P.O. clock and chimes, special ocean forecast and weather report.  
12.3 p.m.: Pianoforte reproduction.  
12.30 p.m.: Shipping and mails.  
12.35 p.m.: Market reports.  
12.45 p.m.: Cricket scores, 2nd Test Match, England v. Australia.  
12.48 p.m.: "Sun" mid-day news service.  
1.0 p.m.: Studio music.  
1.30 p.m.: From the Sydney Cricket Ground, cricket impressions, by M. A. Noble.  
1.35 p.m.: From the studio, talk to children and special entertainment for children in hospital.  
1.57 p.m.: Cricket scores.  
2 p.m.: G.P.O. clock and chimes. Close down.  
Note: Race results from Rosebery ponies will be transmitted by courtesy of the "Sun" newspapers.

### AFTERNOON SESSION.

Announcer: J. Knight Barnett.

Accompanist: Kathleen Roe.

2.15 p.m.: From the Sydney Cricket Ground, description of the 2nd Test Match, England v. Australia.  
4.0 p.m.: Cricket impressions, by M. A. Noble.  
4.5 p.m.: From the studio, Bunty Stuart, contralto, (a) "Nightfall at Sea" (Phillips), (b) "Robin Adair."  
4.12 p.m.: Kathleen Roe, pianist, "Scherzo" (Chopin).  
4.20 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
4.30 p.m.: Captain Fred Aarons, "Demosthenes the Orator."  
4.45 p.m.: Bunty Stuart, contralto, (a) "Golden Dawn" (Herman Lohr), (b) "Caller Herrin" (Nathaniel Goro).  
4.52 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
5.0 p.m.: From the Sydney Cricket Ground, description of the 2nd Test Match, England v. Australia.

### EARLY EVENING SESSION.

Announcer: J. Knight Barnett.

6.0 p.m.: Children's Session, letters and stories.  
Announcer: Basil Kirke.  
6.30 p.m.: "Sun" news and late sporting.  
6.40 p.m.: 2BL Dinner Quartette, (a) "Catherine Waltz" (Tschalkowsky), (b) "Gumnut's Dance" (Railton), (c) "Serenata Napolitana" (Becce), (d) "The Daughter of the Regiment" (Donizetti), (e) "Chansonette" (Brian Hope), (f) "Just Like a Melody" (Donaldson).  
7.10 p.m.: Cricket scores.  
7.12 p.m.: 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, grain and fodder report ("Sun"), dairy produce report ("Sun").

7.25 p.m.: Mr. Pim and Miss Pam in advertising talks and nonsense.  
7.55 p.m.: Programme and other announcements.

### EVENING SESSION.

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

8 p.m.: G.P.O. clock and chimes. Winners in the Radio Eisteddfod. To-night listeners will have an opportunity of hearing the successful competitors in the following sections of the recent Radio Eisteddfod, conducted by the New South Wales Broadcasting Company, Ltd.:—Section 25, winning debating team; Section 20, cornet solo; Section 27, popular vocalist; Section 15, pianoforte solo (under 16 years); Section 13, winning duet; Section 23, radio sketch; Section 31, best original Australian song; Section 28, comedian; Section 29, Radio revue; Section 17, Violin solo (under 16 years); Section 30, Entertainer.  
9.20 p.m.: Poppy Plant and Peg Page in a pot pourri of popular melody.  
9.30 p.m.: Graham and Manning, entertainers, (a) duet "Over and Over Again" (Bennett), (b) "In Our Little Canoe" (Edwards), Dorothy Manning, (c) duet "Honolulu" (Hay).  
9.40 p.m.: A sports talk by Claude Corbett, bett.  
9.55 p.m.: Poppy Plant and Peg Page in a pot pourri of popular melody.  
10.5 p.m.: Graham and Manning (entertainers).  
(a) "I'm Tickled to Death I'm Single" (Gideon).  
(b) Duet, "If You Lived in the Moon" (Lawrance).  
10.15 p.m.: The Savoyans' Dance Band.  
10.30 p.m.: Art Leonard in the newest song hits.  
10.37 p.m.: The Savoyans' Dance Band.  
10.57 p.m.: Resume of following day's programme and announcements.  
10.59 p.m.: The Savoyans' Dance Band, with popular choruses by Art. Leonard.  
11.30 p.m.: National Anthem.  
Close down.

## 2GB, SYDNEY

Wednesday, December 19

10.0 a.m.: Music. 10.10 a.m.: Happiness talk by A. E. Bennett. 10.20 a.m.: Music.  
10.30 a.m.: Women's session by Miss Helen J. Beegling. 11.30 a.m.: Close down. 2.0 p.m.: Music. 2.5 p.m.: Women's radio service by Mrs. Dorothy Jordan. 2.50 p.m.: Music. 3.0 p.m.: Talk. 3.15 p.m.: Close down. 5.30 p.m.: Children's session by Uncle George. 7.0 p.m.: Stock and market reports by New Zealand Loan and Mercantile Agency, Ltd. 7.15 p.m.: Music. 8.0 p.m.: Violin solos by Mr. Edmund Collins. 8.12 p.m.: Songs by Mr. Cecil Houghton. 8.22 p.m.: Pianoforte solos by Miss Mavis Hindale. 8.32 p.m.: Songs by Miss Nance Marley. 8.42 p.m.: Frank Lua and his steel guitar. 8.52 p.m.: Songs by Mr. Norman Williams. 9.0 p.m.: Weather report and address. 9.15 p.m.: Violin solos by Mr. Edmund Collins. 9.30 p.m.: Pianoforte solos by Miss Mavis Hindale. 9.50 p.m.: Songs by Miss Nance Marley. 10.0 p.m.: Frank Lua and his steel guitar. 10.10 p.m.: Orchestral music. 10.30 p.m.: Close down.

## 2UW, SYDNEY

Wednesday, December 19

### MIDDAY SESSION

12.30 p.m.: To-day's anniversary. 12.32 p.m.: Music. 1.0 p.m.: G.P.O. clock and chimes. 1.1 p.m.: Music. 2.0 p.m.: Talks to women. 2.15 p.m.: "Cheerio Talk." 2.30 p.m.: Close down. 4.30 p.m.: Musical programme.

### EVENING SESSION

5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30 p.m.: Close down. 7.0 p.m.: G.P.O. clock and chimes. 7.1 p.m.: Music. 7.10 p.m.: News items. 7.30 p.m.: Musical interlude. 7.35 p.m.: Musical talk. 8.0 p.m.: G.P.O. clock and chimes. 8.1 p.m.: Music. 9.0 p.m.: G.P.O. clock and chimes. 9.1 p.m.: "Science Talk" by Mr. A. T. Keeble. 9.10 p.m.: Music and request numbers. 10 p.m.: Close down.



**3LO, MELBOURNE****Wednesday, December 19****EARLY MORNING SESSION.**

7.15 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports, market reports, general news, shipping, sporting information. 8.0 a.m.: Melbourne Observatory time signal. 8.1 a.m.: Morning melodies. 8.15 a.m.: Close down.

**MORNING SESSION.**

Announcer: C. J. O'Connor.

11.0 a.m.: 3LO's different dainties for the daily dinner. To-day's Radio recipe, Potato Salad. 11.2 a.m.: Miss I. D. Beavan, "Home-made Confectionery." 11.15 a.m.: Mrs. M. Callaway Mahood, "Color in Decoration." 11.30 a.m.: Mrs. Clarence Weber, Physical Culture Expert, "Physical Culture for Women." Cricket (if any). 11.45 a.m.: Description of Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor.

**MID-DAY SESSION.**

Announcer: C. J. O'Connor.

12.0 noon: Melbourne Observatory time signal; express train information. 12.1 p.m.: British official wireless news from Rugby Reuter's, and the Australian Press Association cables; "Argus" news service. 12.15 p.m.: Newmarket stock sales, special report by John M'Namara and Co. 12.20 p.m.: Description of the Sheffield Shield cricket match, Victoria v. Queensland, at M.C.C., by Rod M'Gregor. 1.30 p.m.: Final scores. 1.35 p.m.: Stock Exchange information; meteorological information; weather forecast for Victoria, South Australia, New South Wales, and Tasmania; ocean forecasts; river reports; rainfall. 1.45 p.m.: Close down.

**AFTERNOON SESSION.**

Announcer: C. J. O'Connor.

Accompanist: Agnes Fortune.

2.15 p.m.: The Station Orchestra—Suite, "Silhouette" (Hadley). 2.25 p.m.: Roy Ryan, entertainer, will sing and whistle, "Meadow Lark." 2.30 p.m.: The Station Orchestra—"Andante, Op. 166" (Schubert), "Tarantelle, Op. 43" (Chopin). Selected. 2.42 p.m.: Senia Chostiakoff, tenor—"Oh, Beautiful Night" (Russian Folk Song), "La Donna e Mobile" (Verdi). 2.49 p.m.: Dorothy Roxburgh, viola—"Berceuse" (Arensky). 2.56 p.m.: Gwen Hart, soprano—"A Brown Bird Singing" (Haydn Wood), "Memory" (Park). 3.3 p.m.: The Station Orchestra—"Ballet of the Flowers" Part III. (Hadley). 3.13 p.m.: Syd. Burchall, baritone—"The Lute Player" (Allitson), "King for a Day" (Fioroto). 3.20 p.m.: The Station Trio—"Trio" (Mozart). 3.30 p.m.: Love in a Railway Train—He, Eric Donald; She, Louise Moorehead. 3.45 p.m.: The Station Orchestra—Suite, "In Arcady" (Nevin). 3.55 p.m.: Roy Ryan, entertainer, will sing and whistle, "That's My Mammy," "Ramona." 4.0 p.m.: Guildford Bishop, violin—"Allegro Brillante" (Ten Have). 4.7 p.m.: Senia Chostiakoff, tenor—"Diane" (Erno Rapee and Lew Pollack), "The Light Shades" (Zuboff). 4.14 p.m.: Station Orchestra—"Ersve Italienische" (Beccie). 4.24 p.m.: Gwen Hart, soprano—"Se Saren Rose" (Arditi), "Pale Moon" (Logan). 4.31 p.m.: The Station Orchestra—Overture, "Maid of Artois" (Balfe). 4.38 p.m.: Syd. Burchall, baritone—"The Rover" (Barker), "The Crown of the Year" (Martin). 4.45 p.m.: Sonora recital. 5.0 p.m.: "Herald" news service; Stock Exchange information; final scores, Victoria v. Queensland, at M.C.C., also progress scores second test match, England v. Australia at Sydney; results of Lancefield races will be given as they come to hand. 5.10 p.m.: Close down.

**EVENING SESSION.**

Announcer: Maurice Dudley.

6.5 p.m.: Answers to letters and birthday greetings by "Mary Mary." 6.30 p.m.: Musical interlude. 6.35 p.m.: "Mary Mary" will tell a Christmas story. "The Fir Tree," by Hans Anderson.

**NIGHT SESSION.**

Announcer: Maurice Dudley.

Accompanist: Agnes Fortune.

7.5 p.m.: Stock Exchange information. 7.15 p.m.: Market reports by John M'Namara, Co.; official report of the Newmarket stock and station agents, Bourke Street, Melbourne; fish market reports by J. R. Borrett, Ltd.; rabbit prices; river reports; market reports of the Victorian

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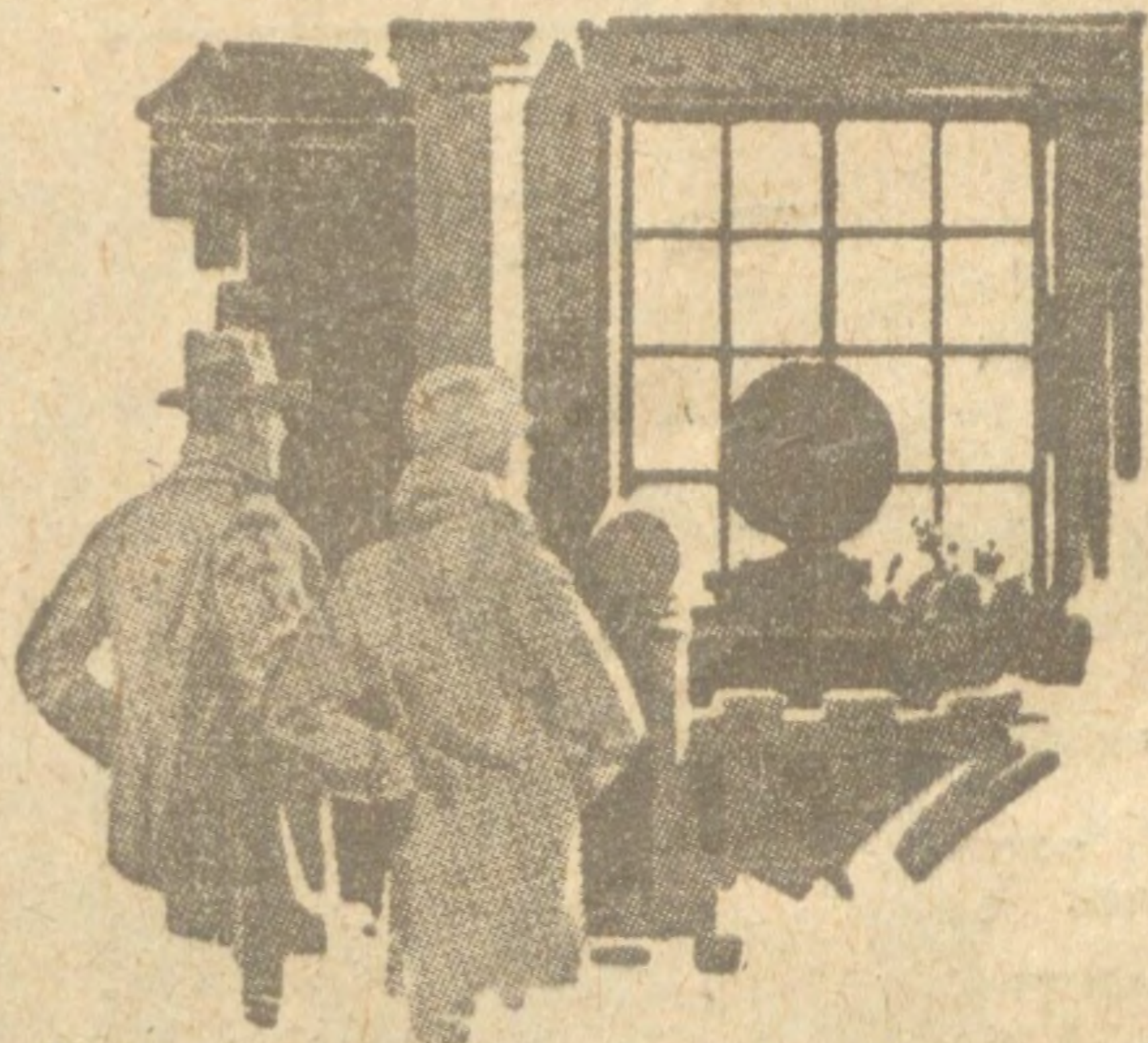
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Producers' Co-operative Co., Ltd., poultry, grain, hay, straw, jute, dairy produce, potatoes, and onions; market reports of fruit by the Victorian Fruiterers' Association; wholesale prices of fruit by the Wholesale Fruit Merchants' Association, citrus fruits.

7.30 p.m.: News; stumps scores, second test match, England v. Australia, at Sydney; result of Sheffield Shield cricket match, Victoria v. Queensland.

7.43 p.m.: Birthday greetings.

7.46 p.m.: Under the auspices of the Department of Agriculture, Mr. W. R. Jewell, agricultural research chemist, will speak on "Fertilisers Registered for 1928."

8.0 p.m.: Programme announcements.

8.1 p.m.: The Metropolitan Orchestra (Conductor, E. Dunbar Carey)—Overture, "Martha" (Flotow).

8.10 p.m.: Ida Walker, mezzo contralto—"There Among the Willows" (Brahms), "The Vain Suit" (Brahms).

8.17 p.m.: The Metropolitan Orchestra—"Valse Triste" (Sibelius), "Sultan's March" from "Cairo" (Fletcher).

8.29 p.m.: Senia Chostlakoff, tenor—"Autumn Asters" (Haritto), "Woman's a Fickle Jade" (Verdi).

8.36 p.m.: The Metropolitan Orchestra—"Minuet" from "Berenice" (Handel), "Hungarian Dances," Nos. 3 and 6 (Brahms).

8.43 p.m.: Ida Walker, mezzo contralto—"Ships that Pass in the Night" (Stephen-son), "Yonder" (Olliver)..

8.50 p.m.: The Metropolitan Orchestra—"Fantasy on Christmas Carols" (arr. by E. Dunbar-Carey).

9.0 p.m.: Viva Holgate Clarke, piano—"Fantasia in C Minor" (Bach), "Sonata in D" (Scarlatti), "Fantasie" (Chopin), "La Campanella" (Paganini-Liszt).

9.25: "Mulligan's Musketeers." Chorus "Comrades in Arms." Song, "Chip of the Old Block" (Edward Jones) Song and Chorus, "When You Played the Organ," George Bryce and Chorus. Duet, "Two Beggars," George Johns and Jack Stewart. Chorus, "Estudiantina." Song and Chorus, "Moonlight on the Danube," George Bryce and Chorus. Chorus, "Mulligan's Musketeers." "Two French Songs," Bessie Banks. Chorus, "Moonlight on the Lake." Solo, "Come into the Garden, Maud." George Johns. Duet, "A Night in Venice," George Bryce and Bessie Banks. Chorus, "Soldiers' Farewell." Chorus.

10.0 p.m.: Senia Chostlakoff, tenor—"The Slumber Song" (Gretchaninoff), "The Star" (Rogers).

10.7 p.m.: Agnes Fortune, piano. Selected.

10.17 p.m.: Roy Ryan, entertainer, will sing and whistle. "Blue Heaven." "Bye, Bye, Blackbird."

10.24 p.m.: "Argus" news service; British official wireless news from Rugby; meteorological information; stumps scores, second test match, England v. Australia, at Sydney.

10.36 p.m.: The Radi-o-Aces—"Clarinet Marmalade" (Fergus), "Ramona" (Wayne), "Rain" (Ruby), "I Love to Dunk a Hunk of Sponge Cake" (Caskill). Selected.

11.0 p.m.: Our Great Thought for To-day—"Because my Baby Don't Mean Maybe Now" (Donaldson), "Beloved" (Kahn), "Just Like a Melody out of the Sky" (Donaldson), "That's what You Mean to Me" (Dairs), "I'm Tired of Making Believe" (Kelley), "Chloe" (Kahn), "That Stolen Melody" (Fisher), "Adoree" (West), "Googily-Goo" (Davis). Selected.

### SLUMBER MUSIC.

"Goodnight Waltz" (Bibo), 11.40 p.m.: "God Save the King."

## 3AR, MELBOURNE

### Wednesday, December 19

#### MORNING NEWS SESSION

10.0 a.m.: G.P.O. Clock says "Ten." 10.1 a.m.: "Age" Stock Exchange reports. London Metal Market. 10.10 a.m.: "Age" market reports—farm and station produce, fruit, fish, vegetables, etc. 10.25 a.m.: "Age" shipping reports. Ocean forecast. 10.30 a.m.: Mail Notices. Express Train information. 10.35 a.m.: "Age" news service, exclusive to 3AR. 10.59 a.m.: Weather forecast.

#### MORNING MUSICAL SESSION

Announcer: Frank Hatherley.

11.0 a.m.: The Radi-o-aces—"Sleepy Baby" (Kahn), "I'm Sorry, Sally" (Kahn), "A Little Change of Atmosphere" (Brown). 11.20 a.m.: Ida Walker, Mezzo-Contralto—"Love, I Have Won You and Held You" (Ronald), "Life and Death" (Taylor). 11.27 a.m.: The Radi-o-aces—"I Wanna Go Voon Voon Voo" (Brown), "Down Upon the Sands" (Hamy), "Mallika" (Rell), "You Said Good-night, But You Meant Good-bye" (Kahn), "The Desert Song" (Romberg), "One Alone" (Romberg). 11.47 a.m.: Syd Burchall—"Somewhere South of Shanghai" (Lumsdaine), "With Mother A-smiling On Me" (Alstyne). 11.54 a.m.: The Radi-o-aces—"Meet Me To-day" (Dean), "Once Again" (Lumsdaine), "Tired Hands" (Woods), "Too Busy" (Miller), "Sweet Sue, Just You" (Tobias), "In a Bamboo Garden" (Donaldson). 12.15 p.m.: Ida Walker, Mezzo-Contralto—"Pleading" (Elgar), "The Lament of Isis" (Bantock). 12.22 p.m.: The Radi-o-aces—"Anything You Say" (Donaldson), "Lonely Acres" (Robinson), "Shake it Down" (Williams). 12.32 p.m.: British Official Wireless News. Announcements. 12.42 p.m.: The Radi-o-aces—"Next to You, I Like Me Next to You" (Bito), "What Was I To Do" (Reid), "Chinatown" (Yvain), "The Riff Song" (Romberg), "The Dance of the Blue Danube" (Fisher), "Together" (Brown). 1.2 p.m.: Syd Burchall—"Casey the Fiddler" (Wood), "Who Knows" (Bale). 1.9 p.m.: The Radi-o-aces—"Tell Me Again" (Clark), "That's My Mammy" (Donaldson), "Beautiful" (Sharp), "After My Laughter Came Tears" (Tobias), "Lolita" (Stoneham), "Without You, Sweetheart" (de Sylva). 1.30 p.m.: Close down.

#### EVENING SESSION

Announcer: John Stuart

6.0 p.m.: Musical Memoirs of the Master Spirits. 7.55 p.m.: Cricket results.

#### NIGHT SESSION

Announcer: John Stuart.

8.0 p.m.: Kathleen Lascelles—"The Art of Dancing." 8.15 p.m.: Captain C. H. Peters—"Books, Wise and Otherwise" 8.30 p.m.: Musical Comedy, "A Runaway Girl." Musical Directress: Madame Ethel Ashton. Produced by: Maurice Dudley. Cast: Brother Tamarind: Edgar Chapple. Guy Stanley: T. James Lucy. Signor Paloni: Mr. Creel: Frank Conrad. Lord Coodle: Albert Harford. Sir William Hake: James Harford. Leonello: Pietra Pascara: James Russell. Flipper: Allan Bell. Alice: Jean Kelly. Dorothy Stanley: Rose Clayden. Carmenita: Merle Griffin. Lady Coodle: Elsie Lang. Fraulein von Der Hohe: Lillian Gray. Winifred Grey: Florence Bltz. 10.0 p.m.: Captain Donald M'Lean—"List, ye Landsmen, all to Me! Messmates, hear a brother sailor Sing the dangers of the sea." 10.15 p.m.: "Age" News Service, exclusive to 3AR. Weather forecast. Cricket and race results. 10.28 p.m.: Our Australian Good-night Quotation. 10.30 p.m.: God Save the King.

## 4QG, BRISBANE

### Wednesday, December 19

#### EARLY MORNING SESSION.

Announcer: J. Tyson.

7.43 a.m.: Time signals. 7.45 a.m.: News service supplied by courtesy of "The Daily Mail." 8 a.m.: Some electric records. 8.15 a.m.: News service supplied by courtesy of "The Courier." 8.30 a.m.: Close down.



## MORNING SESSION.

Announcer: Con. Archdall.

11 a.m.: Music. 11.5 a.m.: Social news.  
11.15 a.m.: Talk on "Artistic Uses of  
Sealing Wax and Crepe Paper," by "De-  
nise." 11.30 a.m.: Music. 11.35 a.m.:  
More social news. 11.45 a.m.: Music. 12  
(noon): Close down.

## MID-DAY SESSION.

Announcer: R. Wight.

1 p.m.: Market reports and weather infor-  
mation. 1.20 p.m.: From the G.P.O., The  
Postal Institute Orchestra. 2 p.m.: Close  
down.

## AFTERNOON SESSION.

Announcer: H. Humphreys.

3 p.m.: From the Tivoli Theatre, orchestral  
music by the Tivoli Operatic Orchestra  
under the baton of Mr. C. Groves. 3.30  
p.m.: From the Studio, mail train run-  
ning tunes, a programme of electrically  
reproduced records. 4 p.m.: From the  
Tivoli Theatre, orchestral music. 4.15 p.m.:  
From the Studio, this afternoon's news.  
4.30 p.m.: Close down.

## EARLY EVENING SESSION.

Announcers: R. Wight and H. Humphreys.

6 p.m.: From the Studio, mail train run-  
ning times; mail information; shipping  
news. 6.5 p.m.: From the Paris Cafe, din-  
ner music. 6.25 p.m.: From the Studio,  
commercial announcements. 6.30 p.m.:  
Bedtime stories conducted by "Little Miss  
Brisbane." 7 p.m.: News in brief. 7.5 p.m.:  
Stock Exchange news. 7.6 p.m.: Metal quo-  
tations. 7.7 p.m.: Market reports. 7.25  
p.m.: Fenwick's stock report. 7.30 p.m.:  
Weather information. 7.40 p.m.: An-  
nouncements. 7.43 p.m.: Standard time  
signals. 7.45 p.m.: Lecturette, "Malze In-  
sect Pests" (continued), by Mr. J. R. A.  
M'Millan (Queensland Agricultural High  
School and College).

## NIGHT SESSION.

Announcer: H. Humphreys.

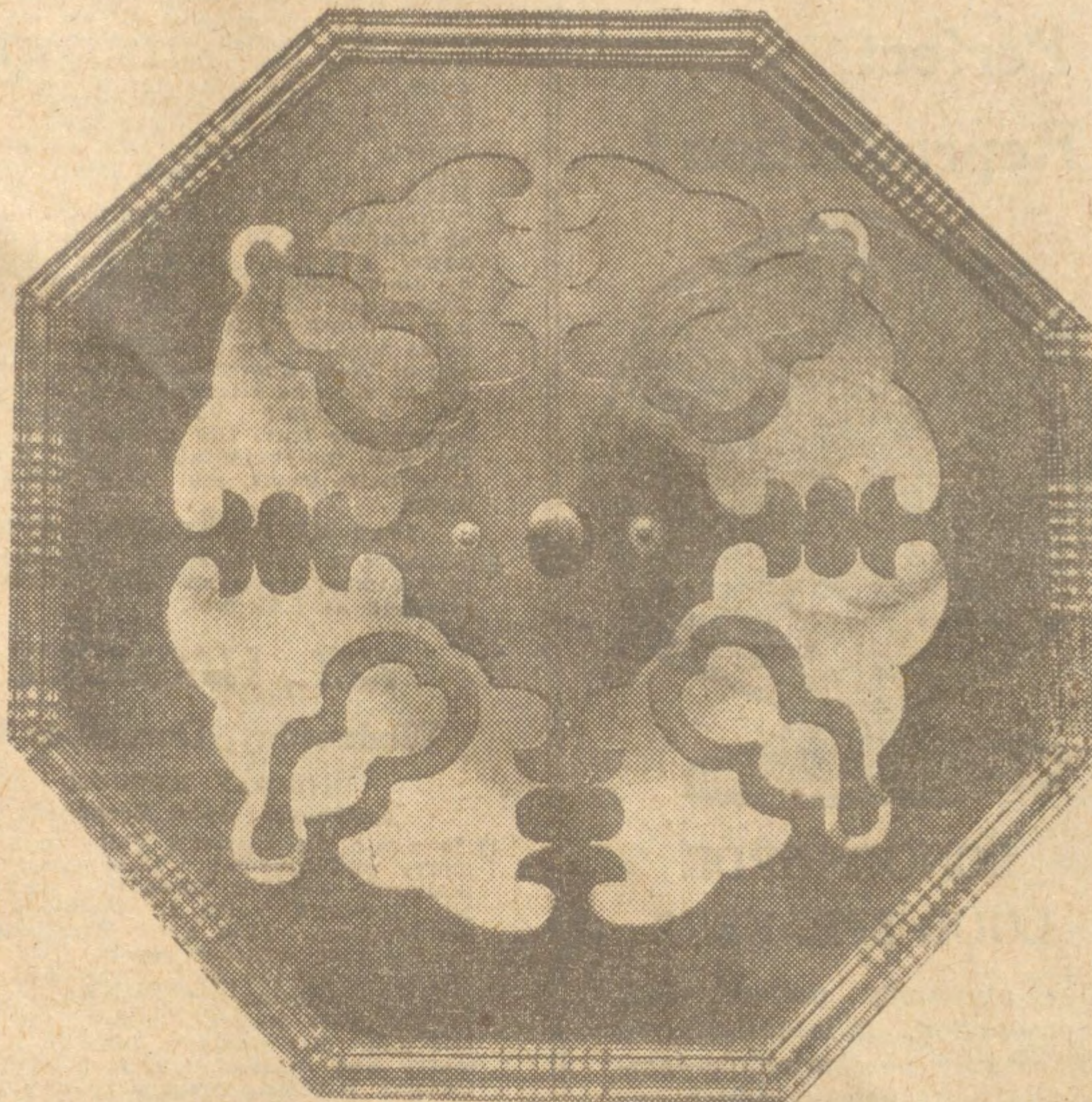
8 p.m.: Alf Featherstone and his Orchestra,  
fox trot, "When Lights are Low in Cairo";  
"Moonlight on the Ganges" (Meyers).  
Fco Todd (elocutionist), selected items.  
The Aloha Novelty Trio in selected  
numbers.  
Alf Featherstone and his Orchestra, jazz  
waltz, "Somewhere" (Davis).  
Harry Collins and the Orchestra, ten  
minutes' coon melody.  
Lucy Baker, pianiste, "Prelude in G Sharp  
Minor" (Rachmaninoff), "Bees' Wed-  
ding" (Mendelssohn).  
9 p.m.: Metropolitan weather forecast.  
9.1 p.m.: Alf Featherstone and his Orches-  
tra, fox trot, "Coquette" (Lombardo); fox  
trot, "Rag Doll" (Brown).  
Muriel M'Hugh, soprano, "Beloved, I Shall  
Wait" (D'Hardelot), "Pride of Tipper-  
ary" (Lockhead).  
Alf Featherstone and his Orchestra, fox  
trot, "How Long Has This Been Going  
On" (Davies); fox trot, "It Don't Do  
Nothin' but Rain" (Cook).  
Vincent Connolly, baritone, "The Curfew"  
(Gould), "The Silver in My Mother's  
Hair" (Courtney).  
Alf Featherstone and his Orchestra, fox  
trot, "Blue Bird, Sing Me a Song" (Han-  
ley), "My Virginia" (Parish).  
The Aloha Trio in selected numbers.  
Alf Featherstone and his Orchestra, jazz  
waltz, "Remember" (Campbell).  
Irene Elphinstone, contralto, "At Parting"  
Russell), "Angels Guard Three" (God-  
ard).  
Alf Featherstone and his Orchestra, fox  
trot, "Dear, on a Night Like This" (Con-  
rad); fox trot, "Is She My Girl Friend"  
(Ager).  
10 p.m.: "The Daily Mail" news, "The  
Courier" news, weather news.  
10.15 p.m.: Alf Featherstone and his Or-  
chestra, three-quarters of an hour's dance  
music.  
11 p.m.: Close down.

## 6WF, PERTH

Wednesday, December 19

12.30 p.m.: Tune in. 12.35: Markets,  
news, and cables. Results will be given  
of the second Test match between the  
English Eleven v. Australian Eleven,  
played at Sydney. 1.0 p.m.: Time sig-  
nal. 1.1 p.m.: Weather notes supplied  
by the Meteorological Bureau of West  
Australia. Station announcements. 1.2  
p.m.: Luncheon Music—The Studio Quin-  
tette, conducted by Mr. Val Smith, will  
play, overture, "Rosamunde" (Schubert);  
jazz, "Mister Spleen" (Thelmer); suite,  
"Holiday Sketches" (Foulds); menuet,  
"De Charmes" (Dyck); rapsodie petite,  
"Masaniello" (Mezzacapo). 2.0 p.m.:

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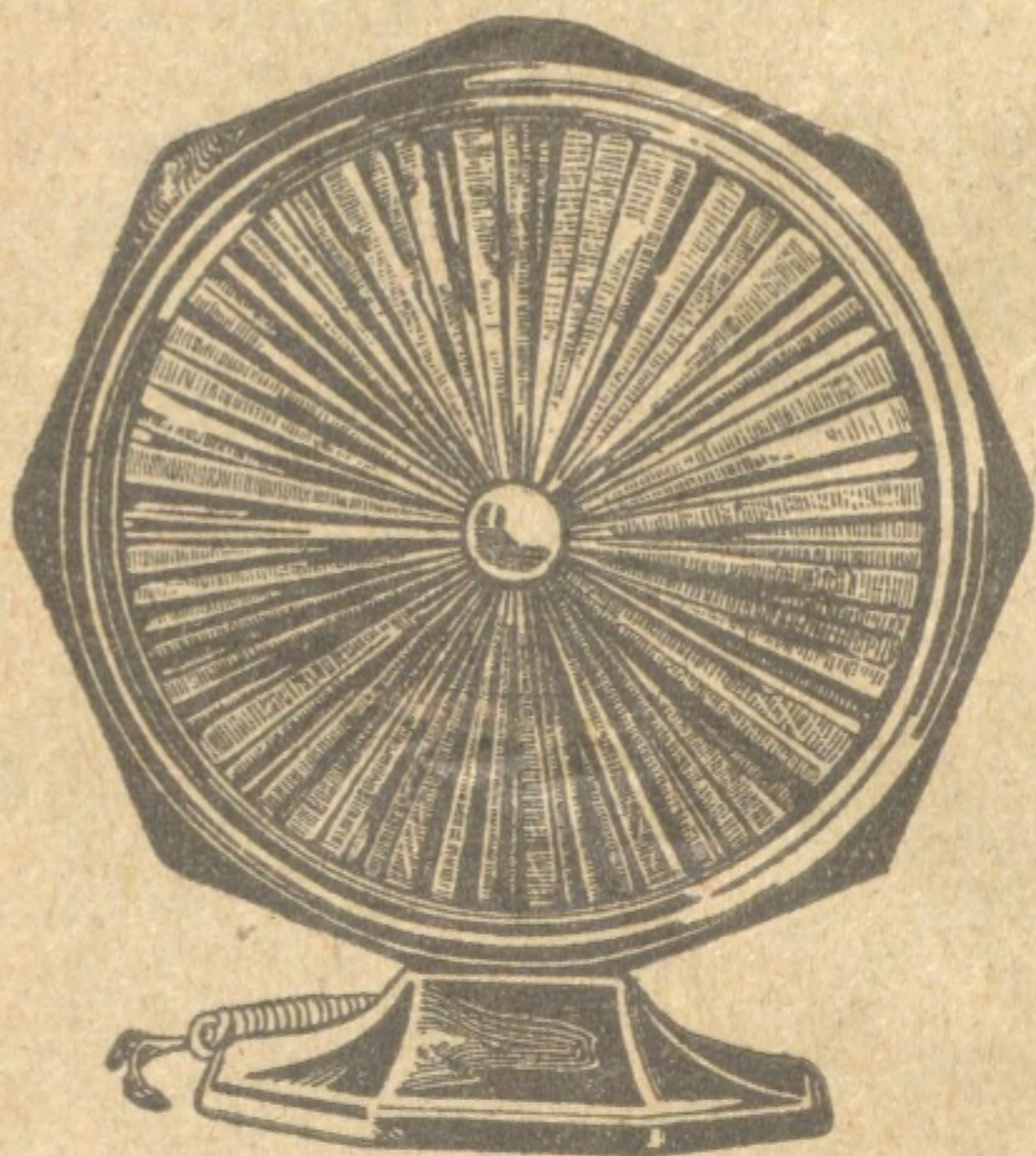
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Close down. 3.0 p.m.: Further results will be given of the second Test match between the English Eleven v. Australian Eleven. 3.35 p.m.: Afternoon Tea Concert, relayed from the Rosebud Cafe, Perth. Vocal and instrumental interludes from the studio. 5.0 p.m.: Further results of the second Test match between the English Eleven v. Australian Eleven. 5.5 p.m.: Close down. 6.45 p.m.: Tune in. The evening transmission is broadcast on 104.5 metres as well as the usual wave length. 6.48 p.m.: Uncle Duffy's evening with the kiddies. 7.5 p.m.: Talk by Mr. Cecil Dent, Secretary, Band of Hope Union. 7.15 p.m.: Talk, "First Aid," by Dr. Winifred Holloway, of London. 7.30 p.m.: Stocks, markets, news. 7.45 p.m.: Talk, "Stock Diseases," by Lieut.-Col. Le Souef, Director of the Zoological Gardens, South Perth. 8.0 p.m.: Time signal. 8.1 p.m.: Weather notes supplied by the Meteorological Bureau of West Australia. Station announcements, such as alterations to programmes, etc. 8.3 p.m.: Variety Night—Musical programme from the studio, including vocal and instrumental artists. 9.0 p.m.: Late news items, etc. 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, December 19

#### MID-DAY SESSION.

Announcer: Jack Broadbent.

11.30 a.m.: His Master's Voice in moments merry and musical. 11.34 a.m.: Special midlands weather forecast. 11.35 a.m.: His Master's Voice in moments merry and musical. 11.55 a.m.: Tasmanian stations 9 a.m. weather report. 12.0: G.P.O. clock chimes the hour. 12.1 p.m.: Shipping information, ships within wireless range, mail notices, housewives' guide. 12.8 p.m.: His Master's Voice in moments merry and musical. 12.11 p.m.: British Official Wireless news. 12.20 p.m.: His Master's Voice in moments merry and musical. 12.29 p.m.: Announcements. 12.33 p.m.: His Master's Voice in moments merry and musical. 12.55 p.m.: "Mercury" news service. 1.10 p.m.: His Master's Voice in moments merry and musical. 1.30 p.m.: Transmission from the Imperial Hotel, Collins Street, Hobart, speeches at the Rotary Club luncheon. 2.0 p.m.: Close down.

#### AFTERNOON SESSION.

Announcer: Jack Broadbent.

3.0 p.m.: G.P.O. clock chimes the hour. 3.1 p.m.: His Master's Voice in moments merry and musical. 3.4 p.m.: Weather information. 3.5 p.m.: His Master's Voice in moments merry and musical. 4.15 p.m.: E. Mary Rowlands, supervisor of the Hobart Free Kindergarten School, will speak on "Child Training." 4.30 p.m.: Close down. During the afternoon progress results will be given of the second Test match at Sydney, N.S.W.

#### EARLY EVENING SESSION.

Announcer: Jack Broadbent.

6.15 p.m.: His Master's Voice in moments merry and musical. 6.30 p.m.: Bertha Southey Brammall will tell the children a Tasmanian fairy tale, "The Egg Urchin" (second part), also nursery rhymes, "There Was An Old Platypus." 6.45 p.m.: His Master's Voice in moments merry and musical. 7.0 p.m.: Answers to letters and birthday greetings by Bertha Southey Brammall. 7.15 p.m.: "Mercury" special news service, railway auction produce sales, weather information, Hobart Stock Exchange quotations, results of ladies' golf.

#### EVENING SESSION.

Announcer: J. M. Counsel.

7.30 p.m.: Geo. Nation will speak on "The Value of a Garden." 7.45 p.m.: Col. L. Payne, secretary, Blind, Deaf, and Dumb Institution, will speak on "The Deaf and Their Problems." 8.0 p.m.: G.P.O. clock chimes the hour. 8.1 p.m.: Fifty years ago to-day. 8.6 p.m.: Mlle. Columbia broadcasts. 8.15 p.m.: A popular and classical programme, by the Discus Ensemble, Johann Strauss and Symphony Orchestra. "The Gipsy Baron," parts 1 and 2 (Strauss); Edna Thornton, soprano, "For Every Day" (Kennedy-Russell), "Vale-

Farewell" (Kennedy-Russell); Robert Radford, bass, "Blow, Blow Thou Winter Wind (Radford), "Erl King" (Schubert); Royal Philharmonic Orchestra, "Don Juan" parts 1 and 2 (Strauss); John M'Cormack, tenor, "Ah, Moon of My Delight (Lehmann), "Drink to Me Only" (Calcott); Edna Thornton, soprano, "Flower Song" Faust (Gounod), "Fierce Flames" (Verdi), Kirkby Lunn, contralto, "The Pretty Creature (arr Wilson), "Boat Song" (Stanford); Ketelby's Orchestral Orchestra, "Bells Across the Meadow (Ketelby), "In a Fairy Realm" Suite (Ketelby); Cecil Sherwood, tenor, "Eleanore" (Taylor), "Soft Beams the Light" (Donizetti).

#### EVENING SESSION.

Organ solo by Patmon, "In a Monastery Garden" (Ketelby), "Sanctuary of the Heart" (Ketelby). John Brownlee, baritone, "Elegie," Song of Mourning, "I'll Not Complain," sung in German. Ketelby's Orchestral Orchestra, "In a Persian Market, parts 1 and 2 (Ketelby). James Melton, tenor, "My Heart Stood Still," "My Heart is in the Roses." Ketelby's Orchestral Orchestra, "Three Fanciful Etchings, parts 1 and 2 (Ketelby). 9.50 p.m.: News session, "Mercury" news service, British Official Wireless news, ships within wireless range, Tasmanian district weather report. 10 p.m.: G.P.O. clock chimes the hour. 10.1 p.m.: Our Tasmanian good-night thought. 10.2 p.m.: God Save the King. 10.3 p.m.: Close down.

### Thursday, December 20

New South Wales Broadcasting  
Company, Limited

### 2FC SERVICE

#### EARLY MORNING SESSION.

Announcer: A. S. Cochrane.

7 a.m.: "Big Ben" and announcements. 7.2 a.m.: Official weather forecast, rainfall, river reports, temperatures, astronomical memoranda. 7.5 a.m.: "Sydney Morning Herald" summary. 7.10 a.m.: Shipping intelligence, mail services. 7.12 a.m.: Studio music. 7.22 a.m.: Investment market, mining share markets, metal quotations. 7.28 a.m.: Wool sales, breadstuffs market, inter-State markets, produce markets. 7.35 a.m.: Studio music. 8 a.m.: "Big Ben." Close down.

#### MORNING SESSION.

Announcer: A. S. Cochrane.

10.0 a.m.: "Big Ben" and announcements. 10.2 a.m.: Pianoforte reproduction. 10.10 a.m.: "Sydney Morning Herald" news service. 10.25 a.m.: Studio music. 10.30 a.m.: Last minute sporting information by the 2FC racing commissioner. 10.40 a.m.: Studio music. 10.45 a.m.: A Talk to Country Women by "Pandora." 11.0 a.m.: "Big Ben." A.P.A. and Reuter's cable services. 11.5 a.m.: Close down.

#### MIDDAY SESSION.

Announcer: A. S. Cochrane.

12.0 noon: "Big Ben" and announcements. 12.1 p.m.: Stock Exchange, first call. 12.3 p.m.: Official weather forecast, rainfall. 12.5 p.m.: From the Sydney Cricket Ground, description of the second Test match, England v. Australia. 1.30 p.m.: From the studio: Stock Exchange, second call. 1.32 p.m.: Weather forecast. 1.34 p.m.: "Evening News" midday news service. Producers' Distributing Society's report. 1.42 p.m.: Rugby wireless news. 1.45 p.m.: Studio music. 1.50 p.m.: Last minute sporting information by the 2FC racing commissioner. 1.57 p.m.: Cricket scores. 2.0 p.m.: "Big Ben." Close down.

#### AFTERNOON SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

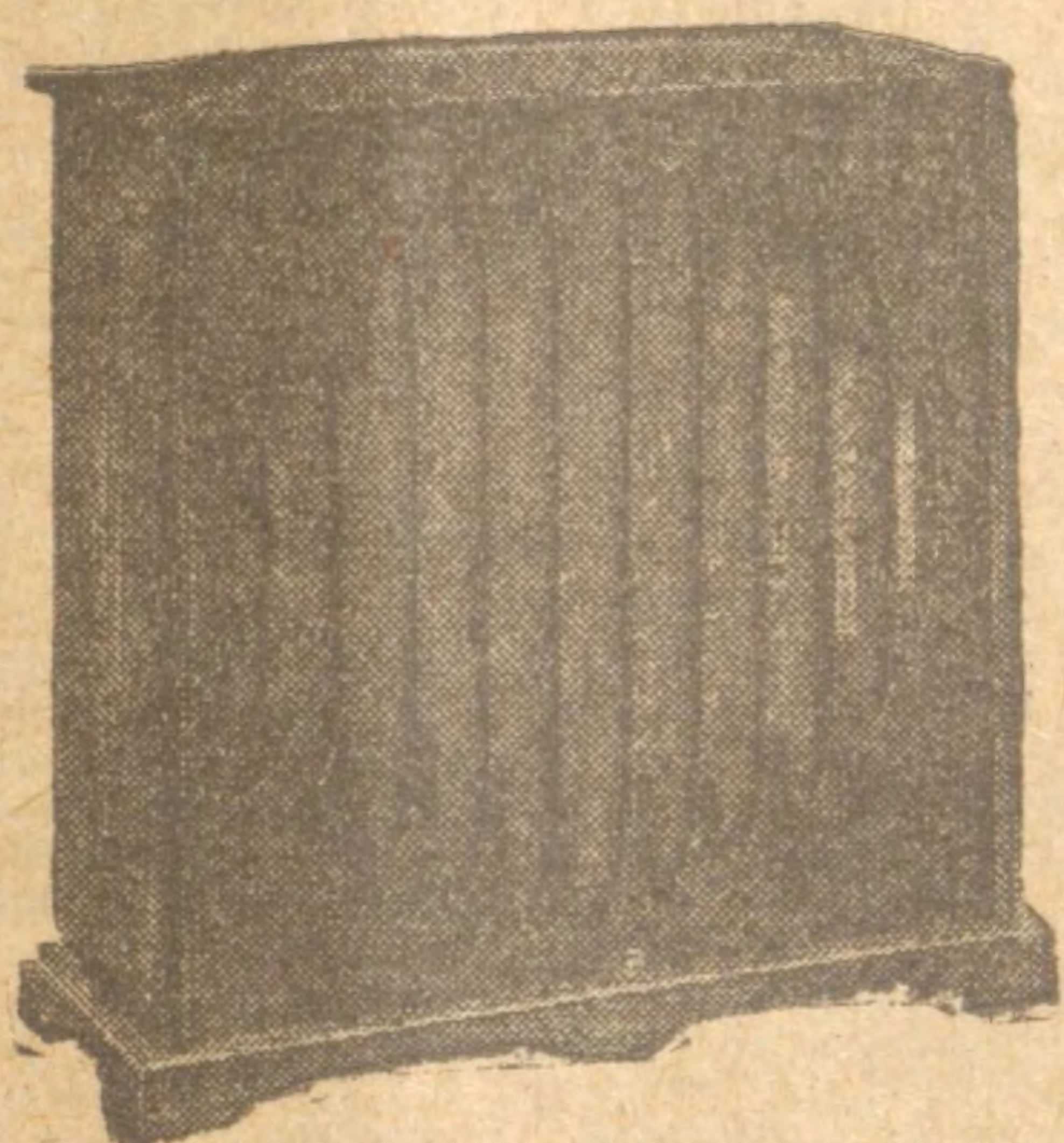
2.30 p.m.: Programme announcements. 2.32 p.m.: Educational Session for the schools, music recital, Miss B. Macaulay will speak on "Your Son" (the exceptional boy). 3.0 p.m.: "Big Ben" pianoforte reproduction.



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3.15 p.m.: Fosse Brakell, contralto.  
3.22 p.m.: Popular music.  
3.30 p.m.: Greta Callow, soprano.  
3.33 p.m.: Fosse Brakell, contralto.  
3.45 p.m.: Cricket scores.  
3.46 p.m.: A reading.  
4.0 p.m.: "Big Ben." Greta Callow, soprano.  
4.7 p.m.: Popular music.  
4.15 p.m.: From the Sydney Cricket Ground, description of the 2nd Test Match, England v. Australia.  
5.0 p.m.: "Big Ben." Close down.  
Note: Cricket description will be carried on through 2BL service till stumps drawn at 6 o'clock.

### EARLY EVENING SESSION.

Announcer: A. S. Cochrane.

5.40 p.m.: The chimes of 2FC.  
5.45 p.m.: The "Hello Man" conducts the children's session, letters and stories, music and entertainment.  
6.30 p.m.: Dalgety's market reports (wheat, wheat, and stock).  
6.40 p.m.: Fruit and vegetable market.  
6.43 p.m.: Stock Exchange report.  
6.45 p.m.: Weather and shipping news.  
6.48 p.m.: Rugby wireless news.  
6.50 p.m.: Late sporting news.  
7.0 p.m.: "Big Ben." Late news service.  
7.10 p.m.: The 2FC Dinner Quartette, conducted by Horace Keats (a) "An Eastern Romance" (Haines), (b) "A Little Damask Rose" (Walton), (c) "A Kiss Before the Dawn" (Perkins), (d) "Gipsy Love" (Lehar), (e) "Berceuse" (Dvorak), (f) "Your's a Real Sweetheart" (Friend).

### EVENING SESSION.

Announcer: Laurence Halbert.

Accompanist: Ewart Chapple.

7.40 p.m.: Programme announcements.  
7.45 p.m.: Popular music.  
7.50 p.m.: Impressions on International cricket, by M. A. Noble.  
8.0 p.m.: "Big Ben." From the Capitol, Ted Henkel's stage band and Fred Scholl at the Wurlitzer organ.  
8.28 p.m.: Lionel Lawson, violinist.  
8.38 p.m.: Arthur Stender, champion cornetist of Australia, late of the Commonwealth Band, (a) "Valse Novelty" (Siegist), (b) "One Alone" (Desert Song) (Romberg).  
8.45 p.m.: Lindley Evans, pianoforte solos, (a) "Study" (Chopin), (b) "Ballade in A Flat" (Chopin).  
9.0 p.m.: "Big Ben." Weather report.  
9.2 p.m.: James Hay, tenor.  
9.10 p.m.: From the Capitol, stage presentation.  
9.31 p.m.: From the studio, Lionel Lawson, violinist.  
9.41 p.m.: From the Hotel Australia, Cec Morrison's Dance Band.  
9.51 p.m.: From the studio, Arthur Stender, cornet solos, (a) "La Paloma" (Yradier), (b) "Emma Valse" (Danish).  
9.59 p.m.: Lindley Evans, pianoforte solos, (a) "Humoreske" (Rachmaninoff), (b) "Romance" (Schumann), (c) "Scherzo" (York Bowen).  
10.9 p.m.: Len Maurice, in the newest song hits.  
10.17 p.m.: From the Hotel Australia, Cec Morrison's Dance Band.  
10.30 p.m.: From the studio, Len Maurice, in the newest song hits.  
10.37 p.m.: From the Hotel Australia, Cec Morrison's Dance Band.  
10.57 p.m.: From the Studio, late weather and announcements.  
10.59 p.m.: From the Hotel Australia, Cec Morrison's Dance Band.  
11.27 p.m.: From the studio, to-morrow's programme.  
11.30 p.m.: National Anthem. Close down.

## 2BL SERVICE

Thursday, December 20

### MORNING SESSION.

Announcer: A. C. C. Stevens.

8.0 a.m.: G.P.O. clock and chimes.  
Metropolitan weather report.  
8.1 a.m.: State weather report.  
8.2 a.m.: Studio music.  
8.15 a.m.: G.P.O. clock and chimes.  
8.25 a.m.: Studio music.  
8.30 a.m.: G.P.O. clock and chimes.  
Studio music.  
8.35 a.m.: Information, mails, shipping, arrivals, departures, and sailings.  
8.38 a.m.: News from the "Daily Telegraph Pictorial."  
8.45 a.m.: G.P.O. clock and chimes.  
Studio music.  
9.0 a.m.: G.P.O. clock and chimes.  
Studio music.  
9.30 a.m.: Half an hour with silent friends.  
10.0 a.m.: G.P.O. clock and chimes. Close down.



## MIDDAY SESSION.

Announcer: J. Knight Barnett.

- 11.0 a.m.: G.P.O. clock and chimes.  
 2BL Women's Sports Association session, conducted by Miss Gwen Varley.  
 11.30 a.m.: Advertising hints.  
 11.40 a.m.: Women's session, conducted by Mrs. Cranfield.  
 12.0 noon: G.P.O. clock and chimes.  
 Special ocean forecast and weather report.  
 12.3 p.m.: Pianoforte reproduction.  
 12.30 p.m.: Shipping and mails.  
 12.35 p.m.: Market reports.  
 12.45 p.m.: Cricket scores, second Test match, England v. Australia.  
 12.48 p.m.: "Sun" midday news service.  
 1.0 p.m.: Studio music.  
 1.30 p.m.: From the Sydney Cricket Ground, cricket impressions by M. A. Noble.  
 1.35 p.m.: From the studio, talk to children and special entertainment for children in hospital.  
 1.57 p.m.: Cricket scores.  
 2.0 p.m.: G.P.O. clock and chimes. Close down.

## AFTERNOON SESSION.

Announcer: J. Knight Barnett.

Accompanist: Kathleen Roe.

- 2.15 p.m.: From the Sydney Cricket Ground. Description of the second Test match, England v. Australia.  
 4.0 p.m.: Cricket impressions by M. A. Noble.  
 4.5 p.m.: From the studio, Kathleen Roe, pianoforte solos.  
 "Variations in F Minor" (Haydn).  
 4.12 p.m.: J. Knight Barnett, musical entertainer.  
 4.20 p.m.: Romano's Dance Orchestra, conducted by Bennie Abrahams.  
 4.30 p.m.: Lulla Fanning, popular songs.  
 4.37 p.m.: Kathleen Roe, pianoforte solos.  
 (a) "Romanze" (Rubinstein).  
 (b) "March Militaire" (Schubert).  
 4.44 p.m.: J. Knight Barnett, musical entertainer.  
 4.51 p.m.: Lulla Fanning, popular songs.  
 5.0 p.m.: From the Sydney Cricket Ground. Description of the second Test match, England v. Australia.

## EARLY EVENING SESSION.

Announcer: Basil Kirke.

- 6.0 p.m.: Children's session.  
 Letters and stories.  
 Visits to Strange and Distant Lands, by "Hello Lizzie."  
 6.30 p.m.: "Sun" news and late sporting.  
 6.40 p.m.: 2BL dinner quartette.  
 (a) "Intermezzo" Irlandais (Leigh).  
 (b) "The Faraway Bells" (Westell Gordon).  
 (c) "La Gitana" (Kreisler).  
 (d) "Faust Ballet Music" (Gounod).  
 (e) Entr'acte "Mam'selle Modiste" (Herbert).  
 (f) Lonesome in the Moonlight (Baer).  
 7.10 p.m.: Cricket scores.  
 7.12 p.m.: 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.  
 Grain and fodder report ("Sun").  
 Dairy produce report ("Sun").  
 Weekly traffic bulletin.  
 7.25 p.m.: Mr. Pim and Miss Pam in advertising talks and nonsense.  
 7.55 p.m.: Programme and other announcements.

## EVENING SESSION.

Announcer: Basil Kirke.

Accompanist: G. Vern Barnett.

- 8.0 p.m.: G.P.O. clock and chimes.  
 Radio Eisteddfod winners.  
 To-night listeners will have an opportunity of hearing the successful competitors in various sections in the Radio Eisteddfod conducted by the New South Wales Broadcasting Company.  
 8.45 p.m.: The Music Makers.  
 Fantasia, "A Midsummer Night's Dream" (Mendelssohn-Finck).  
 8.57 p.m.: Weather report and announcements.  
 9.0 p.m.: G.P.O. clock and chimes.  
 Montgomery Stuart and Myra Leard, sketch, "Switched."  
 9.10 p.m.: Haagen Holenberg, pianoforte solos.  
 (a) "Nocturne in D Flat Major" (Chopin).  
 (b) "Polonaise Militaire" (Chopin).  
 9.20 p.m.: "Week by Week." A topical talk by Mr. S. H. Bowden.  
 9.35 p.m.: Gerald Walenn (violinist).  
 9.42 p.m.: Montgomery Stuart and Myra Leard (sketch), "Table Tapping."  
 9.50 p.m.: The Music Makers.  
 (a) "Adagio Cantabile" (Strauss).  
 (b) "Suite Brevette" (Anthony).

- 10.5 p.m.: Montgomery Stuart and Myra Leard (sketch), "Repairs."  
 10.10 p.m.: Gerald Walenn (violinist).  
 10.18 p.m.: Haagen Holenberg (pianoforte solos).  
 10.28 p.m.: Resume of following day's programme.  
 10.30 p.m.: National Anthem.  
 Close down.

## 2GB, SYDNEY

Thursday, December 20

- 10.0 a.m.: Music. 10.10 a.m.: Happiness talk by A. E. Bennett. 10.20 a.m.: Music. 10.30 a.m.: Women's session by Miss Helen J. Beegling. 11.30 a.m.: Close down. 2.0 p.m.: Music. 2.5 p.m.: Women's radio service by Mrs. Dorothy Jordan. 2.50 p.m.: Music. 3.0 p.m.: Talk. 3.15 p.m.: Close down. 5.30 p.m.: Children's session by Uncle George. 7.0 p.m.: Stock and market reports by New Zealand Loan and Mercantile Agency, Ltd. 7.15 p.m.: Music. 8.0 p.m.: Japanese violin solos by Mr. Bert Mills. 8.10 p.m.: Songs by Mr. Maurice Helson. 8.20 p.m.: Pianoforte solos by Miss Ada Brook. 8.30 p.m.: Songs by Madame Bennett North. 8.40 p.m.: Violin solos by Mr. Lionel Hargreaves. 8.50 p.m.: Songs by Mr. John McCaffery. 9.0 p.m.: Weather report and address. 9.15 p.m.: Japanese violin solos by Mr. Bert Mills. 9.30 p.m.: Songs by Mr. Maurice Helson. 9.40 p.m.: Pianoforte solos by Miss Ada Brook. 9.50 p.m.: Songs by Madame Bennett North. 10.0 p.m.: Violin solos by Mr. Lionel Hargreaves. 10.10 p.m.: Orchestra music. 10.30 p.m.: Close down.

## 3LO, MELBOURNE

Thursday, December 20

## EARLY MORNING SESSION.

- 7.15 a.m.: Morning melodies. 7.20 a.m.: Morning exercises to music. 7.30 a.m.: Stock reports, market reports, general news, shipping, sporting information. 8.0 a.m.: Melbourne Observatory time signal. Express train information. 8.1 a.m.: melodies. 8.15 a.m.: Close down.

## MORNING SESSION.

Announcer: C. J. O'Connor

- 11.0 a.m.: 3LO's different dainties for the daily dinner. To-day's Radio Recipe, Christmas Pudding. 11.5 a.m.: Miss Ray Harris will speak on "Christmas in the Free Kindergarten." 11.20 a.m.: Musical interlude. 11.25 a.m.: Sister Purcell will speak on "Infant Welfare." 11.40 a.m.: Musical interlude. 11.45 a.m.: Mrs. Henrietta C. Walker—"The Art of being a Settler: Picnics and Camps; Comfortable Life in the Open."

## MID-DAY SESSION.

- 12.0 noon: Melbourne Observatory time signal; express train information; 12.1 p.m.: British official wireless news from Rugby; Reuters, and the Australian Press Association cables; "Argus" news service. 12.15 p.m.: Newmarket stock sales, special report by John McNamara and Co. 12.20 p.m.: Community Singing—Old-time Choruses, transmitted from the King's Theatre, Russell Street, Melbourne. Conductor, Frank Hatherley. Soloists: J. Alexander Browne, baritone. "The Veteran's Song" (Adams). "Idle Words." Madeline Knight, contralto—"Silver Threads among the Gold." "Her Bright Smile Haunts Me Still." 1.45 p.m.: Stock Exchange information; meteorological information; weather forecast for Victoria, Tasmania, South Australia, and New South Wales; ocean forecast; river reports. 1.55 p.m.: Close down.

## AFTERNOON SESSION.

Announcer: C. J. O'Connor.

Accompanist: Agnes Fortune.

- 2.15 p.m.: The Strad Trio (Cecil Parkes, violin; May Broderick, piano; Frank Johnstone, cello)—"Trio, Op. 1, No. 3" (Beethoven). Allegro con brio, Andante and variations, prestissimo. 2.35: Senia Chostiakoff, tenor—"Legende" (Tschai-kowsky). "I Pitch my Lonely Caravan at Night" (Coates). 2.42 p.m.: Cecil Parkes, violin—"Arioso" (Handel). "La Precieuse" Couperin-Kreisler. "Chanson Louis and Pavane" (Couperin-Kreisler). 2.51 p.m.: May Broderick, piano—"Romance" (Sibelius). "Arabesque, No. 1" (Debussy). 2.58 p.m.: Senia Chostiakoff, tenor—"By the Fireside" (Strock). "When the Night

- with Stilly Silence" (Robertson). 3.5 p.m.: The Strad Trio—"Nobody Knows De Trouble I've Seen" (White-Parkes). "Gavotte" from "Mignon" (Thomas). "Spanish Dance, No. 1" (Mosskowski). 3.12 p.m.: Dr. Loftus Hills—"Topics of the Week." 3.27 p.m.: Fritz Hart will speak to students of music. 3.42 p.m.: Rev. Wm. Bottomley. "The Scarlet Letter," by Nathaniel Hawthorne. 3.57 p.m.: The Station Orchestra—Overture, "Saul" (Bazzini). 4.7 p.m.: Sydney Burchall, baritone—"Wondering" (Gartman). "Star of the East" (Lohr). 4.14 p.m.: The Station Orchestra—"Romanze" (Rubinstein). "Canzone Barcarola" (Drigo). 4.20 p.m.: Ida Walker, contralto—"Down Here" (Brahe). "Requiem" (Homer). 4.27 p.m.: The Station Orchestra—"Caprice" (Mosskowski). "Serenade" (Karganoff). 4.35 p.m.: "Herald" news service; Stock Exchange information. NOTE.—During the afternoon progress scores of the second test match, England v. Australia, at Sydney, will be given every half-hour, commencing at 1 p.m. Results of the Pakenham races will also be given as they come to hand. 4.45 p.m.: Evensong, transmitted from St. Paul's Cathedral, Melbourne. 5.30 p.m.: Acceptances and barrier positions for the Mentone races to be held on Saturday, December 22, and also for the V.A.T.C. races to be held on Wednesday, December 26.

## NIGHT SESSION.

Announcer: Maurice Dudley.

Accompanist, Agnes Fortune.

- 7.5 p.m.: Stock Exchange information.  
 7.15 p.m.: Special reports by John McNamara and Co.; pig market reports by M'Phail; Anderson and Co.; official report of the Newmarket stock sales by the Associated Stock and Station Agents, Bourke Street, Melbourne; weather synopsis; fish market reports by J. R. Borrett, Ltd., rabbit prices; river reports; 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 by the Wholesale Fruit Merchants' Association, citrus fruits.  
 7.30 p.m.: News session; stumps scores, second test match, England v. Australia, at Sydney.  
 7.43 p.m.: Birthday greetings.  
 7.45 p.m.: Out of the Past.  
 7.46 p.m.: Miss Zillah Carter, now appearing in "Interference" at the Theatre Royal, will speak to you from her dressing room by permission of J. C. Williamson, Limited.  
 8 p.m.: Rod McGregor will speak on "Cricket."  
 8.15 p.m.: The Radi-o-Aces—  
 "The Loyal Legion" (Sousa).  
 "Chloe" (Moret).  
 "Because my Baby Don't Mean Maybe Now" (Donaldson).  
 8.24 p.m.: Roy Ryan, entertainer—  
 "Girl of my Dreams."  
 8.27 p.m.: The Radi-o-Aces—  
 "Wabaly Walk" (Green).  
 "The Desert Song" (Romberg).  
 "One Alone" (Romberg).  
 8.36 p.m.: Ida Walker, contralto—  
 "A Little Coon's Prayer" (Hope).  
 8.39 p.m.: The Radi-o-Aces—  
 "Alabama Stamp" (Creamer).  
 "Anything You Say" (Donaldson).  
 "In a Bamboo Garden" (Donaldson).  
 8.48 p.m.: Sydney Burchall, baritone—  
 "Just a Cottage Small" (Hanley).  
 8.51 p.m.: The Radi-o-Aces—  
 "Get Out and Get Under the Moon" (Tobias).  
 "That's my Weakness Now" (Stempt).  
 "Lolita" (Stonham).  
 9.0 p.m.: Senia Chostiakoff, tenor—  
 "Love is Just a Little Bit of Heaven."  
 9.3 p.m.: The Radi-o-Aces—  
 "My Melancholy Baby" (Norton).  
 "It Goes Like This" (Caesar).  
 "Is it Gonna be Long?" (Whiting).  
 9.12 p.m.: Roy Ryan, entertainer—  
 "Farm Yard Imitations."  
 9.15 p.m.: The Radi-o-Aces—  
 "The Dance of the Blue Danube" (Auber).  
 "After my Laughter Came Tears" (Shay).  
 "Beautiful" (Gillespie).  
 9.24 p.m.: Sydney Burchall, baritone—  
 "Song Down Every Roadway" (Wood).  
 9.27 p.m.: The Radi-o-Aces—  
 "Constantinople" (Carlton).  
 "Gotta Big Date with a Little Girl" (Tobias).  
 "Dream House" (Fox).  
 9.35 p.m.: Ida Walker, mezzo-contralto—  
 "I Heard You Singing" (Eric Coates).  
 9.39 p.m.: The Radi-o-Aces—  
 "Lonesome in the Moonlight" (Russell).



"Mine, All Mine" (Ruby).  
 "Rain" (Ruby).  
 9.48 p.m.: Senia Chostiakoff, tenor—  
 Request items.  
 9.51 p.m.: Radi-o-Aces—  
 "Sunshine" (Berlin).  
 "There Ought to be a Law against That"  
 (Friend)..  
 "Hot Ivories" (Sinatra).  
 10.0 p.m.: "Argus" news service; British  
 official wireless news from Rugby; me-  
 teorological information; announcements.  
 10.15 p.m.: The Radi-o-Aces—  
 "Chiquita" (Wayne).  
 "Just like a Melody out of the Sky"  
 (Donaldson)..  
 "You Are Wonderful" (Ash)..  
 10.24 p.m.: Roy Ryan, entertainer—  
 "A Kiss Before the Dawn."  
 10.27 p.m.: The Radi-o-Aces—  
 "Evening Star" (Fink).  
 "Afraid" (Barnie)..  
 "Someone is Losin' Susan" (Myer)..  
 10.35 p.m.: Ida Walker, contralto,  
 "Waiaata Pol" (Hill)..  
 10.39 p.m.: The Radi-o-Aces—  
 "Mary Ann" (Davis).  
 "Beside a Lazy Stream" (Stempt).  
 "Dusky Stevedore" (Razali)..  
 10.48 p.m.: Sydney Burchall, baritone—  
 "Molly O'Donegal" (Austin).  
 10.51 p.m.: The Radi-o-Aces—  
 "You're a Real Sweetheart" (Friend).  
 "It Don't Do Nothin' but Rain" (Cook).  
 "How Long Has This Been Going On"  
 (Welding).  
 11.0 p.m.: Our Great Thought for To-day.  
 11.1 p.m.: The Radi-o-Aces—  
 "Why Can't You Care?" (Gilbert).  
 "Dear, on a Night like This" (Conrad).  
 "Do You?" (Piantadoni).  
 "In a Honeymoon Cottage" (Lumsdaine).  
 "That's my Mammy" (Donaldson).  
 "Ready for the River" (Moret).  
 "Goodnight Waltz" (Bibo)..  
 "Goodnight Song."  
 11.40 p.m.: "God Save the King."

## 3AR, MELBOURNE

Thursday, December 20

### MORNING NEWS SESSION

10.0 a.m.: G.P.O. Clock says "Ten." 10.1  
 a.m.: "Age" Stock Exchange reports. London  
 Metal Market. 10.10 a.m.: "Age" mar-  
 ket reports—farm and station produce, fruit,  
 fish, vegetables, etc. 10.25 a.m.: "Age"  
 shipping reports. Ocean forecast. 10.30  
 a.m.: Mail Notices. Express Train informa-  
 tion. 10.35 a.m.: "Age" news service, ex-  
 clusive to 3AR. 10.59 a.m.: Weather fore-  
 cast.

### MORNING MUSICAL SESSION

11.0 a.m.: Melodies by the Master Musi-  
 cians for the Multitude. 1.30: Close down.

### EVENING SESSION.

6.0 p.m.: More Melodies by the Master  
 Musicians.

### NIGHT SESSION

Announcer: John Strart.

Accompanist: Reg Erown.

8.0 p.m.: H. A. Brown—  
 "Gardening."  
 8.15 p.m.: Under the auspices of the Y.M.  
 C.A. Canoe Club and Victorian Canoe As-  
 sociation, Mr. E. A. Gollan, secretary of  
 the club, will speak on "Canoeing as a  
 Sport and Recreation."  
 1. "Building Your Own Canoe."  
 8.30 p.m.: The Station Orchestra—  
 Selection, "The Desert Song" (Romberg).  
 "Noveletta" (Ambrosia).  
 8.45 p.m.: Robert Allan, Male Alto—  
 "Little Brown Cottage" (Dickson).  
 "Sally Horner."  
 8.52 p.m.: The Station Orchestra—  
 Suite, "Dornroschen" (Tschalkowsky).  
 "Romanze" (Rubenstein).  
 9.2 p.m.: The Sundowners—  
 "Tse Gwine Back to Dixie" (Anon—own  
 arrang.).  
 "De Hambone" (Westendorf).  
 9.9 p.m.: Transmission from the Cairns  
 Memorial Presbyterian Church, East Mel-  
 bourne—A programme of Christmas music  
 by the Cairns Memorial Church Choir—  
 Arranged by Mr. R. J. H. Oehr.  
 9.39 p.m.: Under the auspices of the Incor-  
 porated Association of Registered Teachers  
 of Victoria—  
 Frank Shann, M.A., Diploma of Education,  
 will speak on—  
 "Australia's Most Profitable Investment—  
 A Talk on School Fees, Teachers, and  
 Training."  
 9.49 p.m.: The Sundowners—  
 "You're a Real Sweetheart" (Friend).  
 "I Told Them All About You" (Friend).  
 9.56 p.m.: The Station Orchestra—  
 Selection, "Veronique" (Messenger).  
 10.6 p.m.: Tom Semple, Tenor—  
 "Sylvelin" (Sinding).

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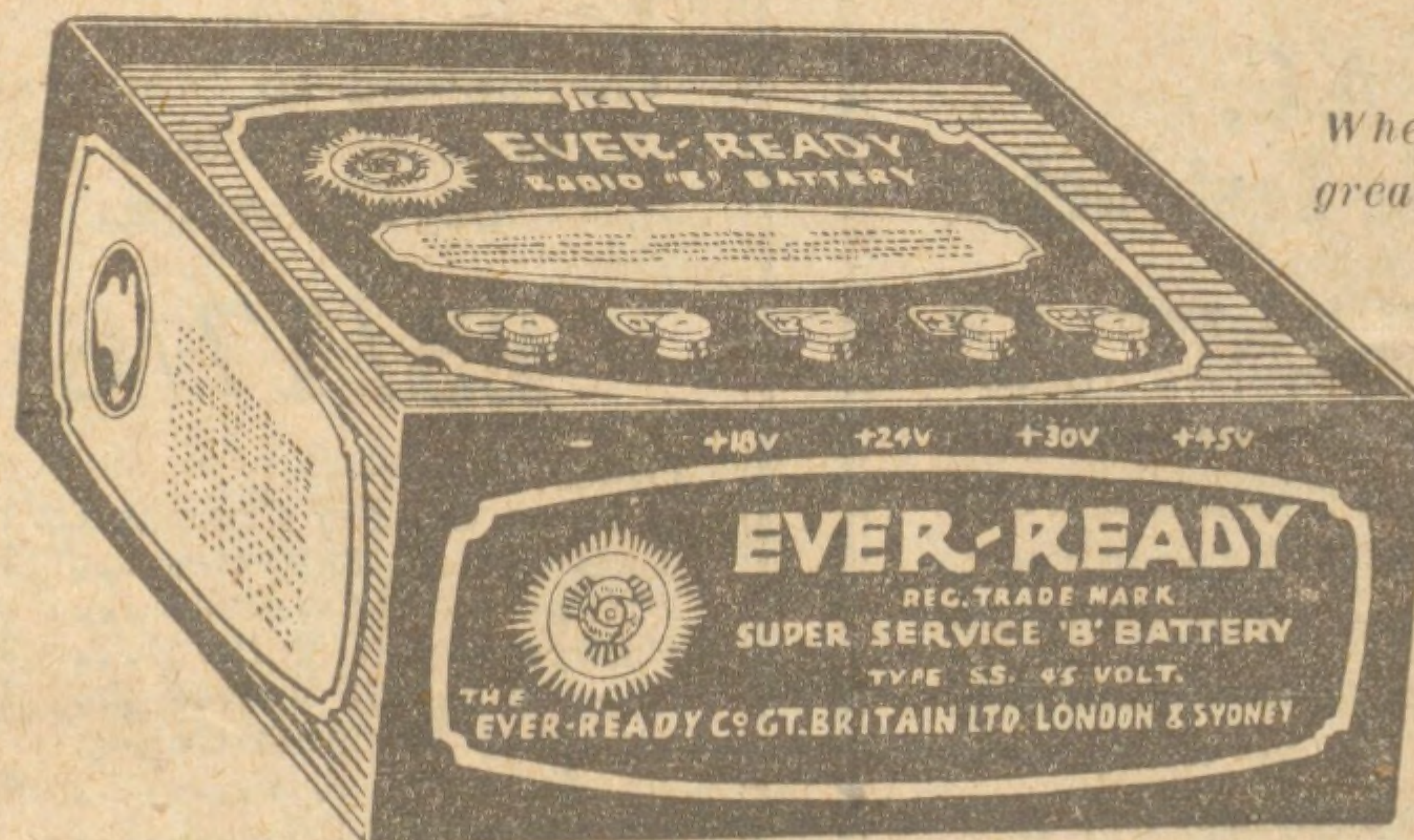
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"Impatience" (Schubert)  
 10.13 p.m.: The Station Orchestra—  
 Suite, "Harvest Time" (Hayden Wood).  
 10.23 p.m.: The "Age" News Service, exclu-  
 sive to 3AR.  
 10.28 p.m.: Our Australian Good-night Quo-  
 tation.  
 10.30 p.m.: God Save the King

## 7ZL, HOBART

Thursday, December 20

MID-DAY SESSION.

Announcer: Jack Broadbent.

11.30 a.m.: Monsieur Sonora, musical selec-  
 tions. 11.34 a.m.: Special midlands wea-  
 ther forecast. 11.35 a.m.: Monsieur So-  
 nora, musical selections. 11.55 a.m.: Tas-  
 manian stations' 9 a.m. weather report.  
 12.0: G.P.O. clock chimes the hour. 12.1  
 p.m.: Shipping information, ships within  
 wireless range, mail notices, housewives'  
 guide. 12.3 p.m.: Monsieur Sonora, musi-  
 cal selections. 12.11 p.m.: British Official  
 Wireless news. 12.20 p.m.: Monsieur So-  
 nora, musical selections. 12.29 p.m.: An-  
 nouncements. 12.33 p.m.: Monsieur So-  
 nora, musical selections. 12.55 p.m.:  
 "Mercury" news service, produce sales  
 held at railway. 1.10 p.m.: Monsieur  
 Sonora, musical selections. 1.30 p.m.:  
 Close down.

AFTERNOON SESSION.

Announcer: Jack Broadbent.

2.0 p.m.: G.P.O. clock chimes the hour. 3.1  
 p.m.: Monsieur Sonora, musical selections.  
 3.4 p.m.: Weather information. 3.5 p.m.:  
 Monsieur Sonora, musical selections. 3.15  
 p.m.: A happy hour with Monsieur So-  
 nora, Aldershot Command Searchlight  
 Tattoo (marches by the massed bands),  
 "The Wee Maan at the Loom," "Hot  
 Punch," "My Home," "The 79th's Fare-  
 well to Gibraltar," "Strathspey," "The  
 De'il in the Kitchen," "The De'il Among  
 the Tailors," Columbia Light Opera Co.,  
 "Oh! Kay," "The Desert Song." Layton

and Johnstone, American duettists (piano)  
 with "Plantation Medley." Philadelphia  
 Symphony Orchestra, "Invitation to the  
 Waltz." English Nursery Rhymes (fox  
 trot), "Together We Two," "Baby  
 Feet Go Pitter-Patter" (medley) "Steam-  
 boat Medley" with effects, "Farm-  
 Co., "Gems from Robin Hood" (Smith  
 de Koven). Paul Whiteman and his or-  
 chestra, "My Hero," "The Merry Widow."  
 4.15 p.m.: Child welfare, a representative  
 of the Child Welfare Association will give  
 a talk on "When Baby Travels." 4.30  
 p.m.: Close down. During the afternoon  
 progress results will be given of the cric-  
 ket match, second Test match, at Sydney,  
 N.S.W..

EARLY EVENING SESSION.

Children's Hour.

6.15 p.m.: Old English Carol singing, choir  
 under the direction of Madame Helen  
 George, Tasmania's distinguished pianist.  
 6.45 p.m.: Answers to letters and birth-  
 day greetings by "Uncle David." 7.0 p.m.:  
 Mlle. Columbia broadcasts. 7.15 p.m.:  
 News session, "Mercury" special Tas-  
 manian news service, railway auction pro-  
 duce sales, weather information, Hobart  
 Stock Exchange quotations.

EVENING SESSION.

7.30 p.m.: Come to Tasmania, under the  
 auspices of the "Come to Tasmania" or-  
 ganisation, W. F. Darling will speak on  
 "Hockey in Tasmania." 7.45 p.m.: J.  
 Scott, professional coach of the Royal  
 Golf Club, will speak on "Golf." 8.0 p.m.:  
 G.P.O. clock chimes the hour. 8.1 p.m.:  
 Fifty years ago to-day. 8.6 p.m.:  
 Mlle. Columbia broadcasts. 8.30 p.m.:  
 One-act comedy (produced by W.  
 E. Fuller), Augustus in Search of a Fa-  
 ther. 9.50 p.m.: News session, British  
 Official Wireless news, "Mercury" spe-  
 cial Tasmanian news service, Tasmanian  
 district weather report. 10.0 p.m.: G.P.O.  
 clock chimes the hour. 10.1 p.m.: Our  
 Tasmanian good-night thought. 10.2 p.m.:  
 God Save the King. Close down.



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# The WIRELESS WEEKLY

# RADIO INFORMATION

# Service

Readers' queries are answered here by our trouble-finding expert, under the direction of the Associate Editors, Mr. Ray Allsop and Mr. Don. B. Knock. If you are in difficulties about reception or set-construction let us know, and we will endeavor to set you right.

Make your questions brief and to the point, and, where possible, show lay-out and wiring design. Under no circumstances will answers to queries be made by letter or by telephone. All answers will appear in the columns of this department in the order they are received.

Under the direction of  
Ray Allsop  
and  
Don. B. Knock  
(Associate Editors)

C.Y. (Scone): (1) Will the All Empire Receiver do all that 'Wireless Weekly' claims for it, or is it merely an advertisement for sale of parts?

Answer: The All Empire has in many cases to our knowledge (many letters from constructors have been published from time to time) exceeded by far the results claimed for this receiver. It will do all, and more than that claimed by us.

(2): "I can only tune in 2FC faintly, and I get them on 100, 98, and 20 on my dials."

Answer: Some component is probably faulty. It is quite O.K. to be able to receive 2FC on harmonics. Test particularly valves, transformers, and batteries. Keep all leads short.

(3): "There does not seem to be enough 'B' voltage."

Answer: The obvious remedy is to test the batteries first, then valves, and transformers. Perhaps also your speaker is faulty.

(4): "I get a howl sometimes."

Answer: This denotes a loose connection, and also the admittance of R.F. into the audio side. Place a .002 fixed condenser across the secondary of the first transformer, and an R.F. choke in series with the plate lead of the first transformer. A low howl would be caused by flat "B" batteries. If you are using an eliminator have the rectifying valve tested.

(5): "I am sure everything is correct, as it has been checked by three others beside myself."

Answer: Everything is NOT correct, so the four of you are wrong. Take the wiring to some competent radio dealer, and ask

him to test the receiver. As you do not like us mentioning firm's names, we refrain from advising you the most likely firm to overcome your troubles. We shall be pleased to advise you, however, if you will write again.

(6): "I find it is no good asking other builders, as they are not game to say if they are getting good or bad results."

Answer: Why did you not admit this fact in question 5? You have, no doubt, seen the letters published from time to time which we have received from builders of the "Go-Getter" and "All Empire." These are not concocted, and the originals may be seen by any reader who cares to give us a call. Be frank with yourself, then carefully re-check wiring again, paying particular attention to the fact that the smallest deviation from our instructions may cause a world of trouble. Ask yourself these questions: Did I use the correct gauge wire? Have I tested the valves, transformers, batteries, condensers, variable and fixed—and other components? And have I made certain that each valve is making contact with its socket? Are my leads short? Are plate and grid leads running too close? (This would cause interaction, and would perhaps help to explain the whistle of which you complain). These are only a few of the questions you should ask yourself. Common sense is the greatest factor in building a receiver. If you have no luck, write again, and give us a few more particulars, with a few less hard words. You are forgiven!

V.S.R. (Allawah): "I decided to build the 'Inexpensive Trickle Charger' but found there was no diagram."

Answer: The diagram appeared in a later issue. If unable to find it, write again and we shall be pleased to publish it for you.

I.D.L. (Duaranga).—(1) "I have built the Go-getter, and am getting excellent results. I have only had two nights to test it, but was quite satisfied with this little set's performance. There is, however, a slight crackling noise which is diminished 50 per cent. when the aerial is removed. The noise is more prevalent on some wave-lengths than others."

Answer: This is either static, or a breakdown in one of the transformers. Test the primary of the first transformer first, it is probably there. Also test "B" batteries, and make certain all leads are tight.

(2) "What size coils should I wind to use this set on the broadcast band?"

Answer: Wind 100 turns of 30 D.S.C. on a three-inch former. Tune in say 2FC, and adjust the number of turns so that this station comes in with the main tuning condenser, three-quarters meshed. You must use the correct voltage on the S.G. valve. Your "B" battery system is not flexible enough.

(3) "When the two circuits synchronise, the detector sets up a howl."

**GENERAL.**—No letters will be answered by post in spite of the fact that stamps may be enclosed. Many readers send stamps, postal notes, money-orders, and the like, in payment for our advice. This is entirely unnecessary, as this service is free to our readers. Coupons will appear regularly in this paper, and they must be forwarded with each batch of queries. Each letter must not contain more than four queries. Where specially required, we shall be pleased to publish small diagrams and illustrations.

Answer: Try the inclusion of an R.F. choke in the B plus leads.

C.H.J. (Victoria).—"I heard a crackle, then the set went dead. When I removed the valve, I found the glass had cracked."

Answer: Probably the glass was faulty, and on expansion by heat from the plate of the valve, this cracked. The movement also probably caused the plate to short-circuit with the filament and grid.

H.R. (Dundas).—(1) "I had to humor my receiver at times, by tickling it under the condenser."

Answer: Either a loose lead to fixed or moving plates, or the contact bushing or spring from the rotor plates has broken, cracked, or worked loose.

(2) "My receiver is not selective enough."

Answer: Place a .0001 fixed condenser in the aerial lead; this does not always do the trick, but invariably helps.

G.T. (no address).—(1) "I wish to add a one-valve amplifier to my one-valve set, so will you please give me a diagram?"

Answer: See reply and circuit drawn for G.M. (Redfern).

(2) "I have a lot of back numbers, dating for the last three years. Any reader may have as many numbers as they wish, by sending stamp for postage."

Answer: Thanks, Mr. Truran. We should like to have your address.

J.M. (Gloucester).—"What is the primary coil?"

Answer: In radio, the primary coil may either represent the aerial coil, i.e., the inductance through which R.F. impulses pass on their circuit to earth (being picked

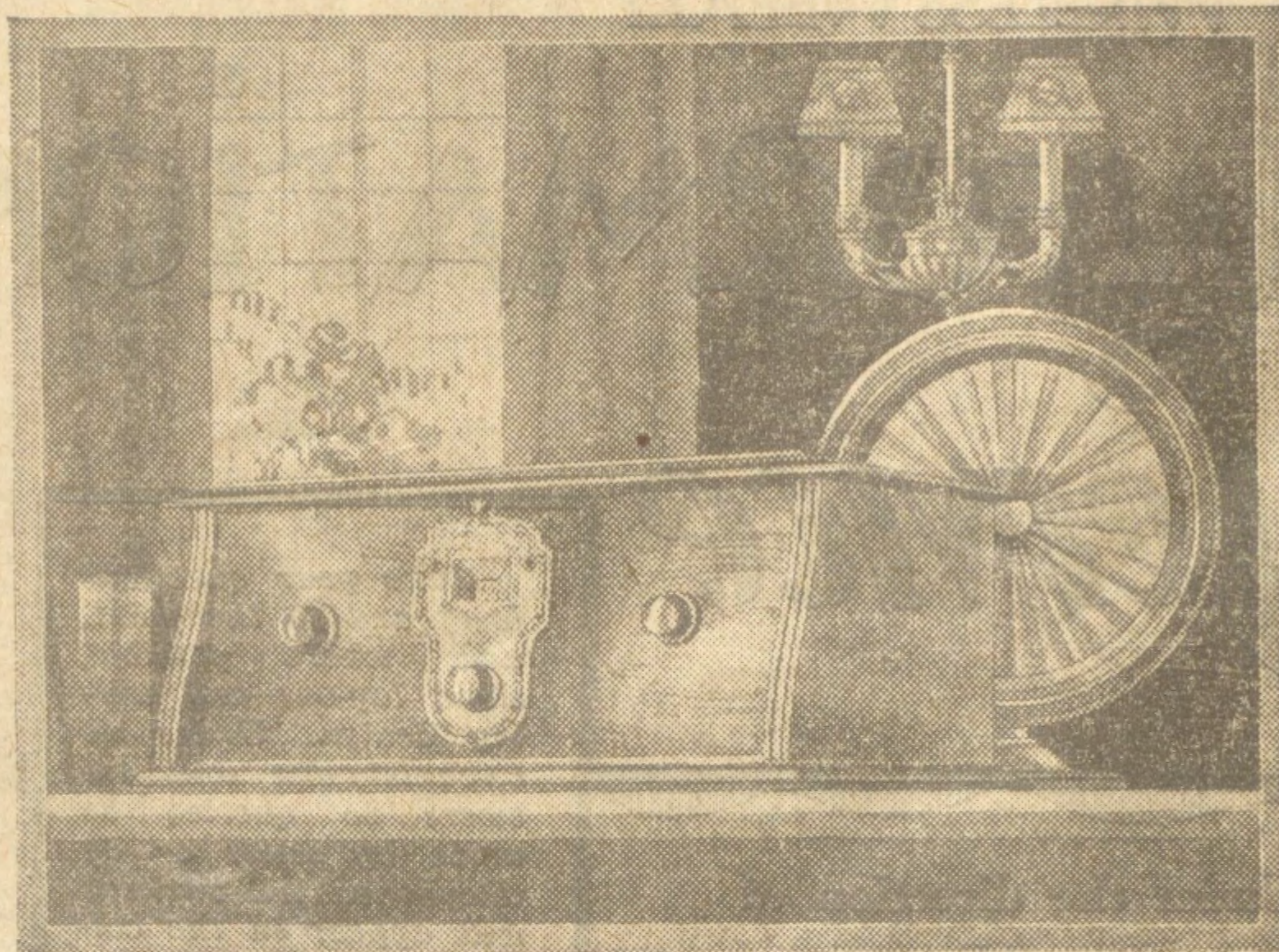
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# FARMER'S

PITT, MARKET AND GEORGE STREETS.

up by the secondary coil in the interim), or it may represent the first, or smallest, winding on a step-up transformer.

"PREMIER" (Marrickville).—"As one of your regular readers, I notice you mention that you pulled in JOAK on a two-valve Reinartz. My set is a two-valve Reinartz and I can pull in 2KA faintly on 'phones, but that is my best performance. I can see 2BL's masts from my place. I get very little reaction on 2BL, though the others are O.K. Can you improve on my circuit?"

Answer: You are getting good results from your Reinartz, as you are so near to 2BL. The nearer to the station you may be, the less noticeable will the carrier become. Two little condensers may be used in the circuit to good effect. Try them out—a .0001 in the aerial lead, and a .001 across the primary of the first transformer. Also try coupling the aerial coil directly to the moving plates of the .00035 condenser. See that the moving plates connect to the last turn of the reaction coil. You could, of course, add an additional stage of audio amplification—or a stage of R.F., or even both—when the receiver would become the famous "Marco Four."

G.P. (Rozelle).—"I am contemplating building the 'Peridyné Five,' and am writing to you asking if you would kindly get in touch with an owner of one of these sets who would be good enough to let me hear the set working some night, if convenient. If you could oblige me with this request, I would be very grateful, as the set in question is rather an expensive one to make up and would be a disappointment to me if it were no better than the set I am at present using."

Answer: We have published your letter, so that readers in your district may get in touch with you personally. Those readers who are kind enough to offer the writer a performance will find Mr. G. Casperson at 170 Evans Street, Rozelle.

R.N. (Wahroonga): "Re the attached circuit. I cannot receive any station by 2FC. Why is this? Can you give me a better crystal circuit?"

Answer: The circuit is of a non-selective type. A good crystal circuit which would suit your requirements admirably was published in these columns last week.

J.R. (Ballina): (1) "What time does 2NO commence to operate, and are there any set times?"

Answer: 2NO usually commences just after 2BL closes down. There are no set times, though he is usually to be heard on Sunday evenings. He may not continue his transmissions much longer. 1929 will affect experimental stations considerably.

(2) "Will I get more distance by adding or subtracting turns from my coils?"

Answer: Either method would have no effect on reception, other than altering the wave length. If you cannot receive amateur stations try removing a few turns.

R.F. (Hurstville): (1) "I am trying to do away with my 'A' battery by using the mains. Could you explain how this should be done? I have a bell-ringing transformer."

Answer: Would not advise you to do this, as hum would be very troublesome, indeed. You can, however, use A.C. on the filaments of the audio stages, but the R.F. stages and detector will function better from batteries.

(2) "If this procedure is not advisable, would a charger, or a trickle charger, be better?"

Answer: For less trouble, the trickle charger would meet demands. However, if you wish to keep your accumulator in very best order it is advisable to use the charger.

(3) "What is the difference between A.C. and D.C.?"

Answer: A.C. is alternating current, which is supplied by an alternator. A.C. has no regular polarity, as the direction of flow reverses approximately 60 times per second—depending on the frequency of the current. D.C. is direct current, and is supplied by a dynamo or other D.C. source. D.C. flows in a regular direction, and, therefore, has a negative and a positive lead. D.C. cannot be stepped up or down, i.e., the voltage or amperage cannot be multiplied or divided. A.C. can be stepped up or down by means of transformers.

(4) "When the set is working and the wires are taken off the speaker and joined, it causes a spark. Why won't it light any sort of bulb?"

Answer: In the first place, the voltage is not high enough. The spark is caused through a sudden rise in potential owing to a make-and-break of the circuit. Secondly, there is no direct connection, as though one wire is connected to B plus, the other is connected only to the plate of



the last valve—which latter is not connected in any way with B negative—therefore no direct current can flow. It is the movement of electrons from the filament of the valve—to the plate—which carries the R.F. impulses. R.F. impulses will traverse air, but this is not so with D.C. current, unless, of course, the voltage be raised enormously, and the space between the two points of contact be diminished. In this case a spark jumps across—and the air gap is called a "Spark gap."

C.P.D. (Toowoomba).—You would get better loud-speaker results from the Reinartz Three. Inter-State stations can also be pulled in well on this receiver, though not always at speaker strength. By adding a stage of R.F. to this receiver (it would then be a Marco Four) you would have one of the best receivers ever put out by this paper.

O.L. (Baulkham Hills).—"I have a three-valve receiver of the Reinartz type, which has given good service for two months. I have been able to pull in Japanese stations on this receiver about 2 a.m. on Sunday mornings, and all Australian stations (with the exception of 6WF) have been pulled in. This morning, however, I noticed that volume was suddenly becoming less, and during the day volume vanished entirely. I switched off the set, and waited for about an hour, after which I switched the set on again. Volume was all that could be desired for about 30 seconds, after which it died away to a whisper again. What is my trouble?"

Answer: Your A battery is flat. If an accumulator is used, have this re-charged. It will be necessary to replace the A supply if dry batteries are used.

"Max" (Randwick).—"I would like to procure a good dictionary of all the radio terms and words. As it is for the use of a radio club we are starting, I should like the book to be one of very high quality, and to be of modern composition."

Answer: You could not do better than procure Drake's "Radio Encyclopaedia," published by Angus and Robertson, price 30/. This book is about 2½ in. thick, and contains everything. Each term is explained in detail.

J.F. (Darlinghurst).—"How many valves are there in a Reinartz receiver?"

Answer: In the Reinartz proper, there is only one valve, which is the detector. A two-valve Reinartz usually consists of a detector and one audio; a three-valve consists of a detector and two audios; and a four-valve Reinartz consists of one stage of R.F., one detector, and two audios. This last circuit is known as the "Marco Four."

C.H.M. (Wiseman's Ferry).—"What advantages are there in using the Pentatron valve?"

Answer: Space is saved, because the Pentatron valve is actually two valves in the one glass bulb. Expense is cut down to a minimum, because only one valve socket is required, only one rheostat is required, and the valve has only one filament, which supplies both valves, and which only takes a small amperage of A current.

B.V.T. (Sydney).—"What is the simplest circuit known? Please tell me how to make the receiver."

Answer: The simplest receiving circuit is the fundamental crystal circuit, which consists of one side of a crystal making contact with the aerial terminal and one side of the telephones, whilst the other side of the crystal connects to earth and the other side of the telephones. This receiver is not selective, of course, as no means of tuning are available.

J.O.F. (Kensington).—"How does a rheostat control the voltage supplied to a valve?"

Answer: The rheostat is a variable resistance. A resistance in any circuit will break down the voltage. By means of a variable contact, the resistance in the filament circuit (the rheostat) can be varied, and, therefore, the more resistance introduced into the circuit, the less voltage will flow to the valve.

G.H.F. (Melbourne).—"What is the difference between a fixed and a variable condenser? I do not want a technical explanation; I just want to know how they compare."

Answer: The fixed condenser has so many plates (depending on the capacity), which are immovably fixed, and which are insulated from each other by mica or some other insulating substance. It is possible to make these condensers very small for radio work, except in the case of those required for high-voltage work. The variable condenser has half its plates variable, that is, their position in regard to the fixed plates may be altered, thus varying the capacity.

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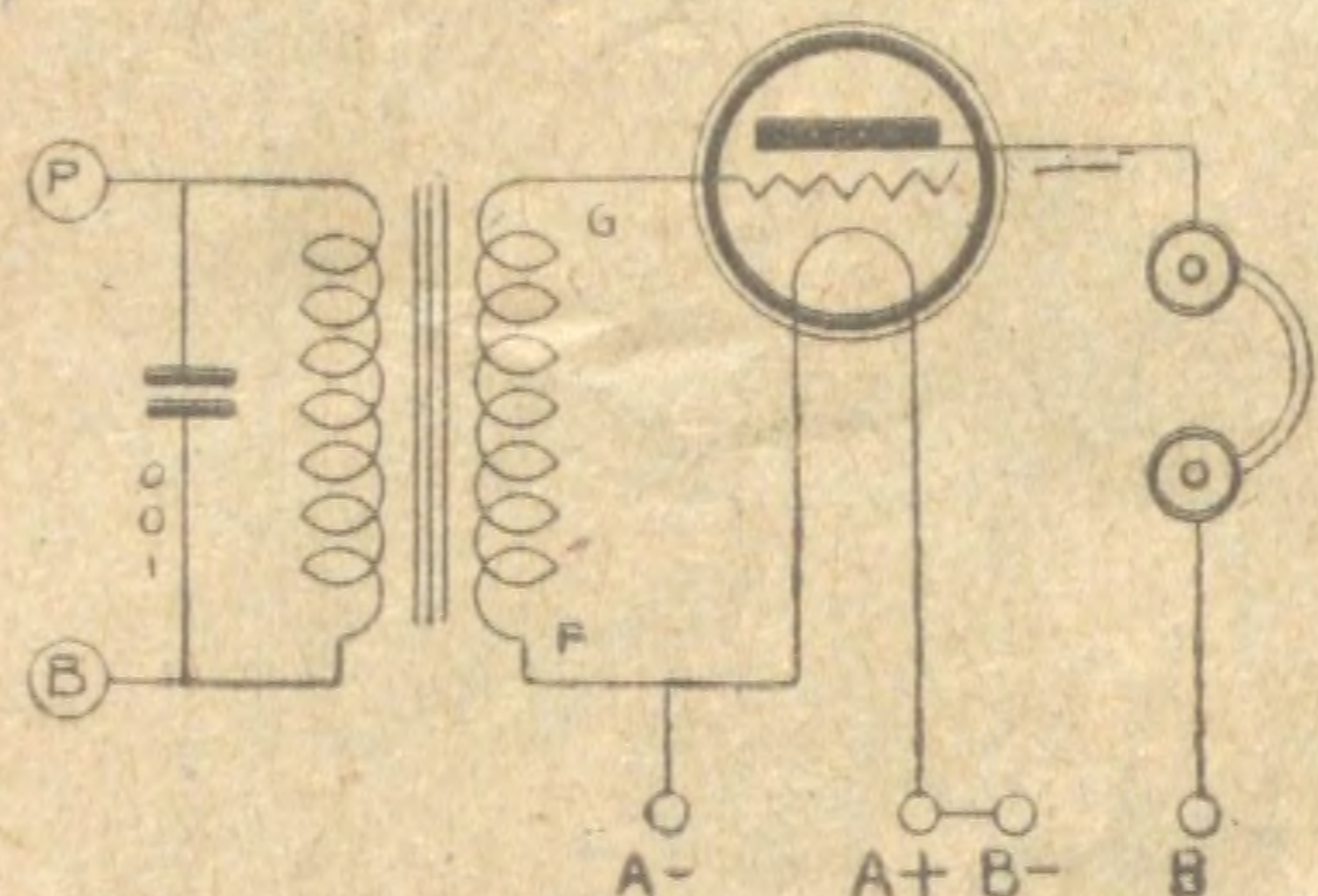
S.R.W. (Stanmore).—“I have a 199 valve, which is all silvered inside. What causes this silvering? Also, will you please tell me how I can test the continuity of the filament, without using the valve in a set, as I can't see any glow owing to the thick deposit of silver matter inside the valve.”

Answer: The silver deposit is caused through exhausting the valve of air. It will not affect the operation of the valve in any way. Test the valve as follows:—Connect the positive tip of a pair of telephones to the positive terminal of your A battery, and the other telephone tip to one of the filament terminals. Now connect the other filament terminal to the negative side of the A battery, when, at the moment of contact, you will hear a click if the filament is intact.

U.O.P. (Petersham).—“What is the voltage of an ordinary flat torch battery, and which is the negative terminal?”

Answer: The voltage of these batteries is 4½. The negative terminal is the long contact strip.

G.M. (Redfern).—“Will you please give me a diagram showing how to add a one-valve amplifier to my one-valve Reinartz?”



Answer: The circuit appears in these columns. The transformer (for best results) should be a Ferranti, with a ratio of 4-1. The P terminal of the transformer should connect to that side of your present telephone connections that goes to the plate of the last valve, whilst the B connection of the transformer should be attached to the other side of the telephones. No alterations are necessary, but an additional B battery should be used for the amplifier. The two B batteries should be connected in series.

“Mug” (Chatswood).—“When do the new laws in connection with amateur radio take effect?”

Answer: In January, 1923.

#### BRIEF REPLIES

P.S. (Piallamore).—Thanks for your letter. Will try the Martin receiver on an underground aerial. Your explanation regarding the roar is quite correct. Also see that the speaker is not placed too near the set. Try a six-sixty valve 610P as detector. Use separate B supplies for the R.F. and audio stages. This receiver is O.K. for summer conditions.

W.A.W. (Bassendean).—The distance between the coils must be found. About one inch to two inches would be O.K. for the go-getter. The best position for the aerial coil varies. The mushiness you mention leads me to think that you have a faulty grid condenser, grid leak, or transformer.

J.W.M.C. (New Zealand).—Either connection will be O.K. It matters not which way round you connect these two tapplings. Join the rotor plates of the neutralising condenser to the variable plates of the .00035 condenser tuning the second R.F. stage. Hope we were in time to stop the language!

F.W.B. (Taree).—In order to prevent the valves from being damaged by an accidental short-circuit, filament fuses should be placed in each filament A negative lead. Place the fuse as near the valve as possible, in the same manner as the grid-leak and condenser are placed on the G of the detector valve. Colville Moore, Radiokes, and Economic Radio Stores can supply. Yes, an eliminator could be used on the receiver, but, as your mains are D.C., this is unnecessary. You can use the mains direct, providing you step down the voltage by means of a transformer or resistances. In order to find polarity of the mains, put a teaspoonful of salt in a glass of water, and immerse the two leads in this, when the negative lead will give off bubbles. This procedure does not apply to A.C., which has no evident polarity, as the direction of flow is altered as much as 60 times per second. In order to improve daylight reception, add an extra stage of R.F., so made that it can be cut out of circuit when not required. Merely turning off the rheostat will be O.K.

G.H.C. (Unanderra).—Evidently you use too much filament current on the valves.

The rheostat should be turned up only just sufficiently to give good results—no more, no less—otherwise the valves will have short life, and results will not be so good as you should expect. Shorten the aerial to about 50 feet. Moving the primary farther away from the secondary will help selectivity, but the reaction coil will have no effect on this. The closer you have primary, secondary, and reaction coils the greater volume will result; but at the same time selectivity will be impaired. Use a short earth.

A.M.S. (Cremorne).—The station you heard was 2SX, not 2FX. This station is owned and operated by Chas. Slade, c/o Croydon Radio Club. He is an amateur working on the 200-metre band.

N.C. (North Sydney).—The correct secondary voltage to use would be 12 volts.

H.B. (Bathurst).—Probably in soldering your aerial at the joints you allowed too much resin to run between the wires, thereby insulating them more or less from each other. Test your “A” batteries, which would cause the fading. Presume “B” batteries are in order?

H.F. (Kempsey).—135 volts would be better, providing you are using valves that will take this plate-voltage comfortably. Yes, you could use the electric mains, as they are D.C. It would be necessary to step the voltage down by means of a transformer or resistances. It would not be necessary to alter your receiver.

M.E. (Temora).—You have made a good choice. The Marco Four is hard to beat. (1) It would not be advisable to use a six ohm rheostat to control all the valves, because the R.F. and detector stages are critical as regards detector voltage. Suggest you use, instead of the Brachstats, a 30 ohm rheostat for the R.F. stage, one for the detector stage, and one for the two audio stages. In this way any type valves could be used. (2) Yes, the 15-plate condenser could be used to control reaction without altering the coils in any way. (3) The receiver could be run off an A.B.C. eliminator. Colville Moore have some blue prints.

H.F. (Ryde).—Connect the last turn of the grid coil to the last turn of the aerial coil, and see that your earth lead is making good contact at both ends.

A.L. (Picton).—The word in question is (to be Irish) two words, separated by a hyphen. It is spelt Terminological-inexactitude.

B.H.I. (Brisbane).—The capacity of variable condensers depends on the number of plates, distance between plates, dielectric used, thickness of plates, and other items. Unless you give us the first three figures afraid we cannot advise you of the capacity of the condenser.

R.M.F. (Naremburn).—Yes, the transformers mentioned will be quite O.K., and will give slightly more amplification. A “B” eliminator can be used with success on this receiver.

M.F. (Thirlmere).—The power for an aeroplane transmitter is obtained from a small generator, which is driven by a small propeller, in the slip stream of the aeroplane propeller.

G.K.O. (Kensington).—An ordinary telephone microphone may be used in a transmitter. It is advisable, however, to use a modulation transformer.

T.U.G. (Randwick).—No, electric lamps cannot be used in radio sets in place of valves. Electric lamps have only one element, i.e., the filament, whereas a valve has three elements at least, the filament, grid, and plate.

V.F. (Lane Cove).—The scratching noise is probably due to a broken down transformer or a loose connection. Test the loud-speaker cords also.

T.E. (Chatswood).—A choke is used to prevent, or, in other words, to “choke” stray R.F. currents, and to prevent them from entering a circuit where A.F. is flowing.

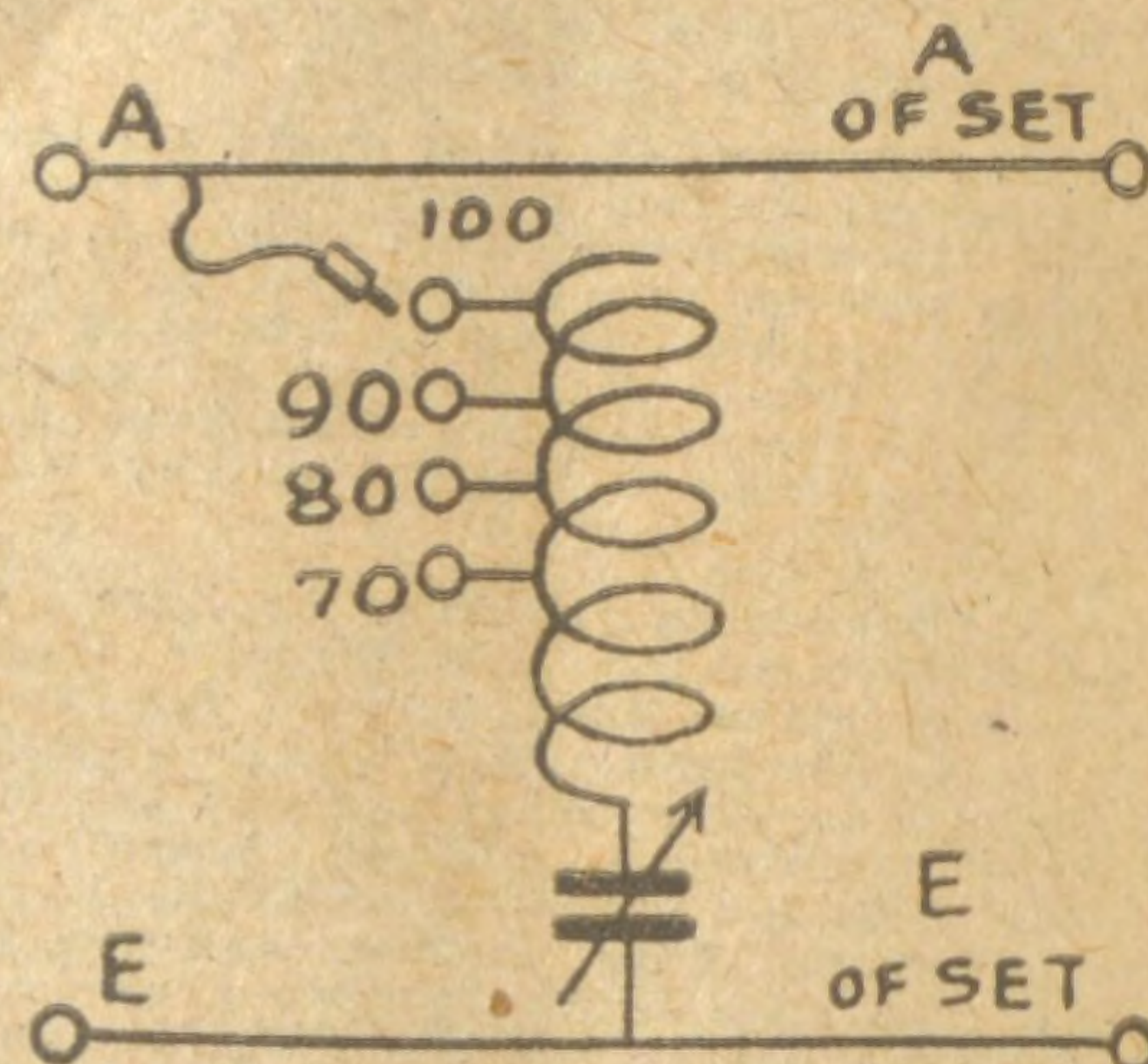
I.G.L. (Moss Vale).—If you desire to build a receiver that will tune on extremely high wave lengths, it would be a tiresome job to wind special coils. Suggest you use an ordinary audio transformer for the primary and secondary coils. This will be quite suitable.

R.T. (Camden).—I shall shortly be commencing a series of articles such as those you suggest, and I intend working up the articles until those who have carefully studied should be fit for the A.O.P.C. examination.

B.F. (Picton).—The howl is caused through microphonic valves. Place your

receiver cabinet on rubber or felt feet, and place the speaker in a different position. It is not advisable to have the speaker resting on top of the cabinet unless shock-absorber sockets are used.

B.B.F. (Mosman).—A suitable wave-trap appears in these columns. This should enable you to cut out 2GB.



K.A.L. (Canberra).—The most up-to-date radio dictionary is Allen's Encyclopedia, price 30/., obtainable from Angus and Robertson.

“Wax” (Mangrove Mountain).—You have wired correctly but the accumulator you are using has too high voltage. This accumulator supplies six volts to the filament, whereas your valve only requires four volts. Insert a 20 ohm fixed resistance in series with the positive filament lead. It would be as well to test the valve after the treatment you have given it.

“WIRE” (Eastlake).—Place a fixed condenser of .002 mfd. across the secondary of the first audio transformer.

M.R.T. (Newcastle).—The circuit forwarded is O.K. It could be improved by introducing a reaction coil in the plate circuit. This should consist of 45 turns of the same wire, i.e., 22 gauge, on a 2in former, and should either be made variable in respect to the grid coil, or should be tuned by a .00035 variable condenser.

P.K. (Katoomba).—The simplest rectifier known is the crystal. A piece of coal may sometimes be used though it is not so sensitive as the chemically-treated crystal with which we are all more or less familiar.

T.E.M. (Blackheath).—The main tuning condenser has a capacity which is too large by half. Use one of .0005 mfd., or reduce the number of turns on your grid coil to 30.

W.E.L. (Jervis Bay).—Yes, two variable condensers are required, as the filament returns are not common.

P.A.M. (Croydon).—Uncle George is now at 2GB, where he has been since he left 2BL.

U.T.R. (Darlinghurst).—You have connected the main tuning condenser incorrectly. The moving plates should be connected to the filament lead, whilst fixed plates should be connected to the grid of the detector valve.

D.F. (Bexley).—The Senior Cone Speaker would suit admirably. You have made a good choice.

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UX171A, UX240, UX210,  
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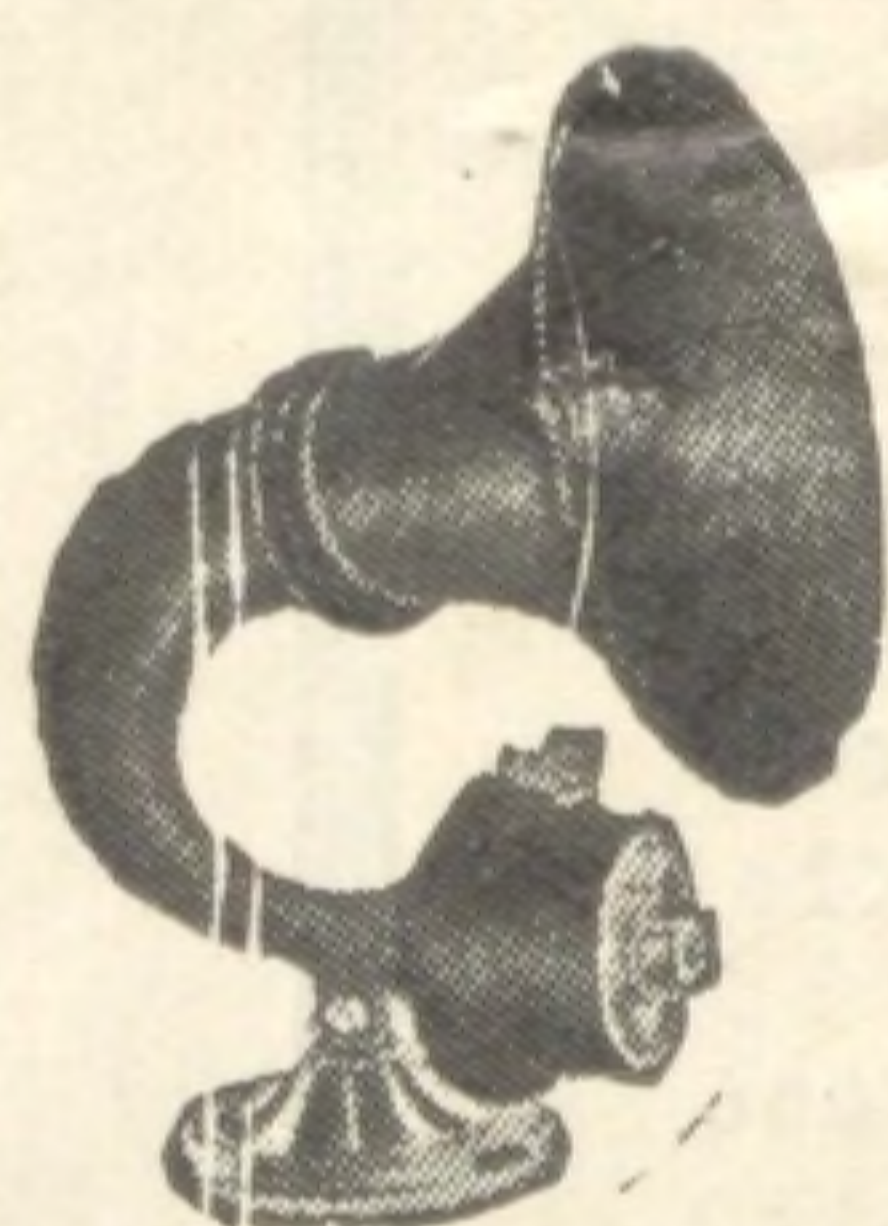
**Amalgamated Wireless**  
(Australasia) Ltd.

Sydney, Melbourne, Adelaide and  
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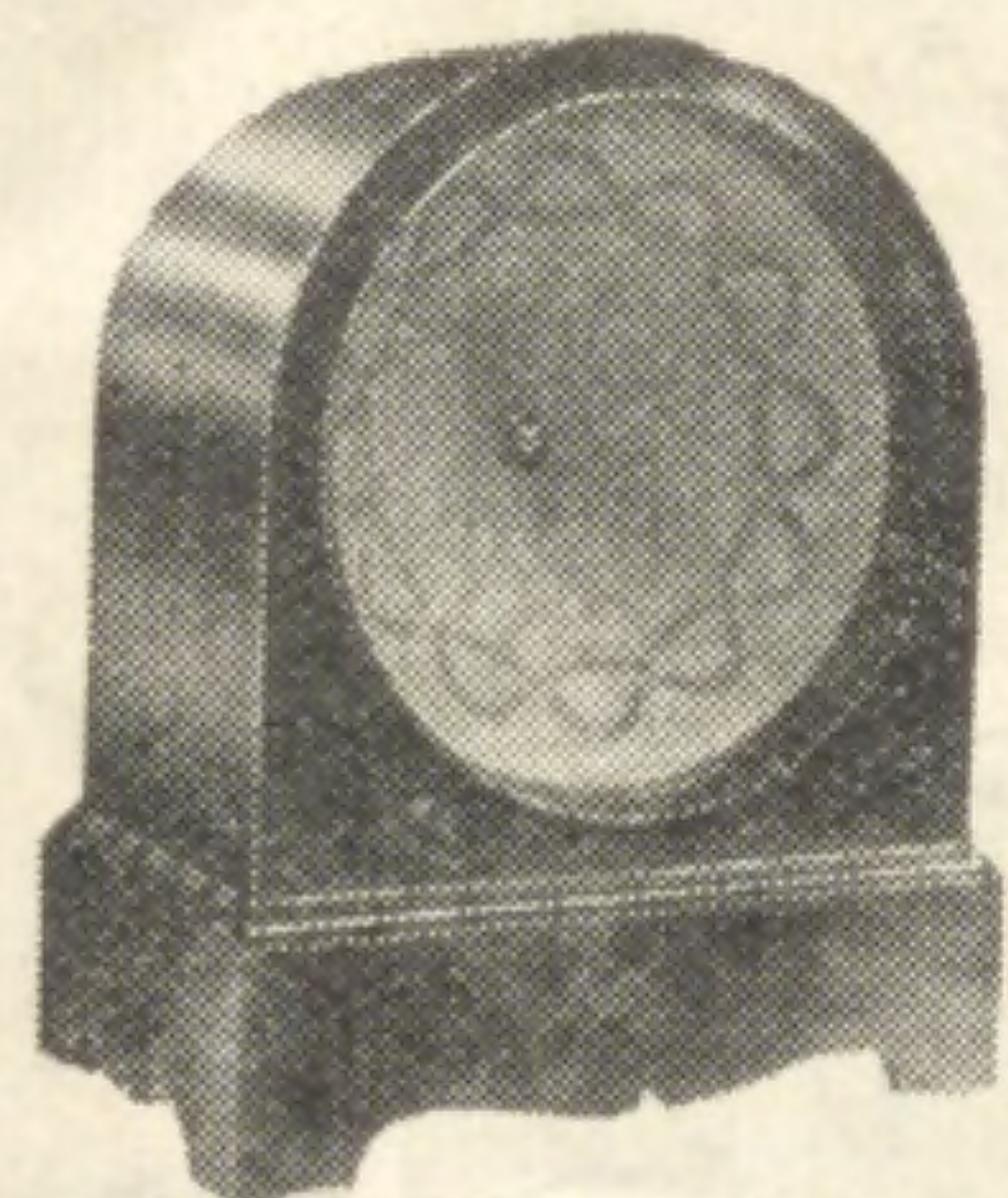
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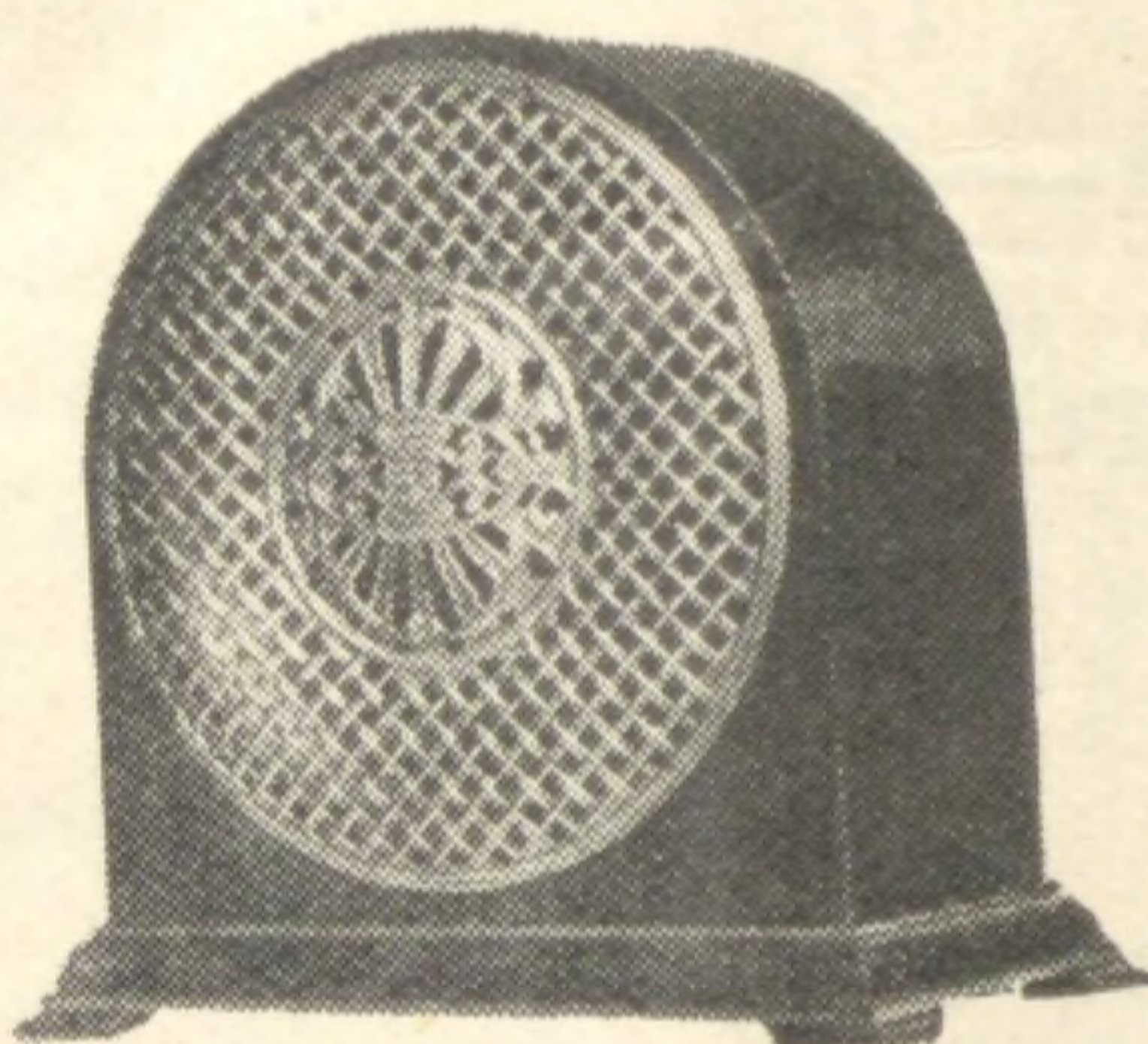
**RADIOLUX**  
(Junior Cone Type)  
RCO.

Old Price

Oak ..... £3/15/-  
Mahogany, £4/-/-

**New Price**

Oak ..... £3/-/-  
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**RADIOLUX (Reflector Horn Type).**

Old Price **New Price.**

Large (Metal)	RS 1	£7/-/-	<b>£3/10/-</b>
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Small (Oak)	RS 2	£6/-/-	<b>£2/17/-</b>
Small (Maple)	RS 3	£7/-/-	<b>£2/17/-</b>
Small (Tasmanian Blackwood)	RS 4	£7/-/-	<b>£2/17/-</b>

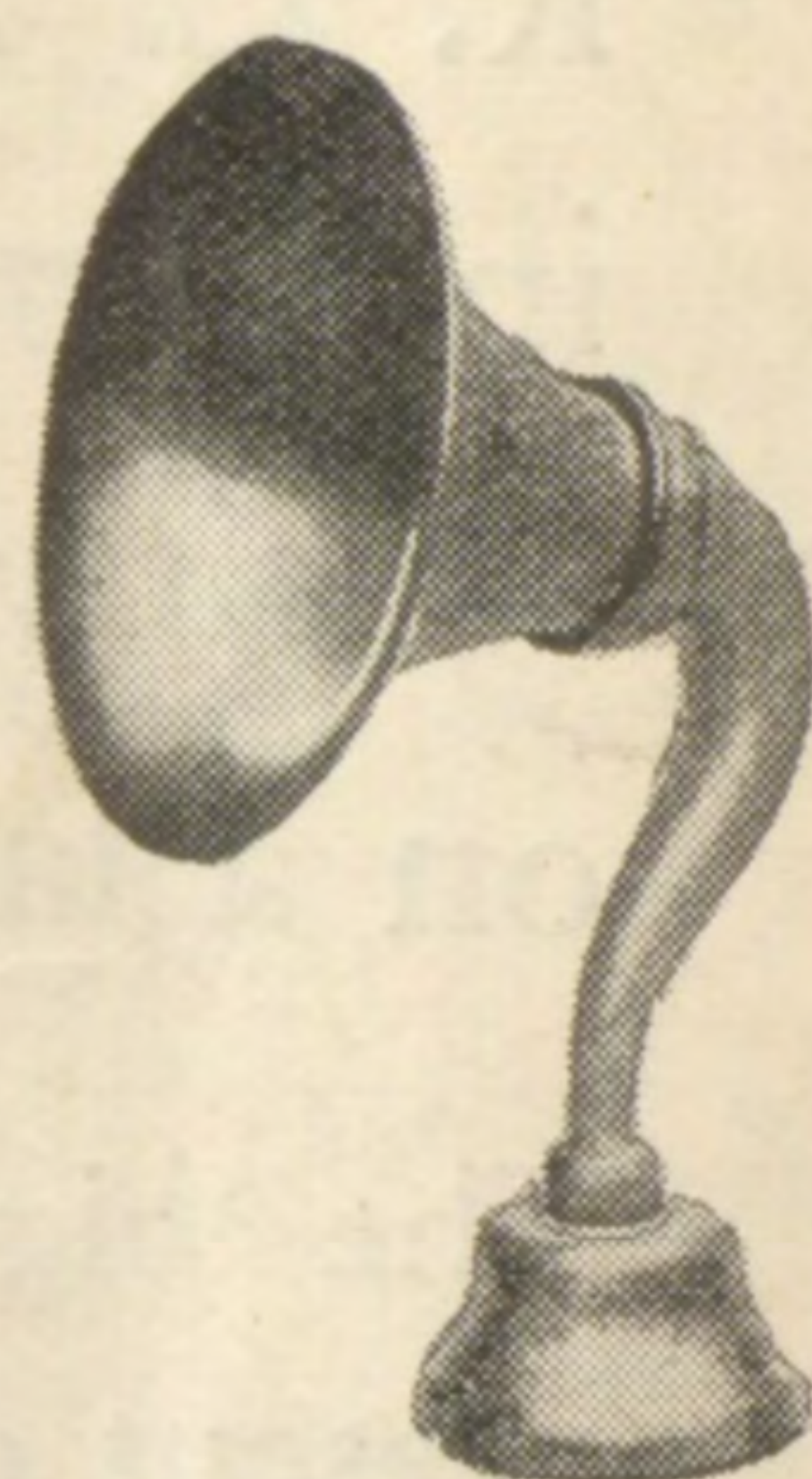
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