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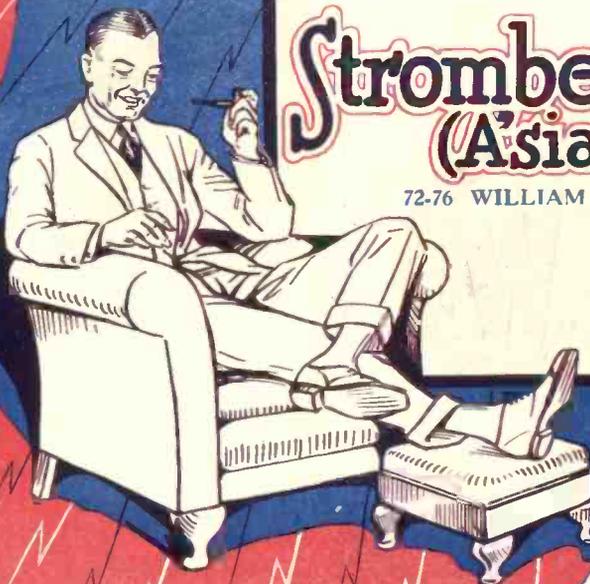
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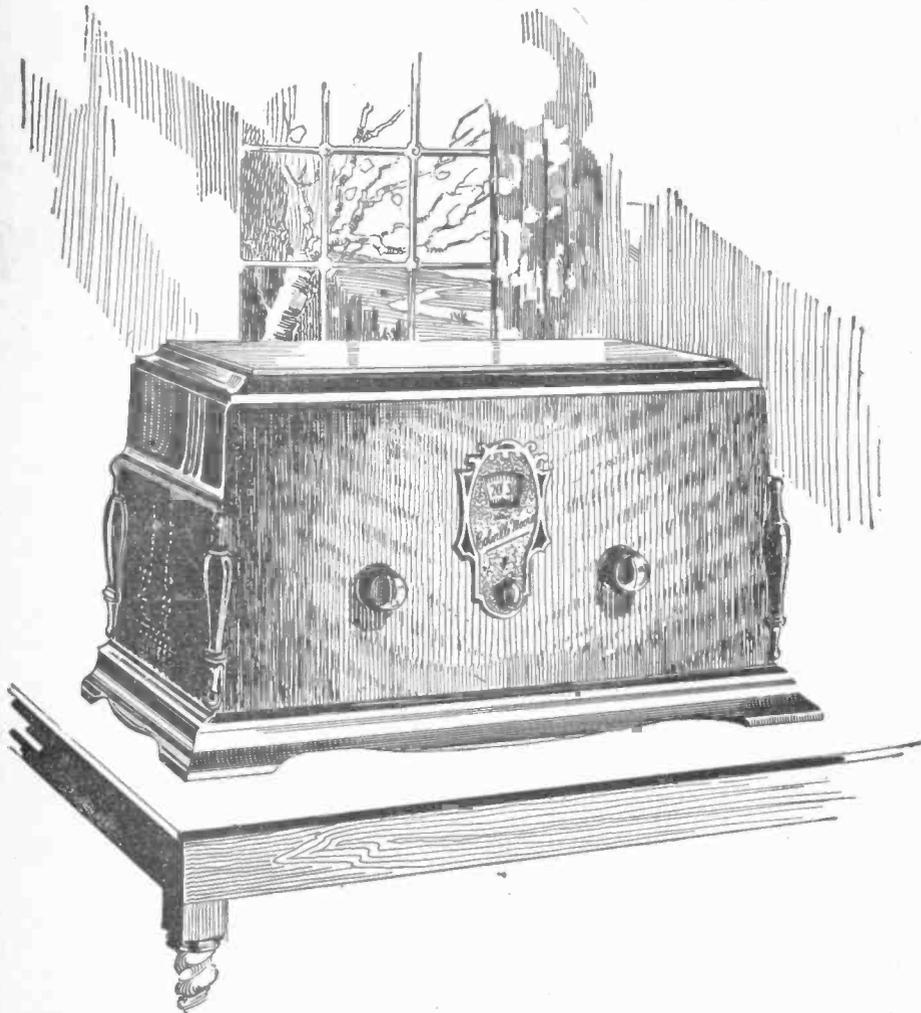
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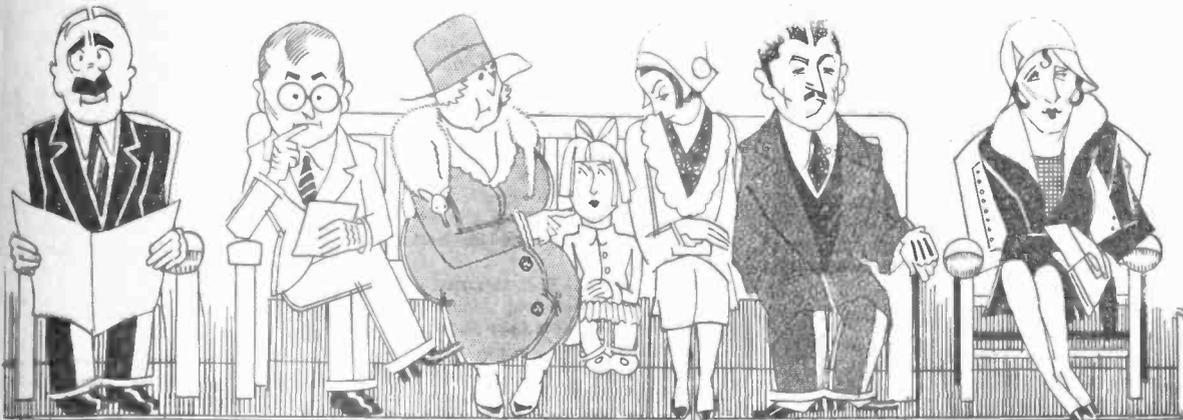
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AT THE TRIALS

Audition Day at the Broadcasting Company. Testing Would-be Performers

THEY sit on a pew and several chairs lining the long and narrow corridor opposite the board room of the Australian Broadcasting Company, Limited, on the second floor of Fifth House, which, as everybody knows, is situated in Pitt Street, between Market Street and the street higher up, the name of which has slipped our tongue for the time being. They sit in a long line on a varnished wooden pew and several picture-show chairs and wait and gaze at the obscured glass and papered partition, before them and wait and gaze at their feet and their hands and their neighbors' feet and hands, and wait and gaze at the door marked "Board Room" on its obscured glass panel.

They know, for the announcement has been made in the papers so that everyone may know, that behind that door sits at least one director of the Australian Broadcasting Company, Limited, stern and unflinching in his resolution to sit behind that door and listen to every one of the strange sounds which come intermittently and in a suffocated condition under the door even as they wait and gaze fixedly—men and women, young and old, beautiful and handsome, excited, depressed, ugly, decrepit, shabby, handboxed, or careless—as they wait and gaze fixedly. That man in the corner, with the lugubrious, lapped jaws, is a vaudeville comedian, probably, and the woman next to him is probably an amateur soprano whose friends have told her . . . and the man next but two up the row, with a violin case between his knees and the air of aloofness is probably a concert artist of some ability, probably a good deal disturbed that he should be placed, even for this afternoon, on the same footing as the man at his left-hand side, who conducts an uncultured conversation with his neighbor, a young saxophonist, on the necessity for light comic songs—he evidently "does" light comic songs—in the broadcasting programmes; the beautiful young thing quite near you, with the low-necked, short-skirted business and the fine silk stockings and the dainty shoes and the appealing lips is probably, very probably, a soubrette,

or singer of popular "hits"; and the girl sitting next to her—the plain girl, the very plain girl—is probably a well-trained contralto singer of fine songs. But you never can tell. You can't judge by appearances. That is why these people are here. That is why they sit on a pew and (da capo al fine).

Yes, that is why they are there. They have filled in a form and sent or brought it to the New South Wales studios of the Australian Broadcasting Company, Limited, 96-98 Market Street, Sydney; and that form has been examined, ticketed, docketed, numbered, and filed, and a letter has been sent to Mr. McJones or Miss or Mrs. McSmith, as the case may be, requesting them to give a trial performance of what they think they can do best on the date stated.

Madame Grieg, advisor to artists, comes along and checks off a name or so; then asks Mr., Mrs., or Miss So-and-So will he, she, or it come this way, please. Whoever-it-is walks down a long passage and enters.

It is, or was once, draped in black, from ceiling to linoleum, draped in heavy folded black stuff, which is there to dullen possible echoes from the walls. There are (or were):—

- A microphone,
- A table,
- A Baby Grand piano, and
- Mr. Carlton Fay.

Mr. Fay is the first (indeed, the only one) to move. Mr. Fay has a little list, and he checks off the name of the potential artist (for one may no longer disguise the fact that it is a potential would-be, or never-will-be, artist), and says, "Your music, please?" in the politest of possible manners. Then the game, or the fun, or what-have-you, begins. The potential artist may say:—
"Here is my music."

"I've left it in my bag outside! how silly of me!"

"I will myself accompany myself."
"I thought you'd be able to do a simple accompaniment like mine out of your own head. I didn't bring any music."

He may say any one of these, but he

doesn't generally say the first. Or he, or she, has laid down his bag when it entered the room and wonders where on earth it is, is sure he or she brought the bag in with it, can't understand how it got lost. Ah! there it is! Excited fumbling with the catch.

Then comes the question of what should be "done." They (we will call them "they"—it's much simpler) fumble forth a sheaf of ten or twelve songs or monologues, and say, "Which do you think I should do?"

"Which do you think you can do best?"

"Well, I do this very well, but do you think THEY'LL like this kind of . . . ?"

"I can't say."

"Well, this one, then; but I don't do this one quite so well . . ."

"Then do the other one."

"But do you think . . ."

"Oh, I'm sure of it! Thank you. Now, will you go up to the microphone and announce your name, and your number—that is, what you're going to do?"

"Go up to the— Oh! But I've never ANNOUNCED before! I didn't think . . ."

"It's quite easy. Just say your name and the title of your song."

"All right—ah—er—shall I say my full name?"

"Yes, say your full name."

Eventually they announce their full name, hesitantly, shakily; then the title of the song.

"Now, will you stand a little back, please?"

"But if I had to come up so close to talk, why do I have to step back to sing?"

"That is the Nature of Things, Madam (or Sir)."

Eventually the song begins. They have begun. Their test is begun!

But all is not yet over. Having started them on their test, and having got them warmed up to the exercise of their art, the powers must stop them when they think it necessary or desirable. Half a song will sometimes prove a beautiful voice. Half a song will generally prove a VERY "unsuitable" voice, and time is money. So there is

(Continued on Page 10.)

BIETWEIEN YOU AND MIE AND THE MICROPHONE

A Terrible Thing Has Happened

WE visited Mr. Norman Lyons just after he had formed the Boys' Model Aero Club. "It's going ahead wonderfully," said Mr. Lyons.

"Boys all over Australia are interested, but the funniest thing about it all is the way the boys' fathers ask for advice. They say, 'My boy couldn't make the R.O.G., Mr. Lyons, so I thought I would help him. Now, all I want to know is how do you fix the angle of those wings?'" Mr. Lyons laughed indulgently.

"They're really as keen as the kids themselves, only for some reason they're shy about letting you know it." We noticed a small model R.O.G. on his table. "Is that the R.O.G.?" we asked.

"Yes."

"Surely that can't fly!"

"Can't it!" exclaimed Mr. Lyons. "Here, you just watch." He picked it up, twisted the propeller, and launched it. It flew round and round the room. Then he made it rise from the table. It looped the loop, went into a tall spin, flew into the wall, and glode, gldor, glided to the floor.

"Little beaut, isn't it?"

"Not bad, Mr. Lyons."

"But that's nothing to what it CAN do."

Mr. Lyons launched it again to show us what it could do—

We left him adjusting the wings to make it loop the loop twice in one flight.

We went into our editor's room one evening when the day's work was done. As we entered our editor looked up with an angry snarl, saw who it was, and subsided. "Thought it was that — Hull," he explained. Then we noticed that he was studying a leaflet covered with diagrams and sections of model aeroplanes. On the table were opened cardboard cartons—fine sticks of light wood, a half-carved propeller, wires, glue of several sorts, and printed paper, obviously for wings. Our editor noticed our scrutiny. "Hull thinks he's the only one in this office who knows anything about model aeroplanes," he said grimly.

He began to pin the wing paper down on his blotting-pad, one eye on the blotting-pad, the other on the

instructions. Then he started hacking at the wooden strips with a razor blade. Then he put the short strips in their places on the wing, and we were just about to ask some silly questions when Mr. Hull came in, one hand behind him.

"Go on, get out of here!" cried our editor in a frenzy, pulling the evening edition of the "Sun" over his half-finished work.

Complacently Mr. Hull advanced a few steps more, and drew from behind him—a completed model of a Baby R.O.G.

Determinedly our editor swivelled round in his chair, away from Mr. Hull's deceitfully beaming countenance, and drummed on his desk with his fingertips.

"Little beauty, isn't it?" asked Mr. Hull of our editor's back.

Our editor made no reply. He set his teeth firmly, and made no reply.

"Watch how it flies," said Mr. Hull, rubbing it in. He wound it up, launched it, and it went circling round the room, and the editor could then no longer take no notice of it.

"Take the thing away! Play with it in the office! Go on!"

"Hullo, what are you doing?" asked Mr. Hull, calmly. "Are you making one yourself?"

"What's that to do with you?"

"Well, I'll give you a little help and advice if you like."

Shivering at the insult, our editor went on with his wing building, ignoring Mr. Hull absolutely. In a few minutes, however, he was studying his diagram perplexedly. Then he glanced sideways at the intent Mr. Hull, glancing back again quickly when he saw he was being watched. In a moment he glanced sideways again, then resolutely back to his diagram. Then

he looked up with a disgustingly conciliatory smile. "Now I wonder at what angle the wings should be set?"

"Like this," said Mr. Hull.

"Oh!—but—"

"Yes, it's quite all right. Then that comes in here, and this goes over those. And these fit in there, and—"

"For goodness sake, shut up! Think I can't understand it myself?"

And so on.

We left Mr. Hull and our editor quarrelling about how long the wings would have to lie before they were properly glued.

The next evening we found our editor twisting the propeller of his completed R.O.G. preparatory to its first flight. It nose-dived violently, and hit the floor with a sharp click. In succeeding flights it (a) crashed into the ceiling; (b) flew unsteadily at the filing cabinet, and turned a back somersault on the floor; and (c) waddled round and round the floor, snapping at desk legs, pillars, and skirting-boards. Then our editor allowed Mr. Hull to inspect it.

Mr. Hull did something to the wings, and twisted the rudder. Then he wound it up and launched it. It circled round the room twice.

"Lemme have a go now," said the editor, after Mr. Hull had repeated the performance.

This time it half-circled the room, looped the loop, and made a perfect landing on the linoleum. Our editor smiled. He smiled.

By this time we ourself were noticeably shaken. But, quickly smothering a desire to suggest several obvious adjustments, we made a supercilious remark about puerility.

"Listen here, James," said Mr. Hull.

"The fact is—"

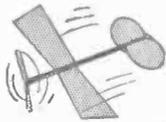
"Let me tell you."

"The fact is."

"Better men."

"The fact is," said the editor, suppressing Mr. Hull at last. "The fact is, my dear James (he is a supercilious sort of cuss, curse him) it is really a matter of being old enough to afford to appear youthful, without fear of losing the newly-won dignity of manhood."

And with this crushing truth upon us, we sat down to write a very withering article for this page on "Aeronautics as a Factor in Cases of Arrested Dementia." Which we would have concluded very satisfactorily but for the disturbing problems arising from any serious consideration of this subject. You see, we have found it imperative to test our thesis by building ourselves a larger more stable, and in every way superior R.O.G. There is just one trouble now, at what angle does one set the wings?



A Story of Love's Selectivity

IN Mosman, over the Harbor from Sydney, a suburb whose streets are fast becoming as concrete as its inhabitants and almost as respectable, there lived a maiden by the name of Julia. Her father was a warehouseman, otherwise he could not have lived in Mosman, and her mother was the wife of her father, whose surname was Bembricks. The Bembricks family lived very happily in a cottage, which I shall not attempt to distinguish, as its description would be that of many other cottages in that delightful locality. Julia Bembricks! No, I prefer to think of her as Julia, Julia, then. What associations does the name revive! Bob Herrick testifies:—

"When as in silks my Julia goes—"

Shakespeare testifies—no, I was thinking of Silvia. Julia was tall, languid, intense, and carried her black bobbed head with the air of a princess. Her face was a delicate oval, because all faces that are novelistically oval are delicate and vice-versa. There was in her eyes a gleam of wistfulness, though why it is impossible to imagine. Was she not living a perfectly calm and untroubled life with respectable parents? She was. Did she ever express a desire that was not at once acceded to? She didn't. Did she not go out to dances every other night in the week? She did. Was she not the magnet of admiring eyes wherever she went? She was. Why, then, the gleam of wistfulness? No one knew. In fact, no one ever noticed it. In fact, Julia herself never referred to it.

My wiser readers will have at once inferred the true cause of that gleam of wistfulness. She had no suitors? Well, you're wrong. She had two. Vivian Brangton was one, and Edward Sellings the other. Vivian Brangton loved her as he had never before loved any woman—as we say. Edward Sellings had never before loved any woman, and bestowed upon her the ardency of passions stored in bond. For business reasons Mr. Sellings disliked Mr. Brangton. For the same reasons Mr. Brangton disliked Mr. Sellings. You suspect that phrase. Business reasons? Well, the fact is, Mr. Sellings was the proprietor of the "Honestweight" Radio Store in Pitt Street, and Mr. Brangton owned the "Perfection" Radio Shop on the opposite side of the street. It seemed fated that in all things Mr. Sellings and Mr. Brangton should be rivals—for Mr. Sellings was a tenor of no mean ability. His talent induced Mr. Stuart F. Doyle (on behalf of his fellow directors of the A.B.C., Mr. Frank Albert and Sir Benjamin Fuller) to grant him regular engagements to sing from 2BL. At the same time Mr. Brangton's tenor was by no means inferior, and induced Mr. Stuart F. Doyle (on behalf of the said fellow directors) to grant him regular engagements to sing from 2FC. Viewed as potential husbands, their qualities were similar in every noticeable respect.

But the choice, it was felt by all concerned, must be made. This feeling reached its crucial point in the Bembricks' drawing-room on a cold winter Tuesday night. Mr. Sellings sat on a chair on one side of the ra-



"O Woman! in our hours of ease, Uncertain, coy, and hard to please." —Scott.

JULIA'S CHOICE

By FELIX O'NEIL

diator. Mr. Brangton sat in a chair on the other side of the radiator. Miss Bembricks sat on the long, comfortable lounge in front of the radiator, which radiator was a present to Miss Bembricks from Mr. Sellings. They were listening to 2BL's programme, which boomed out breezily from a Bungfone loud-speaker, also a present from Mr. Sellings to Miss Bembricks, and which was audio-frequenced and power-amplified from an "Honestweight Four," the gift to Miss Bembricks of Mr. Brangton.

"I think," said Miss Bembricks, "I think you'd better turn off the receiver. I have something to say to you."

Mr. Sellings rose frigidly and removed the loud-speaker terminals from the receiver panel, as Mr. Brangton, equally frigid, pulled out the switch. They resumed their seats.

"It is a very unpleasant situation," continued Miss Bembricks, "but I feel that it is impossible for me to keep you two gentlemen in suspense any longer. I am an innocent, although modern, girl, but I would be blind if I did not notice in you gentlemen marks of that affection commonly styled love." "Just so," said Mr. Sellings. "Of course," said Mr. Brangton.

"It is as I thought," continued Miss Bembricks, "and I have not spoken too soon. Why I should have inspired such an affection is impossible for me to say—"

"Not at all," interrupted Mr. Brangton. "Oh no!" exclaimed Mr. Sellings.

"In any case, I shall not say it," responded Miss Bembricks. "Now, I am not by nature

either coquettish or coy; I prefer to make my decisions in all matters as quietly, as calmly, and as quickly as is possible. So I have been bred by the most indulgent and uncompromising of fathers, and the most loving but virtuous of mothers."

"Exactly," said Mr. Sellings. "Most becoming," murmured Mr. Brangton.

"Therefore, for the past three years," went on Miss Bembricks, "since I have been in receipt of your valued favours, I have observed, minutely, every detail of your respective bearings. I have also considered every aspect and circumstance of marital relationship, and have attempted, to the best of my ability, to envisage each of you, beginning in alphabetical order, in a matrimonial setting of which I formed part. I have now made up my mind. The time has come for me to make my choice."

There was a silence in the Bembricks drawing-room for quite some time, while Miss Bembricks gazed earnestly forward; while Mr. Sellings glared at Mr. Brangton; while Mr. Brangton glared at Mr. Sellings.

Mr. Sellings broke that silence. "Your choicel and that is—?"

"Is—?" supplemented Mr. Brangton.

"Please, not so fast," said Miss Bembricks. "I said the time had come for me to make my choice. Let me say that I can perceive in neither of you two gentlemen anything to make me prefer one to the other. There must be a further test. You know how fond I am of the well-produced voice?"

Two heads nodded grave acquiescence.

"I have noticed that you are both singing over the air to-morrow night—Mr. Brangton from 2FC, Mr. Sellings from 2BL. I have decided to choose the man whose voice appeals most to me to-morrow night. Is that acceptable?"

"Naturally," agreed Mr. Sellings. "You favour me immensely."

"Quite acceptable," said Mr. Brangton, "since Mr. Sellings seems satisfied."

"Very good, then," replied Miss Bembricks. "I shall listen for your voices to-morrow night."

Next morning, Mr. Brangton went into the workshop at the rear of his "Perfection" radio shop, and called out to a young man, who was cursing loudly and swearing profusely over a diminutive, four-valve set in a distant corner.

He looked up as Mr. Brangton entered. "This'll be a wonderful DX job, boss," he said. "We'll be able to get all the foreigners on loud speaker."

"Stop thinking about long-distance for a while, Terrie. I've got a job for you."

Terrie came over to the doorway. "Come into my office," said Mr. Brangton. Terrie went into Mr. Brangton's office. "It's rather a special job," continued Mr. Brangton, "seating himself in his comfortable swivel chair. "Sit down." Terrie sat down.

"I want you to go out to this address to-night," said Mr. Brangton, after a short pause. "It's an Honestweight Four job, and

all you've got to say is that I sent you to tune it up. And see you tune it up as it's never been tuned up before. That is, until I have sung from 2FC, at eight-fifteen. After that—and listen carefully to this—I want you to . . .” and here they went off into a long technical discussion, which can only bore the inexpert reader. It is enough for me to say that at one o'clock Mr. Brangton went out to lunch with a light and merry step, smiling delightedly to himself at odd intervals.

On the same morning, at twelve forty-five, Mr. Sellings called in his chief salesman. “I've got a special job for you, Larrie; in fact, rather an unpleasant job; but I've noticed you can generally get things done—in fact, you've been marked out to me by several customers as the go-getter of this place.”

“Oh, well, Mr. Sellings. It's all in a day's work.”

“Exactly, Larrie, but this job is a little unusual. I'd do it myself, only I'm singing from 2BL to-night at eight-thirty. However, it needs someone with plenty of commonsense and a good deal of bounce, if you follow me.”

“Quite, Mr. Sellings. You can count on me for anything short of murder.”

“Well, it's not that bad. You know Brangton over the way—well, he's singing from 2FC at eight-fifteen to-night. Well, I want you to go up to 2FC and get into the control room. It'll be the hardest thing you've ever tried in your life, but I'm counting on you.”

“I'll do it, Mr. Sellings.”

“Good! Now, when you get there I want you to . . .” they began to discuss the details. Who cares about details? It is enough to say that Mr. Sellings went out to lunch at one o'clock with a carefree swing to his shoulders and a Satanic smile.

At eight-thirteen that night everything in the 2FC garden was lovely. Mr. Cochrane sat at the announcer's desk in befitting dignity. The control operator, behind his glass window, looked almost satisfied with his programme. Mr. Cochrane coughed, took the headphones off his ears, raised his right hand and arm to his diminutive switchboard, and chose an appropriate lever which, after a moment's reflection, he pulled down.

“2FC, Sydney,” he announced; “the Australian Broadcasting Company, supplying the National Broadcasting Service, calling on four-forty-two metres. Our Theatre transmission is concluded. We have returned to the studio, where you will hear Mr. Vivian Brangton, tenor, singing two songs. Mr. Brangton's first number will be, “Come into the Garden, Maud.” Mr. Cochrane pulled down another lever. A bell tinkled and a light flashed above a microphone at the far end of the studio. Mr. Chapple began the accompaniment to “Come into the Garden, Maud.” Mr. Vivian Brangton looked soulfully into the microphone, waved his head once or twice to the music, and began at the right place.

“D'you mind if I come in?” asked Larrie, putting his head round the control-room door and drawing himself after it.

“What?” asked the control-room operator. “That's a wonderful bit of panelling,” said Larrie admiringly, pointing to the 2FC control boards. “I'm in the trade myself. Would you mind explaining it to me?”

“Just a minute, till I see what this bird's doing,” answered the operator, more like a human being.

Larrie spent the waiting minute gazing fixedly through the window at the strained face of Mr. Vivian Brangton. Mr. Brangton

soon became aware of this fixed gaze. Frowned, and began the second verse a half bar before time. “He's not singing too well, to-night,” said the control operator. “What do you want to know?”

“Are those the control panels? How do they work?”

“Oh, you just turn them to the right for more volume, to the left for less. Some singers are able to control their own volume, but with others we've got to hang on to the switch all the time, or they'd blow the station off the air.”

“Must keep you pretty busy.”

“Yes, we've got to watch the indicator all the time.” He pointed to a meter in which a hand wobbled about uncertainly over a few points. Suddenly it shot up, nearly the full sweep of the dial. Mr. Brangton was growing passionate. The operator moved his

Radio Voice Competition

At last an opportunity offers for the budding vocalist to get into the limelight. In connection with the Lord Mayor's 3LO Community Singing Session, held at the Melbourne Town Hall each Thursday, a Radio Voice Competition has been arranged, the prizes being (1) Five engagements to sing at 3LO and/or 3AR and a gold medal, (2) three engagements, while the third prize carries two engagements. Entrants are required to sing a song of their own choice from the A.B.C. Community Song Book. Competitors will be judged by the Community Singing audience each day, and the winners so selected will be judged by adjudicators appointed by the Australian Broadcasting Company when the preliminary judging is complete. Entry forms are obtainable from Mr. Frank Hatherley, c/o 3LO, Melbourne Place, Russell Street, Melbourne, or from the Town Hall, during Community Singing.

switch a few points to the left. “That's what you've got to be careful of,” he said disgustedly.

“Moord! Moooord! Commmmmm! I'm here, art theeeee gaaaaaate!” sang Mr. Brangton. At this moment Larrie turned again to the window, and, looking intently at Mr. Brangton, raised his fingers to his nose in extended order.

“Alooooooown!” ended Mr. Brangton, but not triumphantly. In fact, he was one and a half tones flat. Mr. Vivian Brangton looked angrily towards the control panel. Larrie's face was no longer visible. Mr. Brangton made several paces for the studio door, then stopped. Mr. Cochrane was announcing. “Mr. Brangton's second number is ‘Invictus’ from the poem of Henley.” The light flashed above the microphone once more. Mr. Chapple began the accompaniment.

“Out of the depths that covered me,” sang Mr. Brangton, and went on to thanking whatever Gods might be for his Unconquerable Soul.

Meanwhile, in the control room, Larrie was sitting carelessly watching the orchestra performing through the opposite window, in the Number Two Studio. Suddenly he started: “Hey, what's that chap doing over there? Looks as though he wants you!”

“Where?” snapped the control operator.

“In the next room.”

The control operator looked at his indicators, moved his control switch a few points down, and dashed out into number two studio. Larrie was leaving the control room as he returned.

“Who did you say wanted me?” asked the control operator.

“I thought I saw someone waving for you in the studio.”

“No one there wanted me.”

“I'm awfully sorry—my mistake. I'm not used to being up here, you see.”

“Oh, that's all right.” The control operator opened the door. Larrie went out.

The control-room speaker was shrieking and blasting. He turned to Larrie. “Hey, did you move that switch?”

The answer was the slamming of the lift door as Larrie pressed the ground-floor button. The operator rushed inside and turned the switch down several points. “I'll swear I didn't leave it as high as that,” he muttered. “Curse him! Wonder what his game was. . . .”

Mr. Cochrane was announcing the next artist as Mr. Brangton knocked at the control-room door. “Who was that in here just now?” he asked, through the half-open door. “A friend of yours?”

“I don't know who he was. Just came in and said he wanted to look at the panels. Why? Do you know him?”

“No, but I've got a good idea. The . . . put me off on a last note! G'night.” Mr. Brangton slammed the door, found his hat and overcoat, brought the lift up, slashed the doors apart, snapped them to again, and descended, muttering to himself. “Might have known what to expect from Sellings! Might have known he'd come at some of his dirty tricks! Anyhow. . . .” Mr. Brangton consoled himself with numerous dark reflections.

When Mr. Sellings arrived at the Mosman wharf, he found Mr. Brangton waiting. Mr. Sellings prided himself on being a sport and a gentleman. “Hullo, Viv!” he said, cheerfully. “How'd the songs go?”

“Not very well, Ed,” answered Mr. Brangton, trying to speak icily. “How'd you get on?”

“Oh, so-so. Just as usual, Viv. No trouble up at 2FC?”

“Did you expect there would be any?”

“No—er—no. No—why should I expect there would be?”

“Well, a chap in the control room pulled faces at me. Put me off on a last note.”

“Good God!” Mr. Sellings tried to conceal his elation.

“Yes, and if I knew why he did it, someone's neck would be wrung,” said Mr. Brangton. “I've probably lost everything now. His tone was unconvincing. Mr. Sellings looked at him cautiously. “Wonder what he's been up to,” he thought.

“Well, it was a definite trial,” he said aloud. “There can't be another.”

“No,” said Mr. Brangton. “There can't be another. I'll remember you said that.” The boat came in. They went aboard.

They got off the boat at the Mosman wharf.

They went up together in the Mosman tram—each paying his own fare.

They got off at the same place. They reached the front gate of the Bembricks cottage.

“Oh, Mr. Brangton!” cried Julia, “it was wonderful!”

“Glad you liked it.” Mr. Brangton looked sideways at Mr. Sellings.

“Yes, Mr. Sellings—you should have been here to listen! Terrie,—”

“Who's Terrie?” asked Mr. Sellings.

“My mechanic,” said Mr. Brangton shortly.

“Oh, I begin to see! I'll have a few words with you later about—”

“You've no idea what the volume was like,” continued Julia. “Of course, Terrie said it was a good night for reception, but just imagine us holding JOBK for a whole hour, from eight till nine!”

JOHN PESEK—"TIGER MAN"

An interview with the popular wrestler, whose matches have interested thousands of listeners.

BILLY EDWARDS opened the boom period of wrestling in Melbourne during the early part of 1927, when he exploited roughness as a drawing card, on the shrewd assumption that the more unpopular he became the more people would flock to see him beaten. This proved to be the case for a while.

Had he not been rough, he would have been more popular, but not have drawn the crowd. In five matches he made £3000. He was a master showman of the ring, and especially cultivated the art of mock savagery, thereby pandering to the popular taste at the time being.

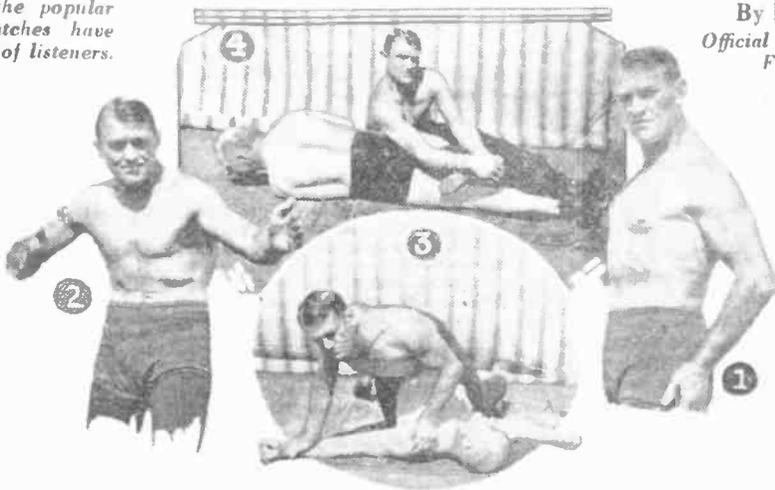
But the artificiality of his tactics eventually reacted against him, and a taste for clean and scientific sport set in, following the advent of Ad. Santel and Zarynoff. Sydney, however, showed exactly the same preference for this class of rough wrestling last year, being entertained by Al Karasick, John Kilonis, and Nichols. The quieter element of the wrestlers here, Ecklund, Santel, and Zarynoff, left the crowd with little thrill.

But clean, scientific wrestling has come into its own, and the huge audiences that have packed the Sydney Stadium have not been slow to show their appreciation. Santel, Zarynoff, Eustace, Browning, Ecklund, and, the greatest of them all, John Pesek, are all clean wrestlers.

John Pesek, known to all the wrestling enthusiasts as "The Tiger Man," has rightly earned this sobriquet, on account of the tiger-like tenacity with which he sticks to a hold once obtained, the litheness with which he moves, and the characteristic speed of that animal. But in attack or defence he radiates that cleanliness, which, with a tenacity of purpose, has made him what he is to-day.

Unassuming

The writer had met Pesek in the hectic, excited surroundings of the dressing-rooms, prior to a match, and in Withrow's training rooms, and thought he would like to have a chat with this "Tiger Man" away from the usual wrestling atmosphere. So I walked around to his flat in Darlinghurst, and was immediately asked to come right in. John was in the middle of dressing, but quickly put me at my ease with a cheery greeting. We started talking broadcasting, and some of the features of the matches held recently. During this time he took a neatly-folded grey suit from a tidily packed Hartman trunk, cleaned his shoes with extra care, and then tidied his room before leaving it. When we arrived in the lounge I told him that I would like to hear his views on Australia, about his home life, and about anything that appealed to him, except wrestling in Australia. His unassuming manner soon became manifest; we went to the grill-room. This was approaching mid-day. He only has two meals a day, and meat only once. On the day of a match he has a light meal about 10 a.m., and nothing else till after the match.



1) Pesek showing chest at normal expansion. 2) Ready to make his tiger-like dive over the head of his opponent, usually obtaining a forward chancery and arm bar. 3) Pesek and his training partner, Peter Limatkon, showing combination hold of leg press, body press, and arm bar. This hold he used to pin Zarynoff in their last match. 4) Showing favorite toe hold, mostly used by Ad Santel. A very punishing hold, in which Pesek is using his own leg as a bar and jerking his opponent's leg up and across it.

We soon were chatting about every-day subjects, and his face radiated happiness when he talked about his home. Pesek is a farmer in Nebraska, and he does all his training in America on his farm. He is very much in love with his wife and two children, a son aged five, and a girl aged eight.

"You know, one of my greatest pleasures is to take a gun and a sports bag, and tramp the country, filling my lungs with that invigorating air that only the country has, appreciating every minute of the day, even though shooting be poor. My boy apparently has the same ideas as myself.

"You realise that I like to talk about my home first, but I do feel happy in this country, because the people are likeable, and the opportunities are so great for such a young country."

By this time we were through lunch, and had adjourned to the lounge, where our talk gradually drifted towards wrestling again. It was with difficulty that one could get Pesek to talk about his past matches. Bit by bit, he told me the following.

Wrestled With Cowboys

"I have been wrestling as long as I can remember. When I was a boy going to school, I learned to look after myself, and a little later I wrestled with the cowboys out in the prairies. We knew little or nothing about rules. The hard ground was the mat, and it was always rough and tumble—Rafferty's rules, where the one that could last the longest was the winner. Later on, I took up boxing, as there was money to be made in it. I was matched against Walter Harwood, and I knocked him out in the first round. He was unconscious for two days. This boxing had my mother worried, and she tried to persuade me to give it up. I had to later on, because the authorities in Nebraska prohibited it. It was then that I took to wrestling. I found out that I liked it better, and that I could make money at it if I made good. I believe that I've done this, because in the last thousand matches I have lost the referee's decision

By FRED JOHNS
Official Wrestling Announcer
For the A.B.C.

maybe ten times, but no more. To date I have met and beaten every man of note. I hold decisions over two world's champions, when they were in their prime—Joe Stecher and Strangler Lewis.

My manager, Al Haft, who came out here with me from America, left here a few weeks ago, and proceeded to India to arrange a match with the great Indian wrestler, Gama, who so sensationally defeated Stan Zibisco. I received a wire from

Al, stating that he could not arrange the match, because Gama had refused to meet me. That is really too bad, as I would like to have gone to India and met this champion.

"When Wills, the colored champion boxer, was after Dempsey's scalp for the heavy-weight boxing title, and Dempsey stated that he drew the color line, Mr. Lichenstein, a close friend of Dempsey, offered to back me for twenty-five thousand dollars to meet Wills in an all-in match, rough and tumble, any place, any time, anywhere, but Wills refused the offer.

"A week before I left America for Australia, two boxing managers in Cleveland, Ohio, asked me to box a match, on the quiet, against Joe Malley, who won the Cleveland boxing tournament. It was to settle an argument between the two managers, and the wager was a suit of clothes. I knocked Malley out in the first round.

Eyes on World Championship

"What I would really like is a match with Sonenberg, who is claiming the world's heavyweight wrestling title in America now. For the past fifteen months I have deposited fifty thousand dollars with the Quality Club, Boxing and Athletic Commission, in Columbus, for a title match with this Sonenberg, win, draw, or lose, but so far Sonenberg has refused to meet me. But he cannot do this for ever, and when the time does come, well—you shall see. I've waited a long time."

Thus, in his quiet way, he stated a few of the facts about himself that will be of interest to many listeners, who have learned, over the air, about this "Tiger Man." He is very human, and a really likeable sport. He is 34 years of age, and is not yet, therefore, in his prime. He is 5ft. 11in. in height, but looks smaller, and weighs 13st. 7lb. He was born and bred in America, his father being an American, and his mother is a Bohemian.

He has enormous chest expansion, and this probably accounts for him being able to get out of some of those seemingly impossible holds. Normal chest measurement is 44in., and he expands thirteen inches. When he completes his contract here with Stadiums, Ltd., he is returning to America, where he hopes to get a title match with Sonenberg.

When Strangler Lewis last met Sonenberg in a title-match, the house brought 90,000 dollars, and when Pesek last met Joe Stecher, each man received fifteen thousand dollars as each one's portion of the gate.

: : EXTRAORDINARY DX : :

Location in DX.

Dear Sir,—As a DX enthusiast, with some claims to experience in that particular line, I have read with interest the letters that have appeared in recent issues of "Wireless Weekly."

Mr. Rawdon H. Suttor's experiences with his ten-tube receiver are of very great interest to me, but the conclusions that I have come to, after a series of tests with a number of different localities during the last two or three years, the reception of weak and distant stations, there is another feature which is of greater importance.

This feature is illustrated in the Editorial on superheterodynes, in the issue of September 27, in paragraph 5 of which article it states:—"No matter what set is used, if the natural noise level is above the signal strength of the station, it cannot be heard satisfactorily."

In dealing with receivers such as the Norden Hauch, with four or more stages of r.f. amplification, the above is the crux of the whole matter, and I have recently demonstrated this fact in connection with a 7-tube "Sargent-Rayment," which I imported from America.

This set is, of course, designed for use with the American type of tube, and has four stages of screen-grid r.f.

Using the tubes for which the set was designed, this receiver is quite useless for the reception of weak stations, owing to the fact that the ratio of noise level to signal strength is so very high. Replacing the American tubes for those of a well-known Continental manufacturer, after the necessary alterations had been made to the wiring, etc., it was found that the noise level had dropped about 100 per cent., and that it was possible to receive stations clearly, and almost without background, that one had not been able to hear at all with the original tubes.

I myself use an 8-tube single control receiver, employing four stages of r.f., with the three electrode tube, and, although I do not wish to compare the results that I have obtained with the wonderful results with one tube sets, by such as "Radio Fan," the fact that I have confirmed reception from 239 stations on the broadcast band outside Australia, will go to show what can be done with a set that is quiet.

Of the above stations, 131 are in the U.S. and Canada, and 53 in Europe, and I would like to add here that the station at Langenburg heard by Mr. Suttor can be heard almost any morning between November and March, though not audible during the winter months.

To those on the look-out for new stations, the following list of American stations that can be heard up to 7 o'clock any evening will possibly be of interest:—

KPLA, Los Angeles, 526 metres, up to 7 p.m. Sydney time.
 KFRC, San Francisco, 492 metres, up to 7 p.m.
 KFI, Los Angeles, 469 metres, up to 7 p.m.
 KPO, San Francisco, 441 metres, on Sunday evenings.
 KFVD, Venice, 428 metres, up to 7 p.m.
 KTM, Santa Monica, 384 metres, up to 7 p.m.
 KGO, Oakland, 380 metres, up to 6 p.m.
 KFQZ, Hollywood, 353 metres, Sunday evenings to 7 o'clock.
 KHJ, Los Angeles, 333 metres, up to 7 p.m.
 KOMO, Seattle, 326 metres, up to 7 p.m.
 KPWB, Los Angeles, 316 metres, up to 7 p.m.

Unusual long-distance records are reported by correspondents on this page. Readers are invited to forward their own list of stations, stating time schedules of stations, type of receiver used and location.

KPLA, Los Angeles, 300 metres, up to 7 p.m.
 KNX, Hollywood, 286 metres, up to 7 p.m.
 KMOX, St. Louis, 275 metres, up to 7 p.m. (frequently).

KMIC, Inglewood, 268 metres, up to 7 p.m.
 KEX, Portland, 254 metres, up to 7 p.m.
 KFOX, Long Beach, 240 metres, up to 7 p.m.
 KPQ, Seattle, 248 metres, up to 7 p.m.
 KGER, Long Beach, 219 metres, up to 7 p.m.
 WEAF, New York, 454 metres, after 10 p.m.
 WLW, Cincinnati, 428 metres, after 11 p.m.
 KSL, Salt Lake City, 265 metres, after 11 p.m.

As a matter of fact, there are many others to be heard after 11 p.m., but those stations on the above list are the earliest to log.

Yours etc.,
 K. L. WILLIAMS.

Pimba, South Australia.

"DX Fan" Replies to "Radio Ace"

Dear Sir,—I would like to thank "Radio Ace" through the Safety-Valve, for his kind remarks (published 27/9/29). It may be of interest to him, and to others also, to know that I attribute the performance of my one-valve to many things, particularly good conditions.

In my opinion, regular reception of far distant stations is hardly possible with a small set, but with extreme care I have succeeded in logging a fair number. I am situated on the highest part of the district, and my aerial is higher than any nearby object. It is perfectly insulated, and the earth very short and efficient. Only high-quality gear is used, and extreme care is necessary in tuning DX.—I am often obliged to use very slight hand capacity to adjust their reaction I have also been fortunate in searching in the right place at the best time.

KDKA, on about 309 metres, has been excellent a couple of times lately—no doubt Mr Suttor, of Tamworth, has heard it. Yes. "Dadio Age," I have good hearing, but doubt if it equals the R.F. mentioned by you.

Having been given the circuit by a ham, I must see if he would be agreeable before giving it out, though it is no freak, but I have not seen it elsewhere. I hope this is not taking too much space, but it may assist your other fans in getting similar results.

My log now is 72, but how about Mr. Danslow? I should think it would take about 10,000 cards to cover a house! Perhaps he would allow a photograph or two of them to be published. I am sure many would like to see them—I would.

Yours, etc.

DX FAN.

Stanmore.

Dutch I.A.R.U.

Dear Sir,—We beg to inform you that the QRA of our QSL section, the only one for Holland, has been changed. The new address is:—

QSL Bureau, N.V.I.R., Postbox 400, Rotterdam, Holland.

Tnx es 73.
 SECRETARY, N.V.I.R.

Holland.

Short Waves

Dear Sir,—With regard to short-wave reception on three valves. During the weekend, including Eighth-hour Day, I spent a good deal of time in the early hours of the morning logging foreign stations. PHI were coming in with excellent volume, probably the loudest station I have had yet, but just below this station, I should say on about 16.4 metres, I have twice raised a very powerful foreigner working Amsterdam. During about the last three-quarters of an hour of their transmissions on both occasions, a woman did most of the talking, while the announcer would say a word or two now and then. On one occasion they appeared to be running over a list of the big shipping ports of the world. They finished at about 2.30 a.m., playing their national anthem, and without any English call sign. The station was definitely not PLE (Bandoeng), as they come in on about 15.7 metres. Also, Radio Manila were coming in fairly strongly on 49 metres, slightly above this on about 50 metres I could hear a strong foreigner putting over musical selections. This station was best at 10.30 p.m. Friday, October 4. Some reader might be able to enlighten me as to whom this was.—Yours, etc.

Edgecliff. JAMES D. FLASHMAN.

KHJ and WOW

Dear Sir,—Your correspondent "Logged Another One," of Wollongong, has logged KHK on a wave a little under 1YA. I have heard this station also, and always thought the call sign was KHJ. I first tuned this station in while the landing of the Graf Zeppelin was being described, and at the best they were coming through at about R5. I have also heard WOW (Ohama) lately on a wave between that of 2YA and 2FC. There is another listener of Jones Island who has heard KHJ, and he also distinguished the call as KHJ.—Yours, etc.,

Jones Island. D. R. GILL.

KHJ and KPSN

Dear Sir,—I wish to correct "Logged Another One" (W.W., September 27). The Californian station he received was KHJ, not KHK, as he states. Station operates on 333.1 metres, 900 k.c., with a power of 1000 watts, and usually closes down at 7 p.m., Sydney time. The other station he mentions is, I fancy, KPSN, Pasadena, California.

If he takes the trouble to get the name of one of their items broadcast, and writes to them, mentioning time, etc., he will get a pretty little card in return, which will be worth sticking on the lid of his receiver.—Yours, etc.,

F. W. HEWSON.
 Augathella, Q.

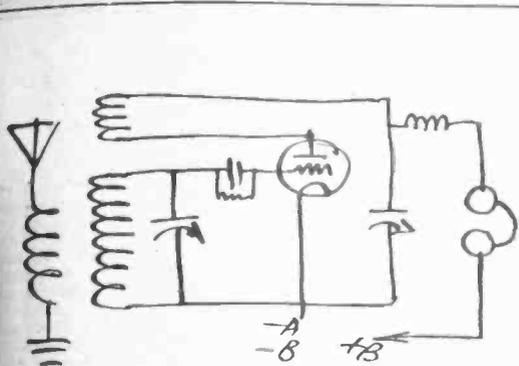
Crystal Reception

Dear Sir,—I heartily agree with "Hertzite" and "Crystal User" in suggesting that you devote one or more pages each week to crystal set owners. Here is a list of the stations that I can receive on my crystal set: 2FC. 3LO. 2BL. 2GB. 2UE. 2KY, and 2UW.

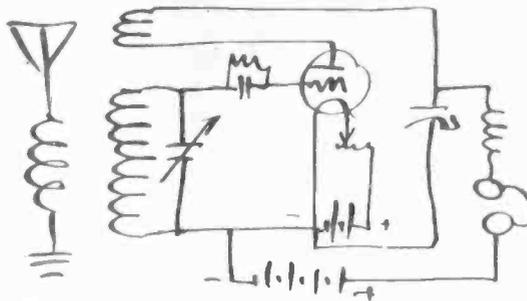
By adding a two-valve amplifier, I can hear VK2AD, Sydney, 3AR, Melbourne, 4QG, Brisbane, and 5CL, Adelaide. Of course, 5CL can only be heard under favorable conditions, but the other interstate stations can be heard nearly any evening.

Yours etc.,
 W. G. CUMMING.

Mosman.



*This is my circuit -
It works something
terrible!*



*What do you think of
my wonderful circuit -
it gets 50AK, 2YA, 1YA
and 75 other distant
stations.*

SOME MORE ABOUT CIRCUITS!

Further Emphasising the Need for Commonsense in Their Use

By ROSS A. HULL

THERE is still a raging interest in circuits. Enthusiasts in thousands still appear to consider them as the very foundation of everything.

"Please can you give me the latest two-valve circuit," is the continual plea, "one that is good on interstate reception?" If it is not a two-valve, it is a crystal circuit, or one for three or four valves. And if it is not a request for a circuit, it is something about changing an existing circuit. "If I convert this circuit to a Marco," they will say, "will I be able to get 2YA?"

"Hush, Hush" Circuits

"It is a crying shame," bemoans another circuit fiend, "that these fellows who get the wonderful results they talk about in the 'Safety Valve' won't publish their circuits—think how radio would progress if they did." To which we are in the habit of replying, sotto voce, "eye-wash, rubbish, rot, bunkum," or a similar group of equally suitable words, which happen to be available at the moment. If all the record breakers published their circuits, we would undoubtedly find them to be nothing more thrilling than a collection of the same old stand-bys that we have been using for years. The circuit diagrams in themselves would provide not the slightest clue to the reason for the unusual success of the receivers.

Only if the record-breakers could describe the extent of interference from power leaks or electrical machines, the location of their aerial, and its details, the apparatus used in their set, and the manner in which it was built, adjusted, and tuned, only if they would tell of these factors would the real

reasons for their success be disclosed. The circuit, by itself, probably would constitute the least useful piece of data that could possibly be provided.

If the owners of these particularly effective receivers really knew what they were doing, they could change the circuit around in a dozen different ways, and they still could obtain the same results. They could provide for a different type of aerial coupling, some other reaction control (if they used one), an entirely different audio amplifier, and an interchange of coils, condensers, resistors, and valves, with components of another make, and, just providing the alterations were done intelligently, the receiver would still work in the same splendid manner. Of course, not all radio enthusiasts are qualified to select and combine apparatus, modifying their circuit to suit it. It is because of this that we print descriptions of sets detailing the parts used, and recommending that similar apparatus be incorporated in any duplicate receiver.

What a Circuit is

The circuit of any set is merely a necessary sort of evil. In the receiver we are to have a certain combination of valves coupled together with a variety of devices. The circuit is simply a wiring diagram, showing how these valves may be connected up with the other apparatus, in order that they will be able to operate under desirable conditions. In planning a receiver, we have always decided first upon the roles that the various valves are to play, and we have then thought out the various inter-valve couplings that would be likely to give the necessary selectivity and amplification. When

the apparatus was selected or designed, we have then proceeded to sketch the wiring necessary to connect the components together, and to allow the valve to operate under the correct conditions. It has never occurred to us for a moment that perhaps the circuit was a "Marco," a "Selecteflex," or that it justified some other similarly puerile and useless title. Maybe we could give the completed receiver a name in order to distinguish it from others, but that title would apply not to the circuit, but to the apparatus, lay-out, and wiring, and everything else that goes to make a complete set.

Names That Mean Nthing

A striking example of this circuit bunkum is the very popular "Marco." Any receiver which has a stage of radio frequency amplification, and a regenerative detector, with reaction controlled by a condenser in series with the reaction coil, is said to have a "Marco" circuit. And a "Marco" circuit, we are told, is a "Reinartz" with a stage of radio frequency amplification. In other words, a "Reinartz" circuit is one in which reaction is controlled with a condenser in series with the reaction coil. The names themselves are quite meaningless, though we do suppose that they are useful in providing a means of distinguishing them from any other. The trouble is that so many listeners really think that the name means something. Because they have a receiver in which the "Marco" circuit gives good results, they immediately conclude that there must be some subtle characteristic of the "Marco" that gives good results. Should the

circuit of their set be a "Honkiflex"—which may differ from the "Marco" in the connections of the reaction coil—they must straightway decide to build a "Marco" and lose no time in writing the "Information Service" for details of the circuit, and for some assurance that they are right in expecting to be able to hear 2YA. Though it was not qualified to glory in a well-known title, his own circuit probably had precisely the same capabilities as the "Marco," and he is disappointed when told that the conversion certainly will not improve his results. Enthusiasts of this type actually get argumentative when we say that some of the rottenest receivers we ever heard had a "Marco" circuit, or a "Tiddledyne," or any other circuit, on which they happen to be particularly keen. We do not mean that the "Marco" is not a good circuit, but we do insist that it is no better than a dozen other similar arrangements, providing in each case the apparatus is of suitable design.

Varying Old Circuits

Let us take as an example the circuit sketched on this page, and examine it carefully, with the idea of noting just what are its essentials, and where it could be changed without any influence on the results. This particular arrangement has a splendid name of its own, though we have forgotten it for the moment.

The fan-shaped arrangement, and the coil on the left of the circuit, represents, of course, the aerial and the aerial coupling coil. The end of this coil, as can be seen, is connected to earth. The actual purpose of this coil is to provide a means of transferring the incoming signal energy to the grid circuit of the detector valve. The coil itself may be arranged in many different ways. Usually it consists of a few turns of wire wound on the same former that supports the grid coil (shown alongside it in the diagrams). The number of turns used, and their position with respect to the grid coil, are the factors which determine the degree of coupling. The degree of coupling, in turn, influences the strength of the received signals, and the selectivity of the set. The looser the coupling (the fewer the turns, or the greater the separation of the coils), the lower will the signal strength be, and the greater the selectivity. The coupling requirements are determined greatly by the size of the aerial used, and by the degree of selectivity necessary to avoid interference.

If the receiver were located at Coogee, and was operated from an aerial 100 feet long, it is certain that a similar aerial coil, or much greater separation between aerial and grid coils, would be necessary than in the case of the same set operated in the country, where the strength of all signals would be lower, and selectivity less of a problem. Since the location of the set and the size of the aerial are variable factors, it is never possible to specify aerial coil details that will provide the most desirable performance in all cases. The best we can do is to mention a certain number of turns, and detail a coil separation that will serve under the average conditions. The aerial coil, then, is one of the things that any enthusiast could vary experimentally, with the idea of deciding on the best constants to suit his own requirements. We are speaking, of course, particularly of the single valve set, in which these small matters are more likely to be of importance than in larger receivers.

The same does not apply to the secondary or grid coil of the receiver. This coil is so proportioned as to permit the circuit to be tuned across the whole broadcast band with the capacity of variable condenser specified. If there are not sufficient turns, or if the maximum capacity of the variable condenser is too low, then the circuit will not tune to the top of the band. On the other hand, if

LUCK!

A very bright-eyed, healthy little Australian lad has been selling newspapers in Elizabeth Street outside the State Insurance Building, in which 3QG is situated. For many months past the members of 3QG staff going on duty between 5 and 6 o'clock have been in the habit of purchasing their evening papers from him.

Some few weeks ago "Uncle Ben," who conducts the bedtime story session on Tuesday and Saturday nights, was talking to Johnny, and happened to find out that he was able to sing. "Uncle Ben" asked him if he would like to come up to 3QG and let him hear him. Johnny readily agreed. He visited the station and proved to have a charming boy soprano voice. "Uncle Ben," after talking to the director of the Station, then asked Johnny if he would like to come along to one of the bedtime story sessions and sing for the boys and girls; and the little fellow was delighted.

After singing at 3QG, one night, "Uncle Ben" suggested that Johnny should be given a small present for his services, and the Station readily agreed that he should be paid. Therefore after giving his item at 3QG, little Johnny the newspaper, was presented with 10/- for his services and he left the Station a very proud little chap. Nobody knew what he intended to do with his money, but it appears, unknown to other people he invested half of it in a Golden Casket Ricket. When the results were drawn Johnny had been lucky enough to win the second prize of £1000.

there are too many turns, or if the minimum capacity of the condenser is too high, then the circuit will not tune to the bottom of the band. The values of these components, however, are not appreciably influenced by other portions of the circuit, and they can be specified definitely for a receiver in Picton or Piccabeen Creek. This input circuit to the valve can be changed around in a great many ways. For instance, a variable condenser can be put in the aerial lead to provide some adjustment of coupling. Alternatively, the aerial coil can be dispensed with, and the aerial connected to the grid coil through a very small condenser. Then the aerial coil could be arranged as a continuation of the grid coil, or the aerial could be connected to a tap in the grid coil itself. All of the schemes would be capable of similar results, providing the correct constants were used, and the correct adjustments made. Each of the arrangements would justify a new name, and the name would just be as meaningless as most of the others we have been talking about.

Condensers

The next components in the circuit are the grid condenser and leak. These are essential to this particular type of detection, and their values influence the sensitivity of the detector and its frequency characteristic. If the grid condenser is too large, the higher frequencies in the received music will be cut down to some extent. If the condenser is too small, the sensitivity will be impaired. Present practice is to use a capacity of the order of .00015 mfd. The value of the grid leak is influenced by the type of valve and the amount of distortion which can be tolerated. The higher values of resistance give greater sensitivity but a loss of high musical frequencies. The lower values allow less distortion, but introduce a definite loss of sensitivity. For the

reception of nearby stations sensitivity might well be sacrificed to the tune of improved reproduction, but in remote locations both factors must be given consideration. In general, the value of grid leaks can be specified for a given valve, though experiment with other resistances will often reward the builder of the set.

And now we come to the feature of the circuit, which apparently has the ability to change the name of the circuit with the flick of a wire. The third coil shown in the sketches, and the second variable condenser, comprise the reaction system, which allows an adjustable amount of energy to be fed back from the plate to the grid circuit of the valve. Energy fed back in this manner increases the sensitivity of the receiver up to the point where the valve breaks into oscillation, causing the heterodyne squeal, with which the families of radio enthusiasts are so familiar. The radio frequency choke, shown in series, with the 'phones, also has a hand in this reaction business, since it prevents the radio frequency current in the plate circuit from flowing through the 'phone branch of the circuit, and obliges it to go through the reaction control condenser. This is just one of several methods of introducing and controlling reaction, and it is just as effective as any other, providing both of them have components of the right values. The circuit shown differs from the "Reinartz" solely in the arrangement of the reaction control condenser. If a receiver incorporating this circuit were changed over to the "Reinartz" arrangement, the capabilities of the receiver would not be altered in the slightest degree.

And so, in this typical single-valve circuit we find that there are certain matters which definitely influence the performance. They include the degree of coupling between the aerial and the grid circuits; the efficiency of the grid coil and condenser; the values of the grid leak and condenser; the proportions of the reaction coil and condenser; and, naturally, the type and condition of the valve. Relatively speaking, there is just one thing that doesn't matter a hoot. It is the circuit.

AT THE TRIALS

(Continued from page 3.)

a buzzer or a bell in the studio, and when the directors have heard enough, for one reason or another, of an artist, they press the button that works the buzzer. "That will be enough, thank you," says Mr. Fay. "Oh, but I haven't FINISHED yet!"

"The buzzer has buzzed, madam." There is the soulful pianist, who CANNOT LEAVE OFF IN THE MIDDLE OF A NUMBER. "But this is so beautiful," he says, throwing his head back, and rolling his eyes to the ceiling. There is the pugnacious gentleman, who—but the less said about him the better.

They go out, and are told they will be advised further.

The names of the passes come before the committee when it meets every Monday morning to deliberate on the future of broadcasting programmes in New South Wales.

Many people who go up to have their art tested, do it for a joke, and tell their friends to listen-in for them at such and such a time this afternoon. This is a very foolish thing to do, because it is wasting time, because their friends cannot possibly hear them. Perhaps this information may be of benefit to some reader.

Now, these things, or most of them, happen every Monday, Wednesday, and Friday afternoon, at "auditions" at the address above-mentioned, and in the manner described, in this year of grace, 1929!

RACE WEEK

The Melbourne Cup—Ferry on Form—Laurence Godfrey Smith

— Martelli—Scott Alexander—Steele Rudd

—Brunton Gibb.



Mick Ferry, who will talk on Cup fancies.



Eric Welch, who will describe the race.

THE usual careful preparations for broadcasting the greatest racing events of the year in Australia have been made this year by the New South Wales studios of the Australian Broadcasting Company.

Mr. Ferry has gone to Melbourne to watch the track gallops and work, and every morning for a week before the race will ring through to Sydney, giving the latest information, which will be transmitted, through 2FC, during the morning's sporting session.

On the Monday night before the Melbourne Cup is run, Mr. Ferry will speak by hand-line from Melbourne, through 2FC, to his punter friends in New South Wales, who will, no doubt, be very eager to hear what he has to say.

The actual description from the course will be given by Mr. Eric Welch, 3LO's well-known sporting announcer.

Descriptions to be relayed or rebroadcast from Melbourne are as follow.

Saturday, November 2, Maribyrnong Plate, the Melbourne Stakes, Victoria Derby, Cantala Stakes, and the Hotham Handicap.

Tuesday, November 5, the whole of the rebroadcast from Melbourne will be devoted to the one event—the Melbourne Cup. On Thursday, November 7, the Linnlthgow Stakes and the Oaks Stakes will be relayed, while on Saturday, November 9, the Batman Stakes, C. B. Fisher Plate, and the V.R.C. Handicap will be transmitted.

Arrangements have also been made to describe the Williamstown Cup on Monday, November 11.

If atmospheric conditions prove suitable, the description of the Melbourne Cup meeting, and the running commentary of the Melbourne Cup race, relayed by 3ME, Melbourne, will be rebroadcast by 6WF, at 12.50 to 1.50 p.m., Perth time.

FROM 2BL on Friday, November 1, Mr Scott Alexander and partner will play "Heartless Mrs. Heart" and "After Nine Years," two fantastic trifles of sketches ("sweetheating stories," he calls them), in the well-known Alexandrian manner.

On November 13, Mr. Alexander will produce "The Touch of Silk" over the air. This is now being played at the Turret Theatre, and is described by Mr. Alexander as "the best Australian drama written." Miss Betty M. Davies, a Melbourne journalist, is the playwright.

THE ability that Mr. Elliott has attained as a whistler is simply a hobby, and purely natural. He uses no artificial means to whistle, and was able to whistle at the age of three. He will present some novelty whistling solos through 2BL on Saturday, November 2.



Martelli.

Vincent Aspey.

FROM 2BL on Tuesday Signor Athos Martelli will play his three-hundred-year-old 'cello. Sonata 3, by Boccherini, "Minuetto," by Becker, and "Berceuse," by Godard. He gives a recital in King's Hall on November 27.

MR. VINCENT ASPEY, a young New Zealander, who came over here to study under Mr. Gerald Walen, of the Conservatorium, is worth listening to. He plays two groups of "classical" numbers next Wednesday, November 6, from 2BL.

THE Jazz Spider will appear in his last episode on Thursday, November 7. This series of thrilling episodes, illustrated by Mr. Lawrence Halbert, the producer, with quite effective "effects," is a credit to its author, Mr. James Donnelly, and to the players, Joe Cahill (Joe Fang), Wilfred Thomas (Digger Doug. Brown), Miss Mollie Kerwan (Vernie Vivian), and Mr. Bert Gilbert, who, with Mr. Donnelly, contrived many incidental characters.

The last scene is "a room behind a cheap eating-house in Sydney's China-town."

ONE of the most interesting novelties to be included in a broadcasting programme will take place from 2FC on November 7, when listeners are invited to write in and say what is the combination in the musical act, "Jack Dempsey—Just Different."

THE Scottish Four will appear from 2BL on November 6, featuring old Scottish melodies. Mr. Robert Baxter, tenor, is the leader of this quartet, with Miss Elsie Findlay as soprano, Miss Peggy Dunbar contralto, and Mr. Raymond Beatty basso.

AS an outcome of Gwen Varley's talks to girls, every Thursday evening, the A.B.C. Younger Set Tennis Clubs are springing up in various suburbs.

Penshurst and Lakemba are the latest additions to the family. Clubs have now been formed in all suburbs, and they meet every Saturday morning at Coogee, Strathfield, Rockdale, Penshurst, and Lakemba. This involves about one hundred girls and boys—the latter are permitted as associate members, and take an equal interest and control of the clubs. Vaucluse and Willoughby are waiting for a few more members in order to commence.

Expert coaches are provided at each club, so that the young folk may learn the correct methods from the start, and have every opportunity to become players of standing.

A night tennis club for business girls is also under formation. Girls are sending in their names, and it is planned to have the club situated near the city, so that girls may have tea in town and go straight to tennis. A proposed coach will also be in attendance. The fees will be most moderate.

MUSICAL listeners are reminded that a recital of popular classics will be given from 3AR on November 7 by Victor Stephenson, the gifted young Australian pianist. Mr. Stephenson is a double Ormond Exhibitionist, gaining first-class honors for solo work on each occasion.

Steele Rudd begins a series of talks next Monday evening, from 2FC, at 10.

WEEK'S TALKS

DAY SESSIONS.

FRIDAY, NOVEMBER 1.—2BL: 1.15, Mrs. Meredith Atkinson, "Amsterdam"; 2.30, Major Sanford Morgan, "Introduction, Ceylon and Its Lost Cities"; 2.45, "Storyteller," "There She Blows—Romance of Whaling."
2FC: 12.0, Captain L. Roberts, "Hongkong"; 2.2, Michael Sawtell, "Moonlighting Wild Cattle"; 4.0, Redgum, "Gardening."
SATURDAY.—2BL: 10.10, J. W. Cooper, "Gardening."

SUNDAY.—2BL: 5.10, C. N. Baeyertz, "Philosophic Thought from Bacon to Ferguson."

MONDAY.—2BL: 1.15, F. Matron McMillan, "Plunket Mothercraft—Babies from nine to thirteen months old"; 2.30, Business Efficiency, C. R. Hall, "The Made-in-Australia Exhibition"; 2.45, "Brings" on the Aborigines.
2FC: 12.0, V. O. Bell, "The Public Forum"; 2.2, A. S. Cochrane, 3.0, Education Department Lecturer; 4.0, W. S. Reay, Literary Personalities, "Dryden—Glorious John," Sister Parry, "Home Nursing Hints"; 2.30, Fred Arlington-Burke, "The Diplomatic Significance of Radiq"; 2.45, Claire Byrne, "Your Suburb."

TUESDAY.—2BL: 1.15, F. Matron McMillan, "Plunket Mothercraft—Babies from nine to thirteen months old"; 2.30, Business Efficiency, C. R. Hall, "The Made-in-Australia Exhibition"; 2.45, "Brings" on the Aborigines.
2FC: 12.0, C. W. Mann, "Do You Know Your Child?—The Play of the Child."
THURSDAY.—2BL: 1.15, Mrs. Mildred Muscio, "The Maternity Bonus"; 2.30, Brunton Gibb, "Random Remarks"; 2.45, F. H. Raward, "Edinburgh, the Pride of Scotland."
2FC: 12.0, A. S. Cochrane; 2.2, C. N. Baeyertz, "Spoken English"; 4.0, Francis Jackson, "Afoot in Mediaeval France."

EVENING SESSIONS.

FRIDAY.—2BL: 7.5, Claude Corbett, "Sporting"; 9.30, Wallace Nelson, "How I Met and Talked with John Galsworthy."

2FC: 9.0, W. A. Oldfield, "Cricket"

SUNDAY.—2FC: 6.40, Feature talk.

MONDAY.—2FC: 10.0, Steele Rudd, "How I Wrote 'On Our Selections.'"

TUESDAY.—2BL: 9.30, V. O. Bell, "A Born Optimist!"

WEDNESDAY.—2BL: 7.5, Graham Kent, "Bridge."

MR. LAURENCE GODFREY SMITH went from Fiji to Vienna to study under Lescheitzky, who would introduce him to friends as "The cannibal who came to Europe to learn from me." He is an accomplished pianist.

Mr. Smith will be heard from 2BL on Sunday night in a very fine programme of good music, which he has arranged and will direct.

The next night, Monday, Mr. Smith will play a Mozart Concerto with the orchestra from 2FC.

These are musical events to be talked about, but possibly Mr. Smith will be just as satisfied if they are listened to.



Laurence Godfrey Smith.

An original musical programme portraying an incident in the life of the famous composer Beethoven will be presented at 3LO on November 4. This will take the form of a playlet with Beethoven as the central figure, who will discuss the musical questions of the day with some of his equally famous contemporaries, and give the inside story connected with the familiar "Moonlight Sonata." The production, which has been specially written for the radio by Gordon Ireland, will include "The Moonlight Sonata."

HOW many women look forward to a bridge afternoon? Some make quite a serious business of it, others regard it as a pleasant diversion, while some, who have not yet entered the charmed circle, often wonder what takes place at these afternoons of cards and chatter. A typical bridge afternoon will be described by Hattie Knight from 3AR on November 7. She, in bright and breezy style, will give a bird's-eye view of how Madame Suburbia declares "Hearts are Trumps."

IT is, comparatively speaking, but a few years ago that the coach was the only means of transit between Melbourne and the leading towns of Victoria, when travelling over unmade roads was a most exciting business. Some reminiscences of the old coaching days will be given from 3AR on November 10, by Mr. Frank Smiley, who has driven many a coach of the famous old "Cobb" line, from Ballarat to Melbourne. Mr. Smiley comes from an old coaching family; his father was one of the first drivers on the Victorian roads.

MANY pleasant memories will be revived by Wilson Muir at 3AR on November 4, when he will give one of the real old-time "Punch and Judy" performances, which should provide much diversion for both young and old.

Mr. Muir has travelled throughout the country districts of Australia with his three companions, Punch, Judy, and their dog Toby, and the fact that the adult interest even surpasses that of the youngsters clearly shows the public remain true to the friends of their childhood.

The little talks that precede the fun, showing how PUNCHINELLO, a native of Bavaria, has flourished since the early part of the sixteenth century, and giving an account of his wanderings through Europe, are most interesting, and add greatly to the success of the entertainment.

CONCERT work and operatic singing are Anne Mills's forte. She is a pupil of S. Vicenzo de Georgio, and has been trained for the operatic stage. Miss Mills has toured New South Wales and Queensland as a concert singer.

LISTENERS' LICENCES
in the Commonwealth, September 30, 1929

	Increase.	Decrease.
N.S.W.	105,341*	969*
Victoria	140,122	— 220
Queensland	24,153	— 692
South Aust.	24,589	173
West Aust.	4,080	184
Tasmania	5,293	180

Therefore, the total number of listeners' licences in the Commonwealth is 303,578, and the total increase 594.

There seems to be very little movement. The New South Wales increase is not so great as those of previous months; the continued small decrease in Victoria means nothing; the Queensland drop of 692 is considered to have no significance, being purely a departmental adjustment; and gradual increases in South Australia, West Australia, and Tasmania will only be worth noting when they are maintained.

* A correction.

FRESH from his exploits in the land of the Golden West, Captain Donald Maclean is back again at 3LO and 3AR. He will be heard from 3LQ on Thursday afternoon, October 31, in the educational session.



BASIL KIRKE.

popular announcer and bedtime story teller, is soon to be wed. Miss Jessie Cahill is on the Westralia bound for Fremantle. Immediately on the arrival of the boat she will become Mrs. Basil Kirke. They were engaged for some time before Mr. Kirke left to manage 6WF for the A.B.C. Miss Cahill was well known in Sydney, where she held a responsible position with Australian Roads, Limited. We are sure that New South Wales listeners will join with us in wishing our old friend, Uncle Basil, and his charming wife the utmost happiness.

FROM 2BL on Wednesday, November 6, Mr. Brunton Gibb and company will present two short radio plays—"The Stepmother" and "Emma and 'Erb."



Brunton Gibb.

Mr. Brunton Gibb needs no introduction. His productions are always intelligible, his methods polished and restrained.

JACK HOUSTON, whose ventriloquial act is proving most popular over the air will be entertaining from 3LO on November 6, in a bright and original sketch. He writes all his own numbers.

LOVERS of Dickens will welcome the talk programmed from 3LO on November 8, when Professor G. H. Cowling, M.A., will take for his subject, "Dickens and David Copperfield." As most readers know, David Copperfield is popularly supposed to be the life story of Charles Dickens, and gives vivid pictures of his life in the blacking factory.

"PRISCILLA." Mrs. L. C. Norton, speaks every Friday for ten minutes at 10.50, and when the clock booms out eleven chimes there are hundreds of women who regret the closing down of the 2BL Station. Her recipes are unusual, and always most successful when tried out, as is evident when the members of the A.B.C. Women's Association Needlecraft Club meet every Friday afternoon, at 11 Rowe Street, and frequently bring boxes of home-made sweets—products of "Priscilla's" instructions.

MISS MARGO HEELS is a popular speaker from 2BL Studio, to the members of the A.B.C. Women's Association and the Girls' Radio Club. On Thursday, November 7, at 6.55 p.m., she will speak during the Girls' Radio Club session on "Simple and Inexpensive Christmas Presents You Can Make." She has also been asked to speak on the same subject on Thursday, November 14, at 10.50 a.m., to the women's session, when the making of "Beautiful and Valuable Presents" will be explained and welcomed in a similar fashion to that of her last talk on "What to Make from Cretonne."

Sometimes she instructs on needlecraft, and as an outcome the Needlecraft Club was formed six months ago. The members are guests of Mrs. Norton. Over fifty are present each week. Instruction is given them in needlework by "Priscilla," afternoon tea served, and a happy social afternoon is spent.

The members of this club are out to raise £50 for the Crown Street Women's Hospital. Many are making sweets and selling them. Others are taking orders for fancywork, while bridge parties and tennis tournaments have also been organised. Miss Mitchell, finance secretary of the Crown Street Women's Hospital, addressed the members recently, and told them of the work of the hospital.

THE xylophone, played by Edna Davis will be heard from 3AR on Wednesday night, October 30, and from 3LO on Friday afternoon, November 1.



A BOUT a month ago we heard that Steele Rudd had been booked by the A.B.C. to give a series of talks or readings; so we went down to see him at an address in the city. We arrived late in the afternoon, and he came in soon after, a tall, stringy man, grey haired, with a small moustache. He didn't look too well (he had just come through a severe illness, he told us later). He seemed to hover hesitatingly between here and there, and he spoke nervously in full, high-pitched tones. He had to go home immediately, but would see us to-morrow afternoon at three o'clock, and we would go over to Mockbell's or some such place and fix up something.

On the following afternoon we went to the office, and Mr. Rudd (we forgot to ask his real name) was there. "We were going outside, weren't we?" he said, reaching for his hat.

"Well, if you don't mind—you see we haven't much time."

"Oh, but you've got enough time for a cup of tea, haven't you?"

"But we've just had lunch."

"Oh, we'll go out all the same. I'm feeling like something myself."

"Very good, Mr. Rudd." As he was closing the office door we added, in a low voice, so that we had to repeat it ruddily, "You see we've come out without any money, Mr. Rudd." (Which was a damnable half-truth—all our credit in the office was gone for that week.)

"THAT'S quite all right," said Mr. Rudd. We walked down O'Connell Street, past the hard old Grannyite building, up Pitt Street and down the lane, talking about talkies which were nearly new at the time. We turned down a little lane, and then it was that Mr. Rudd brought out the old adventurous spirit, still going strong, sparkling with the passing years. It was a question of where to go.

Exploring the "Unknown"

Now Mockbell's was right in front of us—Mockbell's, which we both knew so very well—a place of infinite lounges, a place where you could smoke and drink coffee and talk and put your feet on the table (if necessary). On the left was a place in which neither of us had ever been before. By ourself, the circumstances being so, we would not have dared to go, we would not have dreamed of going anywhere other than Mockbell's; in the other place you mightn't have been allowed to smoke, or they mightn't have what you wanted, or the place might be too finicky to be comfortable, or too silent to talk in. Mr. Rudd was differently constituted. "Let's go in here," he said, waving to the place on the left. "I've never been here before." He led the way, and we followed,

shaken by vague doubts and apprehensive shiverings. However, this bravery, this manifestation of the pioneering spirit, was adequately rewarded.

Tea and biscuits, assorted biscuits, were on the small blue lacquered table in no time, and Mr. Rudd leaned back on his small blue lacquered chair, sighed expansively, and unfastened the buttons of his overcoat.

"I've brought some notes along," said Mr. Rudd. "Do you take milk and sugar? I thought they might make it easier." He produced some papers, and began to unfold them. "Have you your notebook? Help yourself to the biscuits. I went to school at Emu Creek State School. Yes, put it down."

"I went to school at Emu Creek State School. It was the first State school on Darling Downs, which Groom represents (alas, the ruins of time!). I was about seven or eight."

School Days on Our Selection

"The old pioneers had often gathered together to talk of Isolation and bewail the circumstances that compelled them to rear children in the wilderness. Every now and then they petitioned the Government to provide them with a school. Back came the old answer, 'When shown sufficient children of school age in your district, as required by the Act, steps will be taken to comply with your request,' or words to that effect. Now, don't you let your tea get cold."

"But the inhabitants of Emu Creek, or any other old creek, shifted about a lot, and so made it difficult to guarantee the number of kids required. It was like trying to guarantee a number of scrub cattle. But when more land was thrown open for selection, and new settlers, with new youngsters, arrived, the position was altered. A brand new school spaciouso enough to accommodate half a hundred kids, made of weatherboard and celled and lined (the school, not the kids) was erected. It stood on the main stock route and faced a Scotsman's place called Dundonald, though that isn't his real name."

"Years after Dundonald became a member of Parliament, and is mostly the original of Dad' in 'On Our Selection.'"

"I have a lot of memories of the State school, and they remain pretty green with me. They have survived even the emus and the old brown kangaroos themselves, and those animals were so numerous that they always set the whole wide bush in motion—set the whole wide bush in motion (a neat phrase, which had to be repeated) whenever they hopped in great mobs from place to place, and often they took our playground in their way."

"It was a real St. Crispin's day—a wonderful gathering of inhabitants, old and

young, big and little, when the school was opened. "The youngsters will have a chance to be educated now," they would say to each other,' and rise to do something better than starving on selections all their lives like their fathers and mothers, or working for wages on stations, or breaking in horses or bullock driving—even the big ones can go some day, when there won't be much ploughing or washing for them to do at home, and learn to write and read a bit, anyway! And so on, and so on."

We were coming to the end of the biscuits and a second cup of tea as Mr. Rudd folded up his manuscript. We asked for more personal details, compressed.

He left school at twelve and went on a station, doing any sort of work. He became a stockman, went droving, and broke-in horses. He was then nineteen, and was sent into the city.

Here he was procured a job as clerk and messenger. "I nearly died like a parrot; but eventually settled down."

"I used to attend the Brisbane Parliaments for amusement, and began listening to debates. I got a mixed vocabulary. Also went to trials. In those days Griffith was at the bar."

"About this time I joined the Brisbane Rowing Club, and had the itch to write, so I began a column, 'On the River' in the 'Chronicle,' a VERY democratic paper, deceased. The members of the rowing club were hefty, and I didn't feel like taking the consequences of what I was going to write about them; so I looked round for a pen-name. Richard Steel—of Steele and Addison—had always been my favorite author, and rudder sounded watery; so I called myself 'Steele Rudder.' Then I didn't like the look of 'Rudder'; so I chopped it short to 'Rudd.' That's how I come to be 'Steele Rudd.'"

Dad Pigeon-holed

"The first 'Dad' story was written and laid away and forgotten. Sometimes my friends would ask me to bring it out and show it to some mutual acquaintance. Then I thought I couldn't do any harm by sending it to the 'Bulletin,' and I had an immediate acceptance from Archibald, with a request for as many more as I could write. I started to write, and haven't stopped yet."

"I dramatised 'On Our Selection' with Bert Bailey. It's been alive sixteen years now. It had a three years' run to begin with, and is revived every second year. About 3,000,000 people have paid to see it. We took it to London; but they didn't understand it there."

Which completed the afternoon's transmission, ladies and gentlemen, and we crossed into Pitt Street, and parted.

ARE WE ALL COMPOSERS OF MELODY?

15 Do you speak your own me-lo-dy

16 I speak no me-lo-dy

Mr. C. N. Baeyertz insists that we are, and he undertakes to prove it on Sunday evening, November 3, at 7.15, from 2FC, when he will talk of the Melody of Speech.

Listeners on that occasion will be materially assisted by the article from his pen which follows, and by the illustrative diagrams.

MONSIEUR JOURDAIN, in Moliere's "Bourgeois Gentilhomme," was overcome with astonishment when he found that he had been talking in prose all his life without being aware of it. Readers of "Wireless Weekly" may be no less surprised to find that they have been composing melody all their lives with equal unawareness.

True, our speech, for the most part, is "a blund'ring kind of melody." The choice word and measured phrase is above the reach of ordinary men, because they have never learned how to compose the melody of speech.

Yet it is an incontestable fact that we cannot speak without the use of melody. Moreover, when we sing a song the melody is written for us, but when we speak we must of necessity compose, impromptu, our own tunes.

You have never thought of it in that way before? Probably not. But let us reason together. Count from one to ten, and you will, doubtless, compose this melody in monotone, with rising slides on all but 10. Try it.

Monotone (Rising Slides)

A 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Or, if you happen to be very much depressed, you may use falling slides throughout thus:-

Monotone (Falling Slides)

B 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Monotone is the simplest and least interesting form of melody. Now, try these variations:-

Monotone (Alternating Slides)

C 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Counting in Ditones

D 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Ditones (Alternating Slides)

E 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Counting in Tritones

F 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

From Macbeth Act III Scene II

17 A-vault! and quit my sight! let the earth hide thee

My bones are mar-row-less, thy blood is cold.

Part of a Speech by Chatham (Note the Tritones)

But, for the defence of liberty upon a general principle

upon a constitutional principle, it is a ground on which I stand firm, on which I dare meet any man

Counting in Alternating Tritones

G 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Having mastered these, let us take some simple sentences and compose appropriate melody for them.

These examples of simple melody-making in speech may amuse and even interest your readers. If I could succeed in rousing our speakers (public and private) to take some interest in the proper placing and balancing of their speaking voices, and in the technic of speech generally, I would deserve better of mankind (pace Voltaire and Swift), and do more essential service to my country, than the whole race of politicians put together.

Why is it that we hear so few melodious and persuasive voices? Why are there so few interesting speakers and readers? Because, whereas everyone who studies painting, music, or singing, realises the necessity for technical study, most men and women think, with the immortal Dogberry, that to write and read come by nature.

Our speakers have a plentiful lack of knowledge of what goes to the making of an effective vocal equipment—the art of melody-making in speech, agreeable pitch, pure quality, resonance, tempo, modulation, inflexion, articulation, enunciation, and even pronunciation. These matters are of absolutely paramount importance if the beauty

and effectiveness of speech are to be accounted of any value.

A speaker should acquire the same mastery over his instrument as a good violinist or pianist does over the instrument of his choice. Technic, in any art, is merely a means to an end, but the end cannot be achieved without the means.

I do not know who is responsible for the widespread notion that our speaking voices, of the average, are beautiful. Listen critically to the voices of your friends, with their flattened vowels and gobbled consonants, and note how many of these epithets may be aptly applied to them—colorless, lifeless, commonplace, feeble, silly, flabby, adenoidal, muffled, husky, dull, shrill, high-pitched, hard, grinding, grating, harsh, noisy, or unrestrained.

'T is true 't is pity;
and pity 't is 't is true.

8 Is he here?
9 He was here

10 Where has he gone?
11 What do you want?

12 You have good reason
13 I am thy father's spirit

14 She was dead. Dear gentle patient, noble, Nell, was dead

Curves Ahead

The Screen-Grid Valve as a Detector

The Experimenters Department of Technical Progress... Conducted by Ross A. Hull M. I. R. E.

THE detector valve has been in receipt of considerable attention from radio engineers during the last year or two. As a result the practical operation of detectors in highly-developed receivers has been quite radically changed. Not that any new principles have been disclosed, but simply that a study of the frequency characteristics of detectors—previously neglected—has meant a revision of ideas on the subject.

The most modern trend is toward the use of the screen-grid valve as a detector. Such a valve may be used as a "plate" detector to give greater sensitivity than the three element valve used as a grid detector. Also it may be operated with grid condenser and leak to provide an order of sensitivity very far ahead of that made possible in any other known means. Of course, such a detector may be operated as a "power" detector, with sufficient "undistorted" output to excite a high-powered output valve directly. The only snag is in the provision of a suitable coupling device in the plate circuit of the screen-grid detector. Resistance coupling with a plate resistor of 250,000 ohms, and choke coupling with a choke of several hun-

"Curve 1 shows the detection obtained with the use of a grid condenser of 200 mmf. and a grid leak of .5 meg. Curve 2 was obtained with Cg 200 mmf. and Rg 3 meg. Curve 5 gives an idea of the amount of detection obtained with a C bias of 3 volts, which was found to give the greatest amount of detection that could be obtained by this method. Note that the grid leak and condenser method gives roughly four times the efficiency obtained by the C battery method.

"It is also interesting to observe that the frequency distortion when the grid leak and grid condenser are used is quite apparent, though if the grid leak is only .5 meg. and the grid condenser 200 mmf. (Curve 1), probably no noticeable difference to the ear would be observed. Thus it would seem that practically the same quality, as far as the detector was concerned, could be obtained by using a .5 meg. grid leak and a 200 mmf. condenser, and at the same time the efficiency of the system would be increased four times.

"Let us now examine the a.c. screen-grid tube to determine its relative advantages as a detector. As the screen-grid tube has a very high plate resistance a special high impedance audio transformer should be used. But as there were none on the market when these experiments were made the same audio transformer was used and the plate resistance of the screen-grid tube kept as low as possible by using 180 volts on the plate at all times.

"Fig. 2 gives the performance of this tube as a detector. Curve 1 and Curve 2 were taken with the grid leak and condenser. In Curve 1 the signal was impressed on the control grid, while in Curve 2 the signal was impressed on the screen-grid. Both curves show that about five times as much signal can be obtained with the same input as was obtained with the '27. However, the frequency distortion is very great. (This frequency distortion could be materially reduced by designing an audio frequency transformer whose characteristics match the screen-grid tube.)

"In summary, these results show that:—
 "(a) An a.c. screen-grid tube gives five times the output voltage of a '27 tube for the same input, but gives serious audio-frequency distortion.
 "(b) With either type of tube the grid leak and condenser method gives about four times the signal strength obtained with the grid bias method.
 "(c) With the '27 tube there is little difference between the two methods of detection, so far as frequency distortion or overload are concerned, provided that a low value of grid leak is used.
 "(d) With two a.f. stages, power tubes of the '50 type or smaller will overload before a '27 detector will overload.
 "(e) With a '27 detector with grid leak and condenser, a completely modulated r.f. signal of 0.1 volt into the detector will give about 1.2 volts across the secondary of the first audio transformer."

While these statements of Mr. Browning are of very great value, it must be remembered that they do not paint a faithful picture of the screen-grid detector, as he himself admits. Obviously the screen-grid valve would not be used with an ordinary audio transformer in its plate circuit! With a suitable coupling device there would appear to be no reason why a very desirable frequency characteristic should not be combined with the high sensitivity and output that the screen-grid valve can provide.

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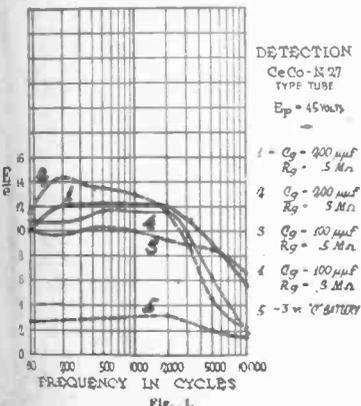
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Bias Voltage

WHEN using a valve of fairly high amplification factor, whether a screen-grid valve or a triode, as a radio-frequency amplifier, it is often well worth while to use no more grid bias than is enough to prevent the flow of grid current. By so doing the a.c. resistance of the valve is kept down to a minimum, with a consequent increase in the amplification afforded by the stage.

Since the signal voltage with which a radio frequency amplifier has to deal is only a small fraction of a volt, there is usually no need to use more than a maximum of half a volt grid bias in order to ensure that no grid current flows even at the moments when the signals make the grid most positive. If the grid bias is increased above the necessary minimum, every extra volt of grid bias is equivalent to reducing the plate voltage by "mu" volts where "mu" is the amplification factor of the valve. With a three-element valve for which the amplification factor is 30, it is only necessary to use 90 volts to obtain the results for which 120 volts would be necessary if 1½ volts of grid bias were applied. It is clearly uneconomical to pay for an extra 30 volts of plate battery and get nothing for it.

With 6-volt valves, one can practically always spare half a volt from the filament battery, so that by putting a small fixed resistance in the negative filament lead the desired grid voltage is obtained. The value of the resistance is computed by dividing 1 by twice the filament current of the valve, so that for a 0.1 amp. filament R would have to be 5 ohms.

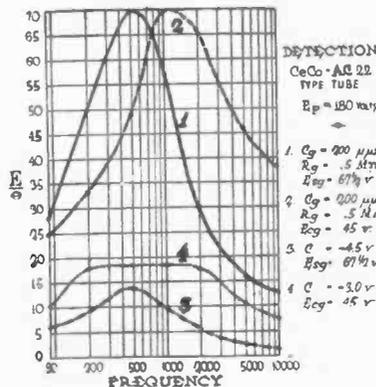


ded henries, are the methods which have proved satisfactory to date.

On the matter of the screen-grid detector and its sensitivity relative to that of the three element valve, some interesting data has been prepared by Glen H. Browning, and published in "Radio." Mr. Browning, in his experiments, set up a detector circuit with an audio frequency transformer in the plate circuit feeding a vacuum tube voltmeter. The detector was excited from a radio frequency signal, the frequency of which was held constant at 1,000 k.c. This signal was modulated by a variable frequency audio frequency oscillator. Complete modulation was used during all tests.

"The conditions used in the experiment were as near as possible to those encountered in practice," states Mr. Browning. Continuing, he says:—

"The results of the measurements made on a '27 type tube are shown in Fig. 1, where the audio voltage developed across the secondary of the audio transformer, divided by the radio volts put into the detector, is plotted against the modulating audio frequency. In this case the input radio signal was held constant at .1 of a volt.



Wireless Weekly

Incorporating "Radio in Australia and New Zealand"

FRIDAY, NOVEMBER 1, 1929.

THE FORM OF THE RADIO PLAY

WHEN wireless broadcasting became permanently established a few years ago the radio play was assured a wonderful future.

It would be specially written for the new medium, and would be utterly different from any other kind of play. Yet the type of play for which radio producers were then apologising as being "only in its infancy" is still the model for the work of radio dramatists.

This is the type of play which is either adapted from a stage play or written originally for broadcasting as nearly as possible to the composition of the modern stage play. While this is done we can scarcely hope for the evolution of a kind of play peculiar only to the radio medium.

The chief cause of the standstill in radio play writing and production is a too eager seeking for "effects"—sounds and noises—which may take the place of stage scenery and "business" on the air. Now, "effects" are all very well when they are used to ILLUSTRATE the action of a play, but when their use becomes so magnified that they are upheld as features and things to be wondered at, they are worse than useless. The difference is between the artist who uses his technique to express his meanings, and the showman who uses his technique to parade his cleverness.

Moreover, no sound or combination of sounds, however well mimicked, can possibly reproduce through the loud-speaker the effects of stage scenery; nor can they act sufficiently in themselves on the imagination of the listener-in to distract him utterly from his environment.

The often-sought co-operation of the listener-in in turning down the lights in his home rather magnifies the faults of the adapted play. A reasonably skilled writer could make excellent use of this assistance on the part of his audience. He would find many other unconsidered factors also.

Therefore, it is obvious if the radio play is to become a success its form must be recast more in accordance with the possibilities of its medium. and, therefore, we must forget the modern stage and its scenery entirely, and create plays as though these had never existed. In fact, we must return to Shakespeare and the Greek dramatists for the closest approximation to a suitable style of composition for the radio play.

REVIEWING THE PROGRAMMES

THE "Night on Sydney Harbor," broadcast by 2FC on Saturday, October 19, proved how faulty execution can make a liar of a good idea. The idea was to broadcast from a launch making a moonlight excursion on Sydney Harbor, accompanied by comedians, talkies, and musicians. What happened was more like a broadcast from a sardine tin in which the sardines were alive, all chirping together, and pickled in beer. Four things are obvious:—

(1) Impromptu broadcasts need more careful rehearsal than "straight" performances.
 (2) Too many artists rock the boat.
 (3) Atmospheric backgrounds, especially of laughter and conversation, should remain in the background.
 (4) Two hours is altogether too long to listen-in to a moonlight excursion.

And we should like to hear a shorter, well-rehearsed broadcast on the same lines as soon as possible.

The Broadcast from Sydney Harbor Bridge (in construction) was a well managed business, obviously well rehearsed. We bow to Mr. Norman Lyons and Mr. C. R. Hall; and make our acknowledgements to Dr. Bradford and Mr. Ennis. These broadcasts, however, are sometimes responsible for strange flights of fancy, the highest on this occasion being that "West Sydney lies spread out before me like a MAGIC CARPET," the pattern of which, we suppose, was indelible from his memory. How-

Readers are invited to send in for publication comments on any programme heard during the week.

ever, advising original people to clip their wings is a wicked business these dull days.

Trying to collect one's thoughts on the recent invasion of 2FC by delegates to the country press conference (October 2) is difficult. When we arrived there were 150 odd delegates, wives, cousins, and/or aunts jammed tightly into number 1 studio. Poor announcer Chapple just fitted into his corner. A space was cleared round Cec Morrison's orchestra and the Baby Bechstein. All else was Country Press. Press, push, and shove—you never saw anything like it in your life before. In number 2 studio the 2BL classical programme was being performed by some of the best artists in Sydney; and about ten Press Conference delegates watched. They all looked bored stiff, which seems to show that the journalists of the wide open spaces of this fair land of ours prefer old-time dance music to a good classical programme. Which isn't necessarily to be deplored. Then you must consider their rivals were making speeches in the 2FC studio, the photographer was in 2FC studio; they were originally invited to the 2FC studio, and the circumstances were too pressing and oppressive for calm listening to "classical" music. We suppose the delegates will go back to their country towns and write about the wonders of radio, marvelling that the station can put over such wonderful programmes every night with such enormous crowds blocking up its studios.

SECRETS OF THE RADIO INDUSTRY—2



Capturing Bees for use in the manufacture of "B" batteries.

The Safety Valve

New 6WF Wavelength Makes Reception Difficult

Dear Sir,—Please permit me, through the medium of your magazine, to draw the attention of the postal authorities to the placing of the new wavelength for 6WF, Perth.

I think "the power" that fixed on 435 metres does not live in Sydney. Except on a superheterodyne, no one around this city can receive the West Australian station while 2FC is on the air. After 2FC closes down, Perth can be heard distinctly. My humble suggestion is: That 6WF be put on a wavelength almost identical with 2YA, Wellington. Since there are three and a half hours' difference in time between West Australia and New Zealand (four hours in summer), there is very little likelihood of interference between the two stations. Some such arrangement as I suggest will make the A.B.C. truly a national service.

Another reasonable grumble: I regret the directors of the A.B.C. were "invited" to alter their Sunday evening programmes. Who, knowing the church-going public in Australia, could believe that two church services broadcast on the Sabbath express the choice of the majority of listeners-in? I feel sure the great silent crowd approved of the original scheme, but the noisy few made the disturbance which should not be noticed, but which brought the compromise of alternate Sunday programmes.

Anyhow, a religious denomination that is keen on broadcasting its particular form of religious worship might be asked to secure a station of its own. It is not just to "compel" all listeners to wait for their Sunday evening programme till the tastes of what must be a small section are satisfied. The B class stations are supplying the deficiency.

Yours etc.,
R. J. O'REGAN.

Rose Bay.

Wool Sales

Dear Sir,—For some months I have patiently waited for the great change for the better in broadcasting programmes to eventuate, as Mr. Stuart Doyle promised it would, in his inauguration speech. I have waited in vain, and can restrain myself no longer. Instead of being superior, the programmes now broadcast are decidedly inferior to the old ones, consisting as they do of gramophone records and second-rate artists.

This, however, is not my greatest grievance. Living some considerable distance from a town, in far-western N.S.W., I am dependent on wireless for late news and reports, which, in Mr. Doyle's new and superior programmes are mainly conspicuous by their absence.

What I complain most bitterly about is the total disregard of the interests of the wool-grower by the new company. Wool is undoubtedly the staple production of Australia, and her mainstay. The wool industry should be of considerable interest to every person in the continent, and quite probably



is, but the A.B.C. appear to believe that Australia should be more interested in the price of butter, eggs, or tomatoes, or what is showing at the pictures. Since this season's wool sales began I have patiently listened to every detail of the market reports, hoping that when they are finished with I shall hear the results of the wool sales. But no! I am invariably disappointed, the announcer briefly states that wool was firm, or sales brisk, and if he has plenty of time he may condescend to mention the sales of a very few of the larger clips.

He then hastens to inform you that there will be an hour's fun at the Capitol. This may satisfy the city man, who has purchased a newspaper on his way home, and can settle down comfortably to read it as soon as the threatened fun begins, but to people in the country who quite probably will not see a newspaper for some days, it is not only unsatisfying, but extremely annoying.

Equally annoying is the fact that the A.B.C. fail to keep to their published programmes. Holders of wireless licences for the country pay more for them than the city holder, and get a great deal less in return. If all the licence-holders who threaten to discontinue their licences on expiration adhere to their decision, this present company will find itself rather at a loss as to what to do with its superior programmes.

Yours, etc.,
U. C. L. KILLEN.

Nyngan.

Good-bye, Old Friends

Dear Sir,—May I be allowed to make a mild protest against some of the broadcast trash under the new management? We naturally expect the A class to stand for the best of everything, and is it not somewhat paradoxical that the B class should surpass them in musical merit (2KY I have not heard, so cannot vouch for it) with their glorious recitals of the world's music and singing such as we cannot hope to hear in Australia for many years to come, as we have not the means of "finishing" our artists?

Where is the wonderful improvement that we were promised? We had no faith in these promises from the start, as we had been used to hearing our best artists, also visiting ones, under the old regime, and where was improvement to come from, except through wholesale importation, which we all know is very costly, even for a big money-making company? The programmes may have improved in variety, but certainly not in merit. It seems utterly absurd to give such lengthy ones for our small population, and would it not be better to curtail them and give a few of the very best items instead of such second-rate ones (particularly from the studio orchestras and vocal quartettes)?

Take the J. C. Williamson's broadcasts, which were amongst the best to be heard here; what has the new company given us in

Readers are urged to express their opinions on matters pertaining to broadcasting. If you have some constructive criticism to offer, here is your chance of expression—your safety valve. The editor assumes no responsibility for statements made by readers and published on this page. Anonymous letters are not considered.

lieu of them? Nothing. Vaudeville type of entertainers can surely not be classed as A and I think I am right in stating that vulgarity was not permitted a second time from any artist under the old regime.

A revue on a recent Saturday night was not worthy of broadcast even from a "Z" station. I also add my protest against the elimination of the Sunday evening service from 2FC; and is the Radio Church Service cut out altogether from 2BL? It was of the best.

Good-bye, old friends, 2FC and 2BL. We did not jibe your passing, as we had heard you from your inception, and we miss your higher standard of culture. Good-bye.

Yours, etc.,
AN OLD LISTENER.

Parramatta.

Popular Lectures

Dear Sir,—Your correspondent, Mr. Jas. Wiltshire ("W.W." 11/10/29) has, I think, expressed the views of quite a number of listeners in regard to the broadcasting of a series of 15-minute lecturettes on interesting topics. Certainly such a diversion from the musical routine would conform with public opinion, and would lend a new interest to the programmes offered by the A.B.C.

Recently a lecturette was delivered on the every-day happenings at Central Station. The speaker dwelt on the farewells, meetings, etc., that take place there, and gave the listeners a vivid, realistic description of the scene that meets the eye there. This type of lecturette is very popular, and should be introduced into the broadcast programmes more frequently than hitherto.

Yours etc.,
THOS. MOORE.

Arncliffe.

Reception at Nowra

Dear Sir,—I have been reading with much interest the letters from time to time expressing opinions re broadcasting stations, etc. Quite a number complain about the poor reception from our two "A" class stations, especially 2FC. There is a lot of truth in these complaints in so far as this district is concerned, but on the other hand, why worry about these stations. Surely you do not wish for anything better than 4QG, 2UE, and before these stations come in 1YA and 2YA. Since the new company have taken over in this State I very seldom bothered about our two stations, as every time I seem to cross them the old familiar jazz, jazz, jazz is on.

Referring to 2BL and 2FC again, I venture to assert that they are absolutely the two worst stations on the air, as far as this district is concerned, both regards quality of programmes and reception.

Yours etc.,
C. D. FRASEK

Nowra.

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Making the SCREEN-GRID VALVE Step Out



A Long Awaited Article for the Home Constructor

ALTHOUGH it was only introduced twelve months ago the screen-grid valve has made rapid headway and practically ousted other forms of high frequency amplification. It's use tends to give greater stability and range, thus providing a choice of more stations with easier control. Furthermore, with this increased radio frequency amplification. Its use tends to give greater one audio frequency stage, the advantages of which are obvious. The likelihood of "motor-biking" (or low frequency oscillation) is diminished, and the chances of introducing distortion are also lessened. We see thus that the screen-grid valve is undoubtedly a revolutionary step influencing the very basis of receiver design.

Now let us consider what is done. In the early days valves and circuits were inefficient, and we were not able to obtain sufficient amplification to run into difficulties with instability. As, however, valves improved and we discovered how to wind more efficient coils, we came to a point where, if we attempted to obtain the maximum amplification per stage in the radio frequency side of the set, we found it impossible to control the circuits owing to feed back of energy. We had then to introduce potentiometers, positive grid bias, damping resistances or other devices, which gave us stability by reducing the net gain.

Reason for Instability

Consider for a moment the reason for instability. We have in the grid circuit of an r.f. stage a voltage V, which is amplified, say, M times, resulting in a voltage MV in the anode circuit. These are indicated in Fig. 1. Just as water at a higher pressure tends to run to a lower level, this higher voltage tends to feed back energy through three channels—first, through magnetic coupling between coils, wires, etc.; second, through capacity coupling between coils, wiring, condensers and grid of the valve itself. This energy reaches the grid circuit, is reamplified, and so we get a cumulative or building-up effect, resulting finally in oscillation. The first two feed back channels can be dealt with by a suitable lay-out and adequate screening, but the capacity within the valve itself is a very different problem.

The first reasonably satisfactory attempt to deal with the plate-grid capacity was the introduction of neutralisation. In its simplest form the neutralised circuit has a centre tapped anode tuning coil, to one end of which is connected the plate of the valve and the coupling to the next stage, while from the other end is taken a small condenser back to the grid of the valve. If the total r.f. voltage across the original plate circuit was

MV, this one will have across each half a voltage of $\frac{1}{2}$ MV, and, owing to the fact that the coil is centre tapped, these two voltages are opposite in sign. Furthermore, they are exactly equal at every instant. If we make the neutralising condenser equal in value to the capacity between the plate and grid of the valve, then the voltage fed back through the latter will in theory be exactly balanced by that fed back through the former, and the net result is that the effect of the capacity within the valve is nullified.

The circuit, therefore, remains stable. In practice, however, neutralisation is not quite so perfect, as in the first place the dielectric of the capacity within the valve is a vacuum, whereas that of the neutralising condenser is air. As a result, the neutralising voltage does not reach the grid circuit of the valve at exactly the same moment as the original feed back voltage, but one is a trifle in front of the other. The balance is hence not quite exact, and, although one may adjust this accurately over a reasonable band of wavelengths, with the latest types of circuits, it is very difficult to obtain maximum efficiency or both long and short wave-length ranges without having to re-set the neutralising condensers. If you adjust on the short waves the set is insensitive on the long waves band, and if you adjust on the latter it oscillates when changing down, unless, of course, a little efficiency is sacrificed to keep the stability more constant.

A Second Grid

The screen-grid valve attacks the problem in a different manner by interposing a second grid between the plate and control grid. This second grid is connected to a suitable point on the high voltage battery, and although not affecting the flow of electrons to any marked extent under working conditions, it almost entirely prevents feed back from the plate to the control grid, thus making possible a far

higher amplification than before.

One may regard the cloud of electrons (see Fig. 2) as a number of invisible particles shot from the filament. As they are very small they pass through the spaces in the grid quite easily, and so reach the plate. A few, of course, are bound to strike the grid-mesh, and those which do so are passed off to the plate battery and form the screen-grid current, which, under working conditions, is quite small. The feed back voltage, however, is not capable of being split up, and it may be regarded as a blanket or mattress laid on the screen-grid. The pressure of this mattress then represents the pressure of the feed back energy. Although it may here and there bulge through the screen-grid, the latter effectively prevents the transmission of its pressure to the actual control grid. The analogy is not perfect, but it helps to explain how the screen-grid acts.

We may note here that the plate-grid capacity of a modern three electrode valve is about 5 micro-microfarads, while that of some screen-grid valves has been reduced to the very low figure of .015 micro-microfarad, roughly one three hundredth of the other.

Single-ended Type

The electrodes of the first screen-grid valve consisted of a standard filament and grid mounted on a cap at one end of the valve (which was of the double-ended type), and a flat circular screen-grid mounted together with a flat anode at the other end.

Another type of screen-grid valve has been developed, and is, to a certain extent, more convenient in use. It is of the single-ended type with a terminal at the top of the bulb. The filament and control-grid are of the usual type, arranged vertically and surrounded by the screen-grid, which is of the elongated box-shaped form. The plate is, of course, outside the screen-grid, being connected to the terminal at the top of the bulb. The filament and control-grid go to the usual pins on the base and the screen-grid to what is normally the plate pin. It will be noted that in some valves of this type a flat plate is also used at the lower end of the screen-grid.

Each stage of a screen-grid valve amplifier, including coils, condensers, and all wiring, is usually enclosed in a separate screened compartment. It is of no use screening the coils alone, as the capacity coupling between condensers and wiring remains. The valves are passed through holes in the inter-stage screens and mounted in such a manner that the screen-grid coincides with the plane of the inter-stage screen itself. If the hole is just sufficiently large

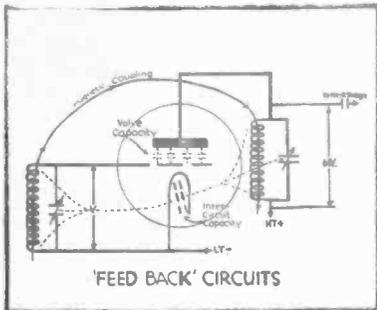


Fig. 1. Illustrating the factors which result in instability in the ordinary type of three element valve used as a r.f. amplifier.

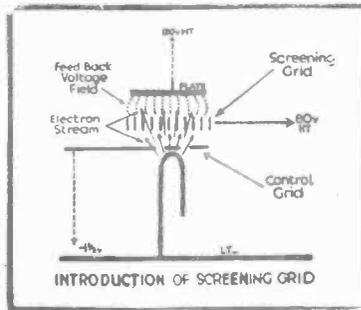


Fig. 2.

to allow the passage of the glass bulb, and the valve is correctly placed, then there is no possibility of leakage from one side of the screen to the other, as the circular plate of the screen-grid will entirely fill the opening. It is most important, therefore, that when you are building a receiver designed to give maximum amplification, the valve-holder should be mounted to set the valve correctly in this way.

Complete screening is not necessary with a single stage, for which front, baseboard, and inter-stage screens are generally sufficient. With two or more r.f. stages, however, it is advisable to be more thorough, and each may be enclosed entirely in a box, or alternatively, a complete system of screens used. The magnification of two and three stages is so great that the slightest leakage may cause instability. All screens are, of course, earthed.

Coils should be wound in such a manner as to have little or no external magnetic field. This not only lessens the possibility of magnetic coupling, but reduces losses through eddy currents in the screens, which are serious with ordinary coils. Popular forms of coils are the "Binocular," "Toroidal," and small solenoids. "Litz" wire is useful on the broadcast band. Tuning condensers should not exceed .00035 mfd. The

tion factor of this particular valve is, roughly, 110. The shape of the curve is peculiar, owing to a secondary emission effect between the point B and C. Between these two we have an actual emission of electrons from the plate to the screen-grid, which tends to counterbalance the flow of

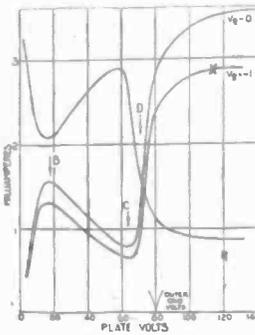


Fig. 3. Characteristic curves of a typical screen-grid valve.

electrons arriving at the plate from the filament. This is partly due to the fact that the screen-grid is at a higher voltage than the plate. The effective gain of plate electrons is, therefore, diminished, and the plate current falls, while the screen-grid current increases. At about 70 volts on the plate this phenomenon disappears, as the plate and screen voltage are now nearly equal, and the curve goes up very sharply before flattening out at the working point.

When the curve is comparatively flat we are getting the maximum amplification and impedance, whereas on the vertical portion GD both the impedance and amplification factor are very low. This section is not normally used. Point B is quite interesting, as when the valve is adjusted to work exactly at the top of the bend it has infinite amplification and infinite impedance. In practice, of course, the infinite impedance makes it impossible actually to obtain infinite amplification, for a reason to be seen in a moment, but you do obtain quite a reasonable step-up per stage, and very high selectivity. The curve shows us that we have here a useful working point when there is any difficulty in cutting out a local station.

All that is required is that the plate voltage should be reduced from its normal value of 120 down to about 20 the screen-grid remaining at its usual point—60 to 90 volts. It is very difficult to find stations with this setting. The transmission should be tuned in with the normal 120-plate volts, and then the

final adjustment made after the voltage has been reduced.

Now let us consider for a moment the amplification obtainable in practice.

In the actual circuit (see Fig. 4) we have available on the anode side a total high frequency fluctuating voltage of, say, M.V. 1 across the anode circuit, and M.V. 2 across the valve itself. Now, if we re-draw the circuit we can easily see that M.V. 1 is the important voltage as far as we are concerned. The valve may, in fact, be regarded as a dynamo feeding the anode circuit which, in turn, supplies the grid of the next valve. Now, the valve amplification gives us the total M.V. 1 plus M.V. 2, and the actual ratio of useful voltage to total voltage is M.V. 1 over M.V. 1 x M.V. 2. M.V. 1 depends on the impedance of the tuned circuit at resonance, and M.V. 2 depends upon the impedance of the valve. It is obvious that the larger M.V. 1 is in relation to M.V. 2 the greater will be the effective amplification. The very best tuned circuits we can make at the present time will have at resonance impedances of 200,000 to 300,000 ohms. Now we have seen

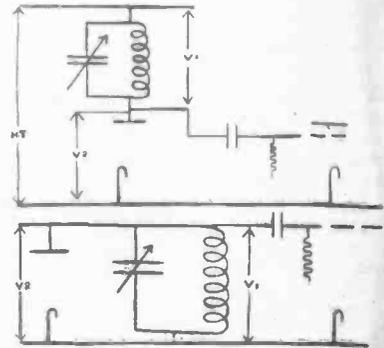
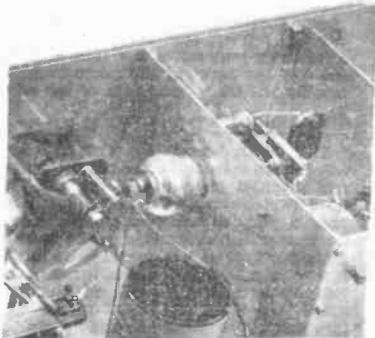


Fig. 4.



The screen-grid valve is here shown mounted in a receiver. The grid circuit is completely contained in the screening compartment and well shielded from the plate circuit. This arrangement would not be applicable to the American screen-grid valves, which have the control grid terminal at the top of the bulb.

larger capacities introduce excessive damping.

Now let us look for a moment at the curve of the Marconi S.215 valve shown in Fig. 3. The first thing to notice is that this is not the usual "grid volts-plate current" curve, but illustrates plate volts against plate current. The working point is indicated by the cross, and you will see that the anode current is then nearly three milliamperes to the plate, and rather less than one millampere to the screen-grid. At this point the plate voltage is 120, the screen-grid voltage 80, and the grid bias between $-\frac{1}{2}$ and $-\frac{1}{4}$. Here the amplifica-

tion factor of the valve may be 200,000 ohms, and it is clear, therefore, that in a stage with such an anode circuit, we can actually expect to obtain, roughly, half to three-fifths of the magnification factor of the valve. As an average circuit is more likely to be 200,000 ohms than 300,000 ohms, we see right away that the maximum gain we can expect in practice is about 100 per stage. Now this is, of course, far greater than that obtainable from the 3-electrode valve, as even under the best possible conditions it is doubtful whether more than 40 is given by a high amplification valve of standard type. We have, therefore, doubled the possible gain with a single stage. When we come to two or more stages, however, the screen-grid valve has a still greater advantage, since we can maintain a magnification of between 80 to 100 per stage, without very great difficulty, whereas with the ordinary valve it is practically impossible to obtain more than 25, even with very careful design, before the circuits become unstable.

Let us turn now to actual circuits. The first, shown in Fig. 5, is one screen-grid

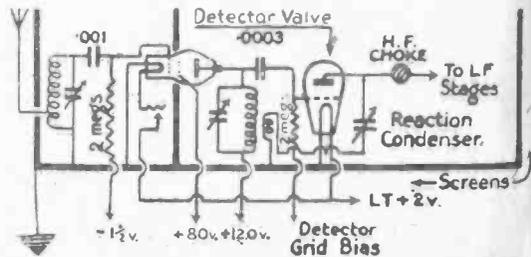


Fig. 5. The circuits of a stage of screen-grid r.f. amplification, and a detector with reaction. The very heavy lines indicate the shielding.

valve and detector, with, of course, one or two low frequency stages, according to your requirements.

You will see the straightforward arrangement of the screen and the standard grid and tuned anode circuits. Owing to the high impedance of the valve, no gain in amplification will be obtained by using radio frequency transformers. On the other hand, a transformer or tapped anode coil may, of course, be employed for increasing selectivity, with a slight loss of amplification. In the circuit shown, leaky grid rectification is used, and a conventional type of capacity reaction.

A few words on selectivity will be of use here. The increased magnification of the screen-grid valve causes an apparent drop in selectivity, unless care is taken to make all circuits as efficient as possible. The aerial should be loosely coupled by tapping down the coil, or inserting a small series condenser. Take particular care to have a good earth, as this may otherwise cause very flat tuning of the first circuit.

Finally, in any difficulty with a local station the effect of dropping the plate voltage to 20 may be tried.

To obtain the highest possible quality at distances up to twenty miles from a local station, a single screen-grid valve, followed by a detector, and one resistance-coupled stage, will generally be ample. The circuit is shown in Fig. 6. No reaction should be used, but particular care taken to ensure an efficient aerial and earth.

You will notice that these circuits are of a perfectly straightforward type. When we attempt two stages, however, certain details should be attended to, particularly if a "B" eliminator is to be employed.

The amplification given by two stages is so great that care should be taken to exclude radio frequencies from the audio frequency side of the receiver. This may be done in the usual manner by means of a radio frequency choke and by-pass condenser. Alternatively, a small iron cored choke, having two or three sections to reduce capacity to a minimum, may be placed in the grid circuit of the first low frequency valve. The usual by-pass condenser is taken from the plate of the detector to earth, and a very small condenser of the order of .00005 mfd. connected from the grid of the first audio frequency valve to the filament. This combination of choke and condenser causes a slight increase in the strength of the higher audio frequencies, and thus as well as choking radio frequency currents, introduces a correction for any cut-off of these

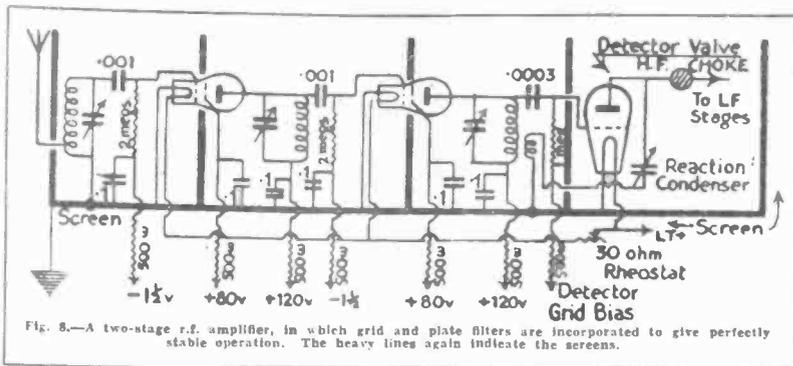


Fig. 8.—A two-stage r.f. amplifier, in which grid and plate filters are incorporated to give perfectly stable operation. The heavy lines again indicate the screens.

higher frequencies which may occur in the tuning circuits. Since the "brilliance" of speech and music depends entirely on these high frequencies, reproduction is thereby improved. You need not, however, worry about using devices of this type with less than three stages, unless you are using tap-

this with one stage, and even with two it is not always necessary when the supply is taken from good "B" and "C" batteries or accumulators, but if an eliminator is to be employed this plate feed system is very desirable, and will generally save a considerable amount of trouble if installed from the beginning. It is essential with three stages. This arrangement is indicated in Fig. 7.

Figure 8 shows a circuit incorporating two screen-grid valves, and having in every lead one of the blocking systems illustrated in the last one. Otherwise the circuit is very much on the lines of those already described.

You will notice that a variable resistance is placed in the filament circuit of the screen-grid valves. This is advisable in all cases, whether with one, two, or more stages, as it provides an excellent means of controlling the volume. For average requirements this circuit needs only one low frequency stage, transformer or resistance-coupled. The detector should preferably be

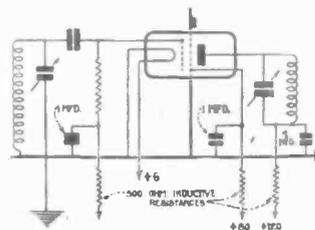


Fig. 7.—Filters in all grid and plate leads are essential in a multi-stage screen-grid amplifier. They were a feature of the recently described superheterodyne.

ped circuits of unusually great selectivity, or reaction is employed.

A second difficulty which may be encountered with this great high frequency magnification is the feed back between circuits across the internal resistances of batteries or mains units supplying the receiver. This feed back, which is quite distinct from the magnetic and capacitive reaction already described, results in oscillation, but is very easily overcome by interposing resistances of 500 ohms, or greater, in each lead to the plate and grid batteries' supplies. A .1 mfd. condenser should be taken from the side of the resistance nearest the circuit down to a negative. You need not worry about



An exploded screen-grid valve showing its construction.

a medium impedance valve, supplied with maximum h.v., and four to eight volts grid bias, so as to obtain efficient anode bend rectification. A high amplification valve usually will only stand 1 1/2 to 3 volts bias, and is easily overloaded. The output valve should, of course, be of the super-power type. If two stages are used, one R.C. and one transformer are suitable.

We see in Fig. 9 a type of layout which may be adopted with the screen-grid valve. If the coils are placed well down in the partitions, it is not always necessary to screen the top.

Of course, there are many other arrangements, which will be equally effective, a number of them having been described in the "Wireless Weekly" receivers of the last few months. Anyone who has read and understood this article should be able to design the layout of his own receiver, and be confident that it will permit him to get the best performance that the screen-grid valves can provide.

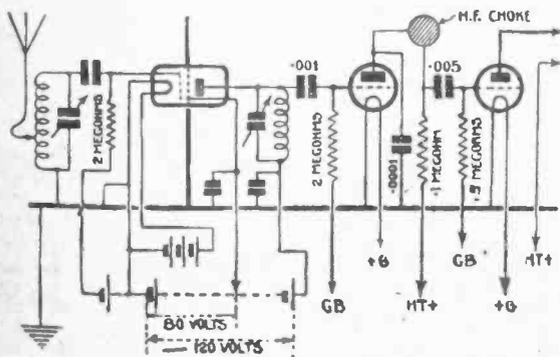
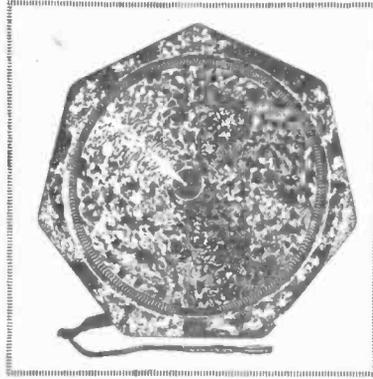
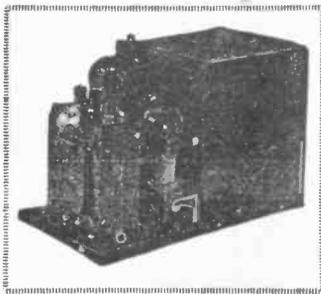


Fig. 6.—The screen-grid valves used in a circuit designed for high quality local reception. No reaction is used.

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This Week We Deal With The Transmitter

Radio Proficiency

Continuing the series of articles for the A.O.P.C. course

WE have passed through the various stages of reception, though it must be frankly admitted that much has necessarily been unsaid. The reader should now know sufficient about the construction of a suitable short-wave set to build one of the two short-wave receivers described a fortnight ago. He might well build up the two valve receiver. This can be satisfactorily used in conjunction with a low-power transmitter, which will shortly be described.

The subjects now to be discussed fall mainly under the heading, "Transmitters," but this heading includes not only that portion of the transmitter that generates a radio frequency current, but also with methods of amplifying it, power supply, aerial systems, keying systems, filters, smoothing circuits, rectifiers, resonance indicators, frequency monitors, and other like apparatus.

Types of Transmitters

There are many types of transmitters, most of which are capable of giving good service, providing they are properly adjusted. A good transmitter gives an output which is mostly on one frequency. This means that when we hear with an oscillating receiver the note will be a pure musical one. Also the good transmitter has a signal which does not "creep," that is, alter its wavelength as components heat up. It is obviously necessary to have every component as rigid as possible. A vibrating coil, or r.f. lead, for instance, would result in a wobbly signal.

The high plate voltage generally used on the plate of the transmitting valve or valves, causes the valve to become very hot, and this often causes creeping of wavelength. It is, therefore, advisable so to arrange the circuit that this effect is minimised. Also the transmitter should be adjusted to operate efficiently, so that the valve will not get any hotter than is necessary.

Good solid contacts are an absolute necessity. The slightest added resistance in some parts of the circuit may cause a transmitter to stop oscillating. If the receiver is out of adjustment, it will not oscillate, and no damage is done. In this state the plate of the transmitting valve will sometimes become red or even white hot, and may melt if maximum plate voltage is being used. It is, therefore, advisable to use, at the most, only two-thirds of the normal plate voltage, until the transmitter is adjusted.

The most important adjustments consist of altering the tuning capacity of the two circuits, and adjusting the amount of feedback. The tuned circuit connected to the plate is called the tank circuit. It is that part of the transmitter which supplies radio frequency power to the aerial. The aerial circuit is that which receives and radiates this energy. In both cases, a coil tuned by a variable condenser is used (we are still referring to low-power transmitters). In some transmitters the tuning also includes the adjustment of clips on the coils. The coupling between the tank and the aerial circuits decides the amount of energy transfer. In the single transmitters being discussed, it also has some influence over the wavelength, as do other adjustments. If one adjustment is made in one part of the transmitter, it is usually necessary to adjust elsewhere.

It is a common mistake to have the tank and the aerial circuits too close together. This usually causes a broad signal and unsteady operation. The transmitter is liable to go out of oscillation suddenly, the plate of the valve becomes red-hot, and if you don't happen to notice it, some damage may be done. The least that can happen is that the costly transmitting valve will become "soft," owing to the liberation of gases from the plate of the valve.

Tank Circuit

In Fig. 1 you see the tank circuit of the transmitter coupled up to the aerial circuit. The reading of this meter is not an actual indication of the current put into the aerial, as many wrongly suppose. It is merely a reading showing the actual current in the tank circuit. A shunted torch bulb or car bulb can be used in place of the ammeter, in order to show resonance.

Note that the aerial circuit only has r.f. current in it when it is tuned to the same frequency as the tank circuit. The latter always has r.f. current in it, when the valve is oscillating. By connecting a loop of wire, three inches diameter, to each side of an ordinary torch bulb, and holding this close to the plate coil, the lamp should light up brilliantly, whatever the tuning of the tank condenser may be. If the lamp does not light, the transmitter is not oscillating, and it means that an adjustment to the clips are probably necessary. If the lamp is placed too near the coil of the tank circuit, it will burn out.

A non-shielded receiver in the same room will pick up signals from the transmitter, whether the aerial is in resonance or not. It is, therefore, necessary to use a shielded receiver (all components, including valves, batteries, etc., shielded), in order to find out how the transmitter is operating. This special receiver is called a monitor, and one is an extremely desirable part of an amateur's equipment.

The wiring in a transmitter should consist of very heavy gauge wires. Even in the

lower-powered transmitters, nothing less than 12-gauge wire should be used in the tuned circuits, since the current carried is sometimes very heavy, and, as a consequence, the wire may become very hot. The heat (you will understand from previous lessons), represents a waste in radio-frequency energy, and it must, therefore, be avoided as much as possible.

A transmitter is not an instrument that can be neatly, and at the same time efficiently, wired. By "neatly" I refer to beautiful angular wiring. The additional wire will only cause losses, owing to the additional resistance.

Power

Even with a low-power transmitter the r.f. current is often very heavy. This may be gauged from the fact that even a six-volt valve (with the filament prongs connected together by a loop of wire, and used as a resonance indicator), will burn up if it is placed too near the plate coil. Using about 200 volts on the plate of an ordinary 201A, this is quite possible. It is often advisable to use one of the Osram Beehive type lamps as an oscillation indicator. When plugged into the 240 volt mains, this lamp will glow fairly brightly, with an orange-red color. Using the loop of wire previously mentioned, the lamp can be caused to glow just as brightly when placed within two or three inches of the tank coil of a low-powered transmitter.

You will now begin to understand the terrific r.f. current that is flowing through this coil. Obviously you will get a very bad r.f. burn if you attempt to adjust the clips on the coil without first switching off the power. If the transmitter is operated in a damp hut, the walls may be alive, and the tools round about may be alive also. These, you must learn to understand, are losses, and you must do everything possible to keep losses to a minimum if you expect to have an efficient transmitter. A moth, flying between the plates of the tank condenser, fries away to nothing, and he has no time to say "Goodnight!"

Shock

This week's lesson has been a general one, which, nevertheless, is very important. The points discussed herein should be thoroughly digested before one attempts to construct a transmitter of any type, since even with low power a slip may be very dangerous.

The writer, whilst testing a power transformer for an amplifier last week (500 volts either side of the secondary), enjoyed 1000 volts shock, which laid him out for some time. Only by jumping violently into the air and pulling the whole business to the floor, thus breaking the circuit, could he let go. A shock received from even a small transmitter plate supply can result in death. The most extreme care is necessary at all times.

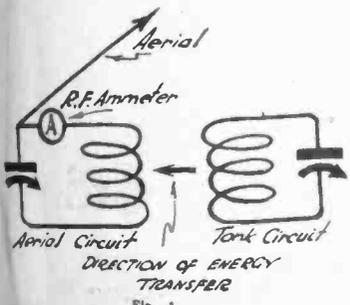


Fig. 1.

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Champion Radio Valve UY-227

A.C. Detector

The Champion UY-227 differs from a general purpose valve in that it has a heater element instead of a filament. Emission in a valve is caused by heating the surface of the filament which is heated so as to emit electrons. In the Champion UY-227 the emitting surface is separated from the heating wire by a piece of insulating material. This does away with the hum which would be heard if a general purpose valve were lighted with alternating current.

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The plates of the Champion UX-280 full wave rectifier are made of a wire mesh in order to facilitate the dissipation of heat.

Champion Radio Valve UX-171A

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A COMPRESSED AIR ENGINE FOR MODEL PLANES

(By Norman Lyons.)

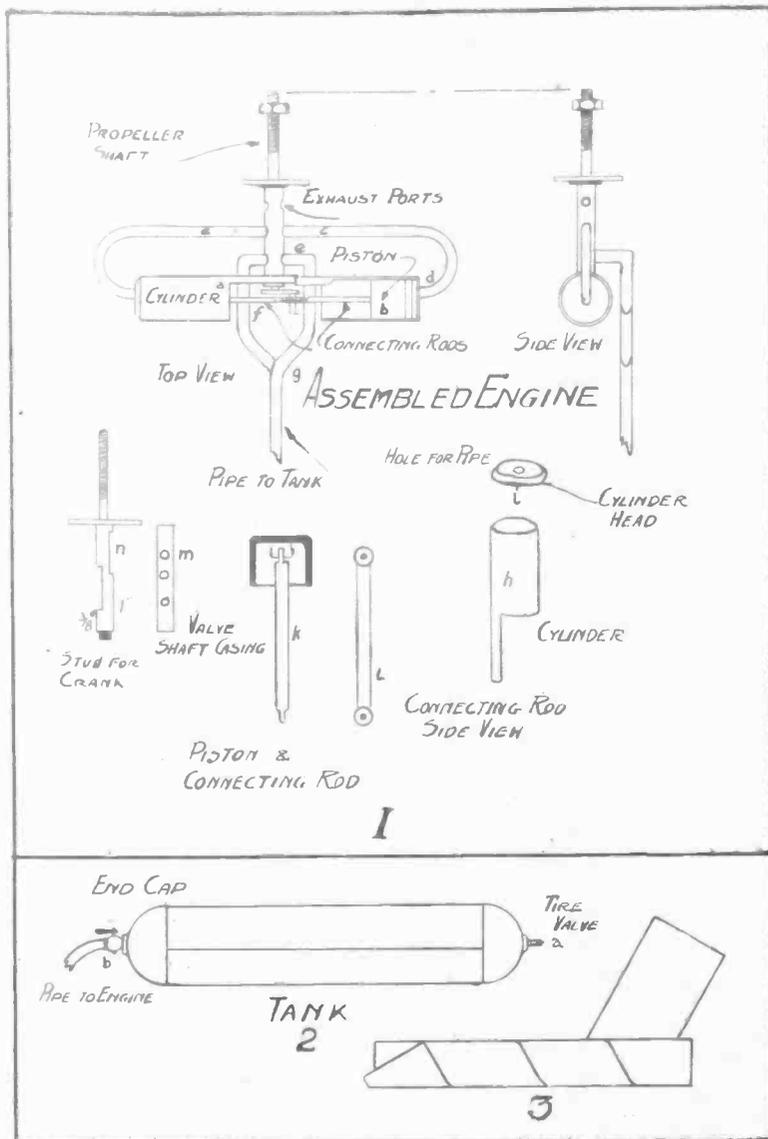
THE compressed air engine as a motive power for model aeroplanes is becoming almost as popular as the twisted skein of rubber. Many compressed air plants have been designed from time to time, and in almost every case the model builder would require a reasonable amount of practical engineering knowledge. It would also be necessary to have the use of a machine shop, or, at least, a lathe.

The compressed air plant, designed by George A. Cavanagh, has an advantage other than its efficiency, in the fact that the builder need not be in the possession of a machine shop, the principal tools being a small vise, small soldering iron, a file and a drill.

The first things needed in the making of this motor are cylinders. For the making of the cylinder, two fishing rod ferrules known as female ferrules are required, and for the heads of the cylinders two male ferrules are required. Such ferrules can be secured at most any sporting goods store. The female ferrules should be filed down to a length of two inches, cut down on one side a distance of $\frac{3}{4}$ of the diameter, then cut in from the end, as shown at "h." When this has been done, two male ferrules should be cut off a distance of $\frac{1}{4}$ in. from the top, as shown at "i." to serve as heads for the cylinders. A hole of $\frac{1}{16}$ in. diameter should be drilled in the centre of each head to enable the connecting of the intake pipes. By the use of soft wire solder, the heads should be soldered into the ends of the cylinders, as shown at "d."

The piston should now be made; for this purpose two additional male ferrules are required. These should be made to operate freely within the cylinders by twisting them in a rag which has been saturated with oil and upon which has been shaken fine powdered emery. When they have been made to operate freely they should be cut down one-half inch from the closed end, as shown at "k." For the connecting rods, two pieces of brass tubing, each $\frac{1}{16}$ in. in diameter by $\frac{1}{16}$ in. in length, are required and, as illustrated at "L," should be flattened out at either end and through each end a hole of $\frac{3}{32}$ inch in diameter should be drilled. For the connecting of the piston rods to the pistons, studs are required; these should be cut from a piece of brass rod $\frac{1}{16}$ in. in diameter by $\frac{1}{16}$ in. in length. As two studs are necessary, one for each piston, this piece should be cut in half, after which each piece should be filed in at one end deep enough to receive the end of the pistons however, the connecting rods should be joined to the studs by the use of a steel pin which is passed through the stud and connecting rod, after which the ends of the pin are flattened, to keep it in position, as shown at "I."

For the outside valve mechanism and also to serve in the capacity as a bearing for the crankshaft, a piece of brass tubing $\frac{1}{16}$ in. in diameter by $\frac{1}{16}$ in. in length is required. Into $\frac{1}{16}$ in. in diameter, and each $\frac{1}{16}$ in. apart,



this should be drilled three holes, each as shown at "m." Next for the valve shaft and also propeller accommodation, secure a piece of $\frac{3}{16}$ in. drill rod two inches in length. On the right-hand side of the valve shaft, as shown at "n," a cut $\frac{1}{32}$ in. deep by $\frac{1}{16}$ in. in length is made one inch from the end. Another cut of the same dimensions is made on the left side; this cut is made at a distance of $\frac{1}{16}$ in. from the stud end.

As shown at "f," the crank-throw consists of a flat piece of steel, $\frac{3}{32}$ in. thick, $\frac{1}{16}$ in. in length, by $\frac{1}{16}$ in. in width. At each end of the crank-throw a hole $\frac{3}{32}$ in. in diameter should be drilled, the holes to be $\frac{1}{16}$ in. apart. Into one hole a piece of steel drill rod $\frac{3}{32}$ in. in diameter by $\frac{1}{16}$ in. long is soldered, to which the connecting rods are mounted, as shown at "I." Into the other hole the stud end of the crank-throw is soldered.

The parts of the motor are assembled by first fitting the pistons into the cylinders. As shown in Figure 1b, after which the cylinders should be lapped one over the other and soldered, as shown at "a." When this has been done, a hole $\frac{1}{16}$ in. in diameter should be drilled half way between the ends of the cylinders, and into this hole should be

soldered one end of the valve shaft. For the inlet pipes, as shown in Figure 1c, secure two pieces of $\frac{1}{16}$ in. brass tubing, and, after heating until soft, bend both to a shape similar to that shown. When this has been done solder one end to the end cylinder and the other in the second hole of the valve-shaft casing. The valve shaft should now be inserted in the valve-shaft casing and the connecting rods sprung on to the crank-throw, as shown in Figure 1f. To loosen the parts of the motor which have just been assembled, it should be filled with oil, and by tightly holding the crankshaft in the jaws of the drill the motor can be worked for a few minutes.

The tank (Figure 2) is made from a sheet of brass or copper foil 15 ins. by 10 ins. by $\frac{1}{100}$ in. in thickness. This is made in the form of a cylinder, the edges of which are soldered together as shown. Sometimes this seam is riveted every $\frac{1}{16}$ in. to increase its strength, but in most cases solder is all that is required to hold the edges together. For the caps, or ends, the tops of two small oil cans are used, each can measuring three inches in diameter. To complete the caps, two discs of metal should be soldered over the ends of the cans where formerly the

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spouts were inserted, the bottoms of the cans having been removed. The bottom edges of the cans should be soldered to the ends of the tank. Into one end of the completed tank, a hole large enough to receive an ordinary bicycle air valve should be drilled (Figure 2a). Another hole is drilled into the other end of the tank, into which is soldered a small gas-cock to act as a valve (Figure 2b). These should be filed down where necessary, to eliminate unnecessary weight.

To connect the tank with the motor, a piece of 1/4 in. brass tubing five inches in length is required, one end of which is soldered into the hole in the valve-shaft casing nearest the cylinders, as shown in Figure 1e. As illustrated in Figure 1g, a hole 1/4 in. in diameter is drilled in one side of the tube in the bend near the tank, and into this a piece of brass tubing 1/4 in. in diameter is soldered to connect the bend with the valve casing. The other end of the 5 in. pipe is soldered to the cock in the tank, thus completing the motor.

In conclusion, it is suggested that the builder exercise careful judgment in both the making and assembling of the different parts of the motor in order to avoid unnecessary trouble and secure satisfactory results.

Another source for the tank ends is found by taking apart a brass bedpost. These are made in two pieces, which are either soldered or pressed together. Bedpost balls have the advantage of being lighter than oil can ends. A form which tapers passes through the air a great deal easier than one which is of the same dimensions throughout. Therefore, in order to secure a more airyworthy model, some contestants may prefer to use different sized ends for their tank, joined by a tapering tube constructed in the same manner as that recommended in the foregoing article.

If it is desired to make a longer tank, the cylinder can be formed by wrapping a wide ribbon of sheet metal around a form like a spiral as shown in Figure 3, soldering each lapping, and finally wrapping the tank spirally with small piano wire. The wire turns should be about 1/4 in. apart, and four lines of solder should be run lengthwise of the tank to hold on the wire. After this it is removed from the form, the ends cut off even, and the cups soldered on.

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A book, "Purpose and Attainment" has been published, which tells all about this excellent course. If you send your name and address to the C. N. Baeyertz Institute, Angus Chambers, 219 Elizabeth Street, Sydney, a copy of this book will be posted to you free by return mail.

TREES

In this article Mr. Cooper talks about trees; what trees are suitable for planting in what parts of New South Wales. Mr. Cooper is parks superintendent to the Civic Commission, comes of a gardening family, and has spent his life in the almost passionate study of botany, practical and theoretical. What he says goes; he takes the greatest pains to make everything perfectly clear. He broadcasts at 10.10 every Saturday from 2BL.

SYDNEY has been poorly planted with trees. In many cases it has been overdone, with one class of tree, irrespective of vital local conditions, soil, and situation.

Ban all fig trees from cottage and villa gardens, pepper trees and pine trees as well. Where there is very little frost in winter, in mild climates, Kurrajongs should be planted; they do not rob the ground around the tree as many other trees do. Near the coast of New South Wales, the European olive is a suitable tree to grow, also around the harbor foreshores, in windy situations, the olive is one of the best trees.

I have seen Jacarandas struggling for an existence at Rose Bay, Bellevue Hill, Vaucluse, Manly, and Mosman, and similar localities, because they were exposed to the cold southerlies. Jacarandas must have shelter from the south; the situation cannot be too warm, so, facing the north is the proper situation. Never plant a Jacaranda facing south.

The South African Chestnut requires a warm situation as well. If the wood does not ripen in autumn it will not flower the following season; the better the position the better it will flower.

Many of our native trees are well worth cultivating. The turpentine, with its white, fluffy balls, is making a fine show in all mild districts—one of our best evergreen flowering trees. The fire-wheel tree of New South Wales requires a warm situation to flower well—another beautiful flowering native tree. The laphostemon has been overdone round Sydney and suburbs, it will not stand heavy frosts.

The evergreen oaks are fine evergreen trees. Heavy frosts settle them; they are mild climate trees. The Norfolk Island tree is the finest tree for the sea coast. Moisture on the subsoll, and sandy at that, suits it best. Another coastal tree is the Banksia. The Western Australian flowering gums do well in mild climates, only the flower does not last long, owing to humidity of our summer months. In a dry atmosphere they last a long time in perfection.

For swampy ground the she-oak does well, but it will not stand heavy frost. Deciduous trees do well in most parts of New South Wales, providing that water is available during summer time; but deciduous trees must not get dry at the roots; the foliage will suffer from the beginning of December till the middle of April if the roots get dry during these months. One thing in favor of deciduous trees is, they shed all their leaves in autumn, and are totally leafless in winter, thus allowing the sun to shine through to the ground under the tree, which does not occur with evergreen trees. Do not plant a deciduous tree where there is a shortage of water between December and April, is sound advice. Another important thing is, full sunshine is necessary for the best effect. Deciduous trees are more effective with a background of evergreen trees. In winter, when the deciduous trees have no foliage, the evergreen trees supply a softening background to the bareness of their leafless branches.

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PHILIPS



Local Programmes, Friday, November 1

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).

EARLY SESSION—7 to 8.15 a.m.

- 7.0: "Big Ben" and meteorological information for the man on the land.
- 7.3: This morning's news from the "Daily Telegraph Pictorial."
- 7.8: Austradio musical reproduction.
- 7.45: Malls and shipping.
- 7.48: What's on to-day?
- 7.50: Children's birthday calls.
- 8.0: Music from the studio.
- 8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

- 10.30: Announcements.
- 10.32: To-morrow's sporting events, by Oscar Lind.
- 10.45: H. Weber at the Grand Organ.
- 11.0: Household helps—cooking, by Miss Ruth Furst.
- 11.10: Cables (copyright), A.P.A. and Sun-Herald news service.
- 11.15: Morning devotion.
- 11.30: Austradio musical reproduction.
- 11.53: British official wireless press.
- 12.0: "Big Ben": Stock Exchange and metal quotations.
- 12.5: Captain L. Roberts.
- 12.20: Middav weather forecast and weather synopsis; produce market session for the man on the land, supplied by the State Marketing Board.
- 12.30: Close.

THE LUNCH HOUR—1 to 2.30 p.m.

- 1.0: Lunch-hour music.
- 2.0: Stock Exchange, second call.
- 2.2: A glance at the afternoon "Sun."
- 2.7: Popular concert—Michael Sawtell, "Moonlighting Wild Cattle."
- 2.27: Announcements.

THE RADIO MATINEE—2.30 to 4.30 p.m.

- Note: During the afternoon if it is possible, opportunity will be taken of giving short descriptions from the cricket match at the Sydney Cricket Ground—Queensland Colts v. New South Wales.
- 2.30: The 2FC Instrumental Trio.
- 2.42: Frank Botham, baritone—(a) "Out Where the Big Shins Go" (Hewitt); (b) "Linden Lea" (Williams).
- 2.49: Rita Graham, violinist—(a) "Hungarian Dance" (Brahms); (b) "Adagio" (De Beriot).
- 2.53: The 2FC Instrumental Trio.
- 3.1: Florence Pouch, soprano—(a) "Sol-vel's Song" (Grieg); (b) "The Yellowhammer" (Lehmann).
- 3.15: The 2FC Instrumental Trio.
- 3.2: Frank Botham, baritone—(a) "Pass! Everman!" (Sanderson); (b) "Eleanore" (Taylor).
- 3.30: Rita Graham, violinist—(a) "Danse Espagnole" (Kreisler); (b) "Poeme Hongrois" (Lederer).
- 3.37: From the Sydney Cricket Ground—description of the cricket match, Queensland Colts v. New South Wales.
- 2.47: The 2FC Instrumental Trio.
- 4.0: "Redgum" will sneak on 'Gardening.'
- 4.15: The 2FC Instrumental Trio.
- 4.28: Stock Exchange, third call.
- 4.30: Close.

EARLY EVENING SESSION—5.45 to 7.55 p.m.

- 5.45: Children's "Good-night" stories, told by the "Hello Man," assisted by the Farm-yard Five.
- 6.45: Dinner-hour music.
- 7.30: A.B.C. sporting service.
- 7.37: Special country session—Stock Exchange resume; markets; weather forecast; late news from the "Sun"; truck bookings.
- 7.58: To-night's programme.

THE EVENING PRESENTATION—8 to 11.30 p.m.

- 2FC offers to-night an organ recital, vocal duets, W. A. Oldfield's "Impressions of English Cricket While Abroad," and harp solos. At 9.15, when the relay commences from 3LO, Melbourne, there will be an excellent programme of band music. Through 2BL service there is entertainment of popular lines—saxophone solos, new radio sketches, well-known song groups, and selections by the national broadcasting orchestra. At 9.15 Wallace Nelson will continue his series of talks.
- 8.0: From Fullerton Memorial Church—organ recital, arranged by Ronald Marston—(a) "Bell Rondo" (Morandi), (b) "Absent"

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- (Metcalf), (c) "Finale from First Sonata" (Mendelssohn), (d) "Andantino" (Lemare).
- (e) "Soldiers' Chorus" (Gounod).
- 8.25: From the studio—Alfred Wilmore and Victor Evans, vocal duets—(a) "Serenade" (Schubert), (b) "I Wish to Tune My Quivering Lyre" (Watson).
- 8.35: Signor Butta, harp solos—(a) "Norwegian Cradle Song" (Moriel), (b) "Amour-ense" (Berger).
- 8.42: Alfred Wilmore and Victor Evans, vocal duets—(a) "The Moon Hath Raised Her Lamp Above" (Benedict), (b) "In the Garden of My Heart" (Ball).
- 8.52: Victor Evans, baritone.
- 8.59: The country man's weather session—(a) "New South Wales forecasts," (b) "Inter-State weather synopsis," yachtsman's and fisherman's forecast.
- 9.0: W. A. Oldfield's "Impressions of English Cricket While Abroad."
- 9.15: Relay from 3LO, Melbourne.
- 10.15: From the studio—announcements and late official weather forecast.
- 10.20: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.
- 11.30: National Anthem; close.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres).

OPENING SESSION—8.15 to 11 a.m.

- 8.15: G.P.O. chimes and announcements.
- 8.16: Music for every mood.
- 8.40: Meteorological data for the country.
- 8.45: Malls and shipping information.
- 8.50: Memory melodies.
- 9.0: This morning's story.
- 9.30: A musical interlude.
- 9.40: British Official Wireless Press.
- 9.45: New music.
- 10.5: News from the "Daily Telegraph Pictorial."
- 10.10: Austradio musical reproduction.
- 10.40: The Australian Broadcasting Company's Women's Association, conducted by Miss Gwen Varley.
- 11.0: G.P.O. chimes; close down.
- MIDDAY SESSION—12 Noon to 2.30 p.m.**
- 12.0: G.P.O. chimes; announcements.
- 12.2: Lunch music.
- 1.0: Afternoon news from "The Sun."
- 1.5: Studio music.
- 1.15: Women's interest talk—Mrs. Meredith Atkinson, "Amsterdam."

- 1.30: Austradio musical reproduction.
- 2.0: J. Knight Barnett at the "Wurlitzer."
- 2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.45 p.m.

- 2.30: A talk by Major Sanford-Morgan.
- 2.45: "Magic Carpet" talk by "The Story-teller."
- 3.0: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.
- 3.12: From the Studio—Charles Holt, Baritone—
 - (a) "A Garden in the Rain" (Dryden-forth and Gibbons)
 - (b) "Love Me or Leave Me" (Donaldson)
 - (c) "Sleepy Valley" (Dowling).
- 3.19: Popular melody.
- 3.22: From the ballroom of the Oriental—Sydney Simpson's Syncopaters, in dance music.
- 3.32: From the Studio—Les. Harris, Saxophone Solos—
 - (a) "La Seranata" (Braga).
 - (b) "Sparklet" (Mills).
- 3.39: Songs of to-day.
- 3.42: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.
- 3.53: From the Studio—Hilda Grace Novelty Pianist—
 - (a) "Cafeteria Jangle" (Buffano).
 - (b) "Rhapsodie Russe" (Nussbaum).
- 4.0: From the ballroom of the Oriental—Sydney Simpson's Syncopaters, in dance music.
- 4.12: From the Studio—Les. Harris, Saxophone Solos—
 - (a) "Simplicity" (Wiedeft).
 - (b) "Saxena."
- 4.19: Charles Holt, Baritone—
 - (a) "Song of Songs" (Berlin).
 - (b) "Then Came the Dawn" (Dubin).
 - (c) "I Wish I had my Old Girl Back Again."
- 4.26: Hilda Grace, Novelty Pianist—
 - (a) "Casa Lopez" (Damesek).
 - (b) "The Music Box" (Lladow).
 - (c) "Gentlemen Prefer Blues" (Carroll)
- 4.33: Radio Rhythm.
- 4.45: The Trade Hour—Demonstration music.
- 5.45: Weather information; close down.
- THE DINNER HOUR—6.15 to 7.55 p.m.**
- 6.15: Dinner music.
- 6.45: The Younger Set session—Boy Scouts, conducted by Mr. Norman Lyons.
- 7.5: A talk on "General Sporting," by Claude Corbett.
- 7.20: The Country Man's Market Session—Wool, wheat, stock, farm produce, fruit, and vegetable markets.
- TO-NIGHT'S PRESENTATION—8.0 to 10.30.**
- On Friday night 2BL offers a programme which should appeal to many listeners. Well-known orchestral numbers and song groups, and to-night we have bright radio sketches and saxophone solos. Wallace Nelson's talk at 9.17 will prove an interesting break.
- 8.0: Frazer Coss, baritone.
- 8.7: National Broadcasting Orchestra—"Selection of Sanderson's Songs."
- 8.17: Mabel Batchelor, soprano—
 - (a) "Love Boat."
 - (b) "But Why" (Logan).
 - (c) "Two Roses" (Gilberte).
- 8.21: Muriel Lang, cellist.
- 8.28: Joseph Kaartinen, saxophone solo—
 - (a) "Valse Yvonne" (Wiedoeff).
 - (b) "Saxarella" (Wiedoeff).
- 8.35: The National Broadcasting Orchestra—
 - (a) "A Life on the Ocean" (Blinding)
 - (b) "Blue Shadows Fantasy."
- 8.45: Frazer Coss, baritone.
- 8.52: Scott Alexander presents a new comedy by Codrington Ball, entitled, "Heartless Mrs. Heart."
- Scene: The Palm Court.
- 9.4: Mabel Batchelor, soprano—
 - (a) "Angus Macdonald" (Roeckel), by request.
 - (b) "Home o' Mine" (Mackenzie), by request.
- 9.11: The National Broadcasting Orchestra Grand March, "Tannhauser" (Wagner).
- 9.17: Wallace Nelson will give a talk.
- 9.32: Muriel Lang, cellist.
- 9.39: The National Broadcasting Orchestra "The Quaker Girl" (Monckton).
- 9.49: Scott Alexander will give a snappy

Codrington Ball Comedy, entitled "After Nine Years."
 10.1: Joseph Kaartinen, saxophone solos—
 (a) "Drigo Serenade" (arr. Kaartinen).
 (b) "Doddin Sax" (Wiedoeft).
 10.8: The National Broadcasting Orchestra Suite: "The Pipes of Pan" (Knight-Logan).
 10.25: Late news from "The Sun."
 Late weather forecast.
 10.30: National Anthem. Close.

2GB

Theosophical Broadcasting Station, 29 Bligh St., Sydney (Wavelength, 316 Metres).
 10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Mrs. W. J. Stelzer. 11.15: Talk by Mrs. Jordan. 11.30: Music. 11.45: Close down. 1.30: Speeches from the Musical Club. 2.0: Music. 2.5: Women's Radio Service, by Mrs. Dorothy Jordan. 2.50: Movie Know All. 3.0: Address by Miss Mary Rivett. 3.15: Music. 3.30: Close down. 5.15: Children's session, by Uncle George. 6.50: M.G.M. Radio Movie Club session. 7.0: Music. 7.45: Feature story. 8.0: Miss Thelma Lansdowne, contralto. 8.7: Symphony Orchestra. 8.15: Madame Betts-Vincent, in an illustrated talk on music. 8.30: Mr. Hector Wagner, baritone. 8.37: Mr. Jack Win and Mr. Heath Burdock, humor. 8.42: Symphony Orchestra. 8.50: Miss Gladys Verona, soprano. 9.0: Weather. 9.3: Address. 9.15: Miss Thelma Lansdowne, contralto. 9.25: Cello solos. 9.30: Mr. Hector Wagner, baritone. 9.40: Mr. Jack Win and Mr. Heath Burdock, humor. 9.45: Symphony Orchestra. 9.50: Miss Gladys Verona, soprano. 10.0: Instrumental music. 10.30: Close down.

2UW

Radio Broadcasting Ltd., Paling's Building, Ash St., Sydney (Wavelength, 267 Metres).
MIDDAY SESSION
 12.30: Request numbers. 1.0: Music. 1.15: Talk on Homecraft by Pandora. 1.40: Music. 2.30: Close. 4.30: Musical programme.
EVENING SESSION.
 5.30: Children's hour, conducted by Uncle Jack. 6.30: Close. 7.0: Request numbers.

8.0: Popular music. 9.0: Comments on Foreign Affairs by Mr. J. M. Prentice. 9.10: Music. 10.30: Close.

2KY

Trades and Labor Council, Goulburn St., Sydney (Wavelength, 290 Metres).
MORNING SESSION
 10.0: Tune-in to the ticking of the clock. 10.3: Popular fox-trots. 10.15: Calls and announcements. 10.30: Women's session. Mrs. Gray. 11.0: A few laughs. 11.5: Piano-forte selections. 11.15: Calls and announcements. 11.20: Musical interlude. 11.30: Request numbers. 11.40: Music and vocal items. 11.55: Where to go to-night. 12.0: Closing announcements.
CHILDREN'S SESSION
 6.0: Birthday calls, request numbers; and kiddies' entertainment, Aunt Jemima and Uncle Bert.

EVENING SESSION

7.0: Musical interlude. 7.5: Birthday calls. 7.15: Sporting feature; turf topics; review of candidates and their prospects for to-morrow, Mr. Geo. A. Davies. 7.40: Request numbers. 8.0: Hawaiian steel guitar selections. 8.15: Women's information service, Mrs. Gray. 8.30: Music and vocal items, from the Studio. 9.10: From ring-side of M'Hugh's Leichhardt Stadium, full description of main 15-round event. 10.0: Closing announcements.

2UE

Broadcasting Station 2UE, Everett Street, Maroubra Sydney (Wavelength, 293 Metres).
EARLY MORNING SESSION.
 7.15: Breakfast-time hour orchestral music. 8.0: Clock and chimes. 8.30: Weather forecast. Close down.
MIDDAY SESSION.
 11.30: Old-time musical hour. 12.30: Conclusion of midday session. 1.0: Orchestral and vocal music. 1.45: Organ recital. 2.0: Vocal and instrumental selections. 2.30: Close down.
EVENING SESSION.
 7.15: Orchestral dinner music. 7.58: Programme announcements. 8.0: Overture. "Light Cavalry." 8.10: Orchestral and vocal concert. 10.15: National Anthem.

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Interstate Programmes, Friday, November 1

3LO

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 331 Metres).

EARLY MORNING SESSION

7.0: Melbourne Observatory time signal. 7.1: Shipping news. 7.3: Physical exercises to music. 7.30: Reproduced music. 7.40: Mail notices. 7.42: What's on to-day? 7.45: Market reports. 7.53: Weather forecasts. 7.55: News. 8.0: Time signal. 8.1: Arrival time of express trains. 8.2: Musical interlude. 8.15: Close down.

MORNING SESSION

9.30: Current happenings in sport, by Mel. Morris. 10.45: Music. 11.30: Morning sales, Melbourne Stock Exchange; metal prices. 12.0: Melbourne Observatory time signal. 12.1: News. 12.15: News; British Official wireless news; Corn Exchange mid-day report; Newmarket stock sales; Associated Stock and Station Agents' official report. 12.30: Close down.

MIDDAY SESSION

1.0: Time signal; Stock Exchange; weather forecasts for Victoria, New South Wales, South Australia and Tasmania; ocean forecast; river reports; rainfall. 1.15: Comments on the day's news. 1.30: Musical interlude.

EDUCATIONAL SESSION

2.0: "The Races and Peoples of the World"—Mr. J. Esmond. 2.15: Musical interlude. 2.20: Gems of English literature; Swift's "Gulliver's Travels"—Prof. G. H. Cowling, M.A. 2.35: Musical interlude. 2.40: A talk in German. 2.55: Musical interlude. Mr. G. E. Green, M.A., Dip. Ed. 3.0: Melbourne Observatory time signal.

THE RADIO MATINEE

3.0: The Studio Light Orchestra—Overture, "Marratara"—Wallace. 3.8: Violet Semple, contralto, and Tom Semple, tenor—Duets, "Passing By" (Purcell), "In the Morning Light" (Beethoven). 3.14: Edna Davis, xylophone—"Poet and Peasant" (Suppe), "I'm Bringing a Red, Red Rose." 3.20: Claude Carter, entertainer—"Jones of the Lancers," "When My Dreams Come True." 3.28: The Studio Light Orchestra—A Highland Patrol; "The Wee MacGregor" (Abers). 3.35: Spanish Serenade; "Paloma" (Fradley), 3.37: Comedy Sketch, "Their First Quarrel," produced by Frederick Whitlow—He, Frederick Whitlow; She, Velma Raine. 3.48: Edouard Lambert, violin—Selected. 3.52: Violet Semple, contralto—"Somebody's Ball Dress" (May Brahe), "Country Dance" (May Brahe). 3.59: Studio Light Orchestra—Selection, "The Merry Widow" (Lehar). 4.7: Claude Carter, entertainer—"The Blacksmith's Farewell," "I'll Always Be in Love." 4.15: Edna Davis, xylophone—"Hungarian Dance" (Brahms), "Ten Little Miles from Town" (Berlin). 4.20: Tom Semple, tenor—"My Father's Close" (Parker), "Night Song" (Cwynn Williams). 4.26: Studio Light Orchestra—

"Gems from South America," 4.30: Close down.

THE CHILDREN'S CORNER

5.45: "Plain Peter" and "Rolling Rita" are here again. Among other funny songs, they are going to sing—"The Girl Who Stuttered and the Boy Who Lapsed." Birthday Greetings by "Plain Peter."

EVENING SESSION

6.35: Musical interlude. 6.45: Bowls—Mr. E. Pascoe. 6.55: Musical interlude. 7.0: Melbourne Observatory time signal. 7.1: Countryman's Session—Stock Exchange information; Corn Exchange report; Associated Stock and Station Agents' official report; Wool Exchange report; mines and metals; fish and rabbit prices; farm and dairy produce report, supplied by the Inter-State Dairy Produce Committee; wholesale fruit prices, supplied by the Wholesale Fruit Merchants' Association; retail fruit prices, supplied by the Victorian Fruitgrowers' Association; citrus fruit prices, supplied by the Victorian Central Citrus Association; weather synopsis; river reports; rainfall. 7.25: Gardening hints—Artificial Manures, Mr. H. W. Jessep, B.Ag.Sc. 7.40: Herald news service. 7.45: Romance of Ruins—Dr. E. Time signal. 8.0: Musical interlude.

LIGHT SESSION

8.0: Collingwood Citizens' Band (conductor, F. C. Johnston)—March, "Mephistopheles"; overture, "Poet and Peasant." 8.8: Madame Mina Hesleva, soprano—"Spring's Awakening" (Sanderson), "The Jewel Song" from "Faust" (Goed). 8.15: National Broadcasting Orchestra—Selection, "The Lily of Killarney" (Benedict). 8.23: "The Two Busy Bees"—Songs and Repertoire. 8.33: "The Sundowners' Male Quartette—"Here Comes the Showboat," "I Haven't Got Hair" (Fain). 8.45: Harry Wallace and his Vagabond Players—Half an hour of modern music. 9.15: Collingwood Citizens' Band—Fania'sia, "Soldier's Memories" from "Mignon" (Thomas), "The Wren" (Benedict). Accompanied by the National Broadcasting Orchestra.

9.32: William James, piano—First Movement from Concerto in F Minor by Arensky. With orchestral accompaniment. 9.42: The Sundowners' Male Quartette—"Old Black Joe" (Foster), "The Spider and the Fly" (O'Hara), "Lily of Laguna." 10.0: Collingwood Citizens' Band—Grand selection, "Lucia di Lammermoor." 10.10: The A.B.C. String Quartette—Quartette No. XVI. (Mozart).

10.10: Eric Welch will speak on "To-morrow's V.R.C. Races at Flemington." 10.20: Collingwood Citizens' Band—Novelty March, "Paddy's Patrol"; march, "Duntroon." 10.30: British Official Wireless news; meteorological information; items of interest. 10.40: "The Rex" Dance Band. 11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 487 Metres).

MORNING SESSION

8.15: Musical reproduction. 8.45: Weather data. 9.0: Chimes. 9.1: News service. 9.5: Musical reproduction. 10.0: Chimes. 10.1: British official wireless news. 10.10: Announcements. 10.30: Arnold Coleman at the Wurzelizer. 10.50: The daily broadcast, service. 11.0: Close down.

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MIDDAY SESSION

12.0: Chimes. 12.1: Famous Women—Margaret of Burgundy—An English Princess Abroad—Miss Jessie Webb, M.A. 12.15: Fifteen minutes' synopsis, 12.30: Lullaby music, supplied by Paul Jacale and his Band. 2.0: Chimes.

AFTERNOON SESSION

2.1: Orchestra—New York Philharmonic Orchestra. 2.8: Tenor, Mario Chamlee. 2.12: Violin, Albert Spalding. 2.16: Comedians, Luther and Robinson. 2.22: Orchestral, Beom Selvin and his Orchestra. 2.25: Baritone, Giuseppe Danise. 2.28: Clarinet, Johnny Dadds. 2.34: Orchestral, Ernie Golden and his Orchestra. 2.40: Violin, Albert Spalding. 2.44: Tenor, Mario Chamlee. 2.48: Comedienne, Belle Baker. 2.54: Band, Walter E. Rogers and his Band. 3.0: Request numbers. 3.20: A chat by a prominent woman. 3.55: Musical interlude. 3.40: Topical chapter—The Flapper and Auntie. 3.55: Musical interlude. 4.0: A Woman's Wanderings through the Empire—Miss Frances Fraser. Traders' Demonstration Session.—4.15: "Australdr!" Musical reproduction. 5.0: G.P.O. chimes. 5.1: "Australdr!" musical reproduction. 5.30: Weather data. 5.45: Close down.

EVENING SESSION

6.15: Dinner music, supplied by Paul Jacale and his Band. 7.30: What's on the air to-night? 7.32: Sporting results. 7.35: Latest musical releases. 8.0: G.P.O. chimes.

NIGHT SESSION

8.1: A.I.P. Recollections—Mr. C. Ellis. 8.15: Community singing, transmitted from the Malvern Town Hall; conductor, Frank Hatherley. 10.0: Weather information and Herald news. 10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (255 Metres).

MOBING SESSION

11.0: Municipal band, "Cuckoo Waltz." 11.30: "in Vogue"—"The World's Fashions and Fables." 11.35: Paul Whiteman and his orchestra, "Chinese Lullaby." 12.0: John Turner, "Mother Macbrее." 12.30: Dajos Bela Orchestra "Ideale," 1.0: Orce Moore, "For You." 1.30: Thelma Terry and her play boys, "Voice of the Southland." 1.45: Close down.

AFTERNOON SESSION

2.15: New symphony orchestra, "Henry VIII Dances." 3.30: Margherita Salvi, "Una Voce Poco Fa." 3.0: Sponsored session. 4.0: Close down.

EARLY EVENING SESSION

5.0: Sponsored sessions. 6.30: Cleveland symphony orchestra, "Sleeping Beauty." 7.0: Alma Gluck, "Irish Love Song." 7.15: Market reports. 7.30: Ted Wallace and his Campus boys, "Mean to me."

8.0: Minneapolis symphony orchestra, "Melodrama." 8.30: Charles Hackett, "Beloved, it is morn." 9.0: Nat. G. 9.30: Orpheo de Castro (cello), "At the Fountain." 10.0: Chester Gaylord, "My tumbles are over." 10.30 Will Prior and his stage band, "Old Fashioned Rose." 10.45: News. 11.0: Close.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

MIDDAY SESSION

1.0: Market reports and weather. 1.30: Lunch-hour music. 2.0: Close.

AFTERNOON SESSION

3.0: Studio Orchestra 2.30: Mail train running times. 3.31: Music. 4.15: News. 4.30: Close.

EARLY EVENING SESSION

6.0: Dinner music; mail train running times; mail information; shipping news. 6.25: Commercial announcements. 6.30: Bedtime stories conducted by the "Sandman." 7.0: News in brief; 7.5: Stock Exchange news. 7.6: Metal quotations. 7.7: Market reports. 7.25: Penwick's stock report. 7.30: Weather. 7.45: Announcements. 7.48: Standard time signals. 7.45: To-morrow's sporting fixtures reviewed.

NIGHT SESSION

8.0: The Melodious Trio (piano, banjo, violin)—Fox-trot, "Dainty Miss"; march, "Repa Band" (Sweden). 8.8: W. L. Burch (bass)—"Friend o' Mine" (Sanderson). 8.12: The Rhythm Rascals—Dance music. 8.22: Mrs. Charles Willey (contralto)—"Shin Shin" (Japan).

8.27: Double Male Quartette—A group of war-time favorites, including: "Tipperary," "Keep the Home Fires Burning," "Long, Long Trail," "Mademoiselle from Armentieres."

8.42: The Rhythm Rascals—Syncopators. 8.53: George Williamson (tenor)—"Adieu, Marie" (Adams), by request. 8.57: Double Male Quartette—Ballad, "Bells of St. Mary's," by request.

9.0: Metropolitan weather forecast. Week-end road information for motorists officially supplied by the R.A.C.Q.

9.15: The Rhythm Rascals—Dance music. 9.25: Double Male Quartette—A group of "darkey" numbers, including, "Ole Black Joe," "Swanee Ribbons," "Massa's in de Cold, Cold Ground," "Genevieve."

9.40: The Melodious Trio—March, "Stepping Out." 9.45: W. L. Burch (bass)—"Till I Wake" (Woodie-Finden). 9.50: The Rhythm Rascals—Dance music. 10.0: News, weather. Close.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

MORNING SESSION

1.15: Recordings. 1.45: Progress report of George McLeod's attempt on Adelaide to Melbourne cycling record. 1.46: Kitchen craft and menu talk. 12.1: Recordings. 12.15: News. 12.40: Recordings. 12.52: Railway Stock Exchange, and meteorological information and progress report of George McLeod's formation. 1.15: Recordings. 1.59: Meteorological attempt on Adelaide to Melbourne cycling record. 2.0: Close.

AFTERNOON SESSION

3.0: Chimes. 3.4: Progress report of George McLeod's attempt on Adelaide to Melbourne cycling record. 3.5: Recordings. 4.0: Piano. 4.15: An educational talk. 4.25: Stock Exchange. 4.30: Close.

EVENING SESSION

6.0: Progress report of George McLeod's attempt on Adelaide to Melbourne cycling record. 6.2: Birthday greetings. 6.15: Request numbers. 6.30: Dinner session. 7.0: Birthday League greetings: selections for to-morrow's races at Flemington and Strathalbyn; progress report of George McLeod's attempt on Adelaide to Melbourne record; Stock Exchange. 7.20: Tennis talk. 7.45: Mr. A. Grenfell-Price, M.A., F.R.G.S., will speak on "Pioneers of Australia."

NIGHT SESSION

8.0: Fifty years ago to-day.
8.10: The Stelner Trio—"Prenier Trio" (Mendelssohn).
8.20: Alys Watson, soprano.
8.24: Pianoforte recital by Hans Bertram (blind pianist).
8.34: George Horton, comedian, will entertain you.
8.44: The Stelner Trio—"Three Dances" (Benyon).
8.55: Signor Torre, baritone—"Heart Throbs" (Mendelssohn). "The Violets."
9.0: Meteorological, including Semaphore tides; overseas grain report.
9.3: Progress report of George McLeod's attempt on Adelaide to Melbourne cycling record.
9.5: The Stelner Trio—"Nocturne No. 3" (Liszt). "Polish Dance" (Scharwenka).
9.15: Alys Watson, soprano—selected.
9.22: Lizette Foglia, violinist—"Romance" (Rubinstein). "Scherzo" (Van Goens).
9.27: George Horton, comedian, will entertain you.
9.37: The Stelner Trio—"Chant Sans Paroles" (Tschikowsky). "La Cinquantaine" (Mario).
9.47: Signor Torre, baritone—"Love Sends a Little Gift of Roses."
9.51: Guido Giacchino, 'cellist—selected.
9.55: Alys Watson, soprano—selected.
10.1: The Stelner Trio—"Concerto" (Bach).
10.11: Signor Torre, baritone—"Amo Sirena" (Mendelssohn).
10.15: Weather, sporting, etc.
10.30: Dance recordings.
11.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth, (Wavelength, 435 Metres).

EARLY MORNING SESSION.—7.30: Chimes. 7.31: Meteorological. 7.32: The day's maxim. 7.35: Early rising music. 7.55: Mails and shipping intelligence. 8.0: What's on to-day? 8.5: Music. 8.27: Features of to-day's programme. 8.30: Close down.

MORNING SESSION.—10.0: Chimes. 10.1: Reproduced music. 10.19: Women's interest talk by Dorothy Graham. 10.30: Organ recital. 11.0: Close down.

MIDDAY SESSION.—12.30: Chimes. 12.31: Reproduced music. 12.45: World-wide cables. 12.55: Items of interest. 1.0: Chimes. 1.1: Weather. 1.2: Luncheon music. 2.30: Close down.

THE RADIO MATINEE.—3.30: Reproduced music. 3.45: "A Message from the Country Women's Organisation." 4.0: Chimes. 4.1: Concert. 4.55: Features of this evening's presentation. 5.0: Close down.

EARLY EVENING SESSION.—5.45: Chimes. 5.46: Children's good-night stories by Uncle Bas and Aunt Maxine. 6.15: A.B.C. Younger Set session. "Things strange but true." 6.30: Dinner music by the National Broadcasting Orchestra. 7.30: Weather report. 7.31: News. 7.35: Market reports. 7.40: Stock Exchange. 7.42: Review of to-morrow's sporting fixtures. 7.57: Features of to-night's presentation.

EVENING SESSION.—8.0: Chimes. 8.1: Weather report. 8.2: Instrumental trio. 8.10: Racing observer. 8.25: Instrumental Trio. 8.45: James Conarty, gardening hints. 9.0: Chimes. 9.1: Weather. 9.2: R. T. Newton, violinist. 9.8: Announcements. 9.15: Description of wrestling match from Perth Stadium, by Russell Sandeman. 10.0: Chimes. 10.1: What's on to-morrow? 10.3: Temple Court Dance Band, conducted by Merv Lyons. 11.0: Town Hall chimes. "God Save the King."

7ZL

Tasmanian Broadcasters Pty., Bursary Bldgs., Elizabeth Street, Hobart (Wavelength, 516 Metres).

11.30 a.m.: Recital. 11.34: Weather. 11.35: Recital. 11.55: Weather. 12.0: Chimes. 12.1: Shipping, mail notices, housewives' guide. 12.30: News. 12.40: Recital. 1.5: Auction sales. 1.10: Recital. 1.30: Close. 3.0: Selections. 3.4: Weather. 3.5: Recital. 4.15: Readings. 4.30: Close. 6.15: Children's corner. 7.10: Recorded music. 7.20: News. 7.30: Studio concert. 7.37: Geo. Huxley, concertina solos, "Alice, Where Art Thou" (Ascher). "Provida Donna Dolce Madre." 7.47: Record recital. 8.0: Doris Barker, soprano, "Waiata Poi" (Hill). "A Little Coo's Prayer" (Hope). 8.7: Record recital. 8.20: Geo. Huxley, concertina solos, "La Serenata." "Ah, Dolce Canto." 8.30: Record recital. 8.38: Doris Barker, soprano, "Five Little Picaninnies" (Anthony). "Blackbird's Song" (Scott). 8.45: James Conarty. 9.45: News. 10.0: Chimes. 10.1: Close.

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Local Programmes, Saturday, November 2

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).

EARLY SESSION—7 to 8.15 a.m.

- 7.0: "Big Ben" and meteorological information for the man on the land.
- 7.3: This morning's news from the "Daily Telegraph Pictorial."
- 7.8: Austradio musical reproduction.
- 7.45: Mails and shipping.
- 7.48: What's on to-day?
- 7.50: Children's birthday calls.
- 8.0: Music from the studio.
- 8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

- 10.30: Announcements.
- 10.32: A.B.C. Racing Observer.
- 10.45: Studio music.
- 11.0: Household helps—week-end suggestions by Miss Ruth Furst.
- 11.10: Cables—(copyright) A.P.A. and Sun-Herald news service.
- 11.15: Austradio musical reproduction.
- 11.55: British official wireless press.
- 12.0: "Big Ben": Stock Exchange and other quotations.
- 12.5: Studio music.
- 12.20: Midday weather forecast and weather synopsis.
- 12.30: Studio music.
- 12.50: From Canterbury—description of the races in the running.

Note: During the afternoon, from Flemington, Victoria, description of the Maribyrnong Plate, Melbourne Stakes, Cantala Stakes, and the Hotham Handicap.

From the studio: During intervals between races a musical programme will be broadcast.

- 7.5: Complete sporting resume.
- 8.15: Close.

EARLY EVENING SESSION—5.45 to 7.55 p.m.

- 5.45: Children's "Good-night" stories, told by the "Hello Man," assisted by Aunt Willa and Cousin Gwen.
- 6.45: Dinner-hour music.
- 7.30: A.B.C. sporting service.
- 7.37: Special country session—Stock Exchange resume; markets; weather forecast; late news from the "Sun."
- 7.58: To-night's programme.
- Announcing a programme of real old time music. 2FC offers listeners to-night Veterans of Variety in Song and Story of the past and present. Through 2BL Service the programme is on popular lines, novelty mouth organ numbers and whistling solos, steel guitar numbers, and the big sporting feature.
- 8.0: The Veterans of Variety—1899 in Song and Story. 1929 in Music of To-day.
- Note: At 9 o'clock the Country Man's Weather Session—
 - (a) New South Wales forecasts.
 - (b) Interstate weather synopsis.
 - Yachtsman's and Fisherman's forecast.
- 10.0: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.
- 10.15: From the Studio: Announcements. Late official weather forecast.
- 10.20: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.
- 11.30: Close. National Anthem.

THE DINNER HOUR—6.15 to 7.55 p.m.

- 6.15: Dinner music.
- 6.45: The Younger Set Session—The Captain, to his Comradios.
- 7.5: A.B.C. Sporting service.
- 7.20: Austradio musical reproduction.
- 7.55: What's on the air to-night?

10-NIGHT'S PRESENTATION—8.0 to 12.0.

On Saturday night our programme, are always on popular lines, and to-night there is the usual light type of entertainment, popular numbers, steel guitar items, novelty mouth organ and whistling solos, and symphonic music by the A.B.C. Dance Orchestra. In contrast to this modern programme 2FC offers Veterans of Variety, 1899 to 1929—popular features of entertainment which should make a wide appeal to our listeners.

- 8.0: Announcing a popular programme.
- 8.1: The Australian Broadcasting Dance Orchestra, conducted by Cec. Morrison, featuring a radio dance symphony.
- 8.12: Charles Lawrence, entertainer.
- 8.22: The Oahu Trio—
 - (a) "Hilo March" (Pale).
 - (b) "Honolulu Moon."
 - (c) "Maori Melodies."
- 8.32: To-night's big sporting feature.
- 9.30: Jack Elliott, in novelty whistling solos
 - (a) "Invercargill March" (Lithgow).
 - (b) "Bird Imitations."
 - (c) "Hustling Hinkler March" (Abe Bear).
- 9.37: Harry Croot, baritone—
 - (a) "Long Ago in Aiala" (Messenger).
 - (b) "The Meeting of the Waters" (Moore).
- 9.44: The Oahu Trio—
 - (a) "Saxophone Waltz" (Sisk).
 - (b) "Honolulu March" (arr. Awa).
 - (c) "Aloha Oe" (Introducing Saw) (arr. Awa).
- 9.54: Charles Lawrence, entertainer.
- 10.4: Jack Elliott, in novelty mouth organ solos—
 - (a) "Under the Double Eagle" (Wagner).
 - (b) "When the Great Red Dawn is Shining."
- 10.11: The Australian Broadcasting Dance Orchestra, conducted by Cec. Morrison.
- 10.25: Late weather forecast.
- 10.30: The Australian Broadcasting Dance Orchestra, conducted by Cec. Morrison.
- 12.0: National Anthem. Close.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres).

OPENING SESSION—8.15 to 11 a.m.

- 8.15: G.P.O. chimes and announcements
- 8.16: Music for every mood.
- 8.40: Meteorological data for the country.
- 8.45: Mails and shipping information.
- 8.50: Memory melodies.
- 9.0: This morning's news.
- 9.30: A musical interlude.
- 9.40: British Official Wireless press.
- 9.45: New music.
- 10.8: News from the "Daily Telegraph Pictorial."
- 10.10: Austradio musical reproduction.
- 10.40: Mr. C. Cooper, Park Superintendent of City Parks, will talk on "Gardening."
- 11.0: G.P.O. chimes. Close down.

MIDDAY SESSION—12 noon to 2.30 p.m.

- 12.0: G.P.O. chimes. Announcements.
- 12.2: Lunch music.
- 1.0: Afternoon news from "The Sun."
- 1.5: Austradio musical reproduction.
- 2.0: J. Knight Barnett at the Wurlitzer.
- 2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.15 p.m.

- 2.30: Radio rhythm.
- 2.42: Basil Rye, baritone.
- 2.49: Modern music.
- 3.0: From the Sydney Cricket Ground—A description of the match Queensland Colts v. New South Wales.
- 3.10: From the Studio—Jazzinski, in popular vocal numbers, with piano interlude.
- 3.17: The latest dance music.
- 3.27: Florence Smith, contralto—
 - (a) "Arise, O Sun" (Day).
 - (b) "Tis the Hour of Farewell" (Lehmann).
- 3.34: Melody memories.
- 3.44: Basil Rye, baritone.
- 3.51: From the Sydney Cricket Ground—A description of the match Queensland Colts v. New South Wales.
- 4.0: From the Studio—Florence Smith, contralto—
 - (a) "A Summer Night" (Thomas).
 - (b) "My Prayer" (Squire).
- 4.7: Studio music.
- 4.17: Jazzinski at the piano.
- 4.24: Austradio musical reproduction.
- 4.45: From the Sydney Cricket Ground—A description of the match Queensland Colts v. New South Wales.
- 4.55: A musical interlude.
- 5.0: Complete racing and sporting resume.
- 5.15: Close down.

2GB

Theosophical Broadcasting Station, 29 Bligh St., Sydney (Wavelength, 316 Metres).

- 3.0: Musical session. 5.15: Children's session, by Uncle George; M.G.M. Radio Movie Club session. 7.0: Request hour. 10.30: Close down.

2UW

Radio Broadcasting Ltd., Fanning's Building, 444 St., Sydney (Wavelength, 267 Metres).

- 5.30 p.m.: Children's hour, conducted by Uncle Jack. 6.30: Close. 7.0: Musical programme. 10.30: Close.

2KY

Trades and Labor Council, Gough St., Sydney (Wavelength, 280 Metres).

CHILDREN'S SESSION

- 6.0: Birthday calls; request numbers; and kiddies' entertainment, Aunt Jemima and Uncle Bert.

EVENING SESSION

- 7.0: Musical interlude. 7.5: Birthday calls. 7.15: Sporting feature; turf topics; how they ran to-day. 7.50: Request numbers. 8.0: Closing announcements.

2UE

Broadcasting Station 2UE, Everett Street, Manly, Sydney (Wavelength, 293 Metres).

EARLY MORNING SESSION.

- 7.15: Breakfast-time hour orchestral music. 8.0: Clock and chimes. 8.1: Music. 8.30: Weather forecast. Close down.

EVENING SESSION.

- 7.15: Orchestral dinner music. 7.59: Programme announcements. 8.0: Overture, "Maritana." 8.10: Orchestral and vocal selections. 10.30: Close down.



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LEVENSON'S RADIO 226 PITT ST., SYDNEY.
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Interstate Programmes, Saturday, November 2

3LO

Australian Broadcasting Co., 799-800 St. Melbourne (Wavelength, 371 Metres).

EARLY MORNING SESSION

7 to 8.15: See Friday.
MORNING SESSION
 10.30 to 12.30: See Friday.

MIDDAY SESSION

12.57: Description of Maiden Plate, one mile, V.R.C. races at Flemington, by Eric Welch. 1.5: Stock Exchange; weather. 1.30: Melody broadcast.

AFTERNOON SESSION

1.35: Description of Maribyrnong Plate, 5 furlongs, V.R.C. races at Flemington, by Eric Welch. 1.45: Musical interlude. 1.55: Preliminary description of Victorian Rowing Association's Regatta on the Yarra. 2.35: Description of Melbourne Stakes, 1 1/4 miles, V.R.C. races at Flemington, by Eric Welch. 2.50: Musical interlude. Melbourne observatory time signal; sporting results to hand. 3.0: Description of Victorian Rowing Association's Regatta on the Yarra. 3.24: Description of Victoria Derby, 1 1/2 miles, V.R.C. races at Flemington, by Eric Welch. 3.40: Musical interlude. 3.50: Description of Victorian Rowing Association's Regatta on the Yarra. 4.0: Melbourne observatory time signal; sporting results to hand. 4.10: Musical interlude. 4.15: Description of Hotham Handicap, one mile, V.R.C. races at Flemington, by Eric Welch. 4.30: Close down. 4.55: Sporting results. 5.35: Close down.

THE CHILDREN'S CORNER

5.45: "Little Miss Kookaburra" has found another "Pond Mermaid" story in response to many requests from her Little Kookaburrites. Birthday greetings from "Little Miss Kookaburra." Then, for the older ones, a further instalment of the thrilling serial, "The Guides at Calvary Hill."

EVENING SESSION

6.40: Sporting results. 6.55: Musical interlude. 7.0: Melbourne Observatory time signal. 7.1: Countryman's Session. 7.25: Stories of our Mining Fields—Mr. E. A. Mustard. 7.40: The Herald News Service. 7.45: Wandering Round the World—Rhodesia; Mr. H. J. G. Esmonde. 8.0: Melbourne Observatory time signal.

NIGHT SESSION

8.0: National Broadcasting Orchestra—Selection from "Wildflower" (Youmans).
 8.10: Mary Hotham, mezzo-soprano—"Come Thou Pining, Preevish Love" (Vinci). "Abi How Delightful the Morning" (Reynolds).
 8.17: Bertha Jorgensen, violin—"The Deluge" (Saint-Saens).
 8.23: Rita Hilton, entertainer—"The Alphabetical Diary." "What Does He Call You, Girls?"
 8.30: National Broadcasting Orchestra—Suite, "Les Deux Pigeons" (Messager).
 8.40: A special programme has been arranged.
 9.50: National Broadcasting Orchestra—Selection from the musical comedy "Sometime" (Prinl).
 10.0: Mary Hotham, mezzo-soprano—"Love's a Merchant" (Carew). "Full Moon" (Woolmer).
 10.7: Rita Hilton, entertainer—Musical monologues, "High Society," request item.
 10.15: The A.B.C. string Quartette—Quartette No. 50 (Haydn).
 10.25: British official wireless news; sporting results; items of interest; meteorological information.
 10.35: "The Rex" Dance Band.
 11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 444 Metres).

MORNING SESSION

8.15 to 11.0: See Friday.

MIDDAY SESSION

12.0 to 2.0: See Friday. 2.1: The Idyls of the King—Geraint and Enid (Rev. W. Bottomley). 2.15: Musical interlude. 2.20: Life in the Tropics—Mr. A. A. Downs. 2.35: Musical interlude. 2.40: Old Coaching Days—Mr. Frank Smiley. 2.55: Musical interlude. 3.0: G.P.O. chimes.

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THE RADIO MATINEE

3.1: Paul Jeacle and his Band—"Humoreskimo." "Come West, Little Girl; Come West" (Wending).
 3.6: The Harmonists Male Quartette—English Madrigal; Negro Melody. 3.14: Bob Adams—trumpet solo, selected. 3.18: Freda Treweek, soprano—"My Dear Soul" (Sanderson). "You'll Get Heaps o' Lick-in's" (Clarke). 3.25: Gordon Ireland, the Apollo of Pop-songs at the piano, "The Rainbow Man" (Hanley). "Building a Nest for Mary" (Greer). 3.31: Paul Jeacle and his Band—"It's a Wonderful World After All" (Davis). "I'm Just a Vagabond Lover" (Vale). 3.37: The Harmonists Male Quartette—bass solo, "Bashful Tom" (Kepp). Frank Nicholson. 4.30: George Bodley—saxophone solo, selected. 4.4: One-act play, "The Fortune Teller" (produced by Duclie Hall); characters, Duam Nayro, the Fortune Teller (Ducie Hall), Shirley (Leonty Levy), Allison Grant (Claude Carter); scene—A sitting-room draped with black velvet curtains with a centre opening outside of which is a standard lamp with a red light. In the centre of the stage is a black table and two black high-backed chairs. At one end of the room is a black screen. As the curtain goes up Duam Nayro, who is a tall, thin, very white-faced woman, is sitting at the table. 3.55: Paul Jeacle and his Band—duo numbers. 4.2: Harmonists Male Quartette—"The Tar's Song." "Larboard Watch." 4.10: Piano novelty by an absent artist. 4.16: Freda Treweek, mezzo-soprano—country folk songs—"Out to the Greenwood" (Brahe). 4.23: Gordon Ireland, songs at the piano—"Lolita" (Strachley). 4.29: Paul Jeacle and his Band—"Mississippi Moon" (Terese). "Love Sings a Song in My Heart" (Cherilavsky). 4.33: The Harmonists Male Quartette—tenor solo, "Angels Guard Three." Tom Masters. 4.39: Paul Jeacle—saxophone solo, selected. 4.43: Harmonists Male Quartette—"I'm Alongin' for You, Massa" in the Cold, Cold Ground." 4.50: Paul Jeacle and his Band—request numbers. 5.0: G.P.O. chimes. 5.1: "Australio" musical reproduction. 5.30: Weather data. 5.35: "Australio" musical reproduction. 5.48: Close down.

EVENING SESSION

6.15: Dinner speech, supplied by the Studio Light Orchestra. 7.30: What's on the air to-night? 7.32: Sporting results. 7.40: Latest musical releases. 8.0: Chimes.

NIGHT SESSION

8.1: Malvern Brass Band—march, "The 20th Century" (Rimmer); entr'acte, "Narcissus" (Ord. Hume).
 8.8: "The Two Wags," mirth and melody.
 8.18: Albert Durand, banjo—"The Lost Chord" (by request). (Sullivan). (b) A banjo description of a military march-past, with novel effects.
 8.24: Jane Douglas, soprano—"A Heart That's True" (Robyn). "The Fairy Land" (Phillips).
 8.31: Malvern Brass Band—fantasia, "Under sunny Skies" (Rimmer).
 8.40: Thomas George, bass—"Riding through the Night" (Smith). "The Gentle Quater-tern" solo.
 8.47: One-act play, by the Melbourne Dickens Dramatic Club, "Mrs. Nickleby's Admirer"; characters, Kate Nickleby (Muriel Bardsley), The Admirer, the old gentleman over the wall (Maurice Latimer), The Keeper (Harold Wells); scene, Mrs. Nickleby's garden.
 9.7: Les Rohmer, Prince of Variety—song, "Why" (Stoneham) piano-accordion, "Dance of the Paper Dolls" (B).
 9.15: Malvern Brass Band—Waltz Brilliant "Wisp o' the Wisp" (Bourne).
 9.23: Jane Douglas, soprano—"Do You Know My Garden?" (Wood). "Sing, Sing, Blackbird" (Phillips).
 9.30: Albert Durand, banjo—humorous sketch, "The Curate"; piano, "Tattoo."
 9.37: Malvern Brass Band—"Vale of Avon" (Rimmer).
 9.42: Thomas George, bass—"The Floral Dance" (Moss). "O, Mistress Mine" (Quilter).
 9.48: Malvern Brass Band—selections from musical comedy.
 9.57: Les Rohmer, Prince of Variety—song, "The Big Parade"; piano-accordion, "Ten Little Miles from Town"; "Misery Farm."
 10.5: Weather information and Herald news.
 10.15: Malvern Brass Band—overture, "Pique Dame" (Suppe).
 10.25: "The Two Wags," mirth and melody.
 10.35: Malvern Brass Band—Intermezzo Gavotte, "Hypatia" (Ord. Hume); "Andante Cantabile" (Tschaiakowsky).
 10.45: "The Two Wags" Dance Band.
 12.0: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (355 Metres).

AFTERNOON SESSION

2.0: Berlin State Opera orchestra, "Polonaise No. 2" (Liszt). 2.30: Rex Whitehead (bass), "In Cellar Cool." 3.0: Colonial Club Orchestra, "Naughty Eyes" 3.30: Layton and Johnstone, "Blue Cross." 4.0: Nat Shikret and his orchestra, "Lady Divine." 4.30: Grand symphony orchestra, "Ries of Hoffman" 5.0: Sponsored session. 5.30: Close down.
 Note: During the afternoon progress reports and results of sporting events will be given at intervals.

EARLY EVENING SESSION

6.0: Cleveland symphony orchestra, "Slavonic Dance." 6.30: All sporting results. 6.45: Alfred O'Shea, "Then You'll Remember Me." 7.0: Jack Hylton and his orchestra, "Laughing Marionette." 7.30: George Brown (tenor). "The Two Wags."

EVENING SESSION

8.0: Sponsored programme. The Victorian Professional orchestra's concert transmitted from the Auditorium. 9.0: Florentina (soprano), "Mighty Lak a Rose." 9.30 Paul Whiteman and his orchestra, "Chinese Lullaby." 10.0: Reginald Foort, "Love's Garden of Roses." 10.30: Anna Linde, "Le Concon." 10.45: News. 11.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

EARLY MORNING SESSION

7.30 to 8.30: See Friday.

AFTERNOON SESSION—See Friday.

EARLY EVENING SESSION

6.10: El-wheely news service. 6.30: Bedtime stories conducted by "Uncle Ben." 7.0: To-day's races in detail. 7.20: General sporting notes. 7.30: Sailing notes by Mr. Fred Smith.

NIGHT SESSION

8.0: The smoke concert arranged by the Commercial Travellers' Association will be relayed from the Commercial Travellers' Club. 12.15: News; railway weather. Close down.
 Note: At suitable times the semi-finals and finals of the main trophy race at the Davies Park Speedway will be relayed.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

MORNING SESSION

12.0: Chimes. 12.1: Special late selections for races at Flemington. 12.3: Probable starters and selections for races at Strathalbyn. 12.15: News; railway information. 12.45: Recordings. 1.0: G.P.O. chimes and close down.

AFTERNOON SESSION

2.0: During the afternoon descriptions of the races at Flemington will be given, interspersed with musical numbers and Strathalbyn race results from the studio. 5.0: Close.

EVENING SESSION

6.0: Resume of Flemington and Strathalbyn race results. 6.2: Birthday greetings; League greetings. 7.10: Rev. G. E. Hale, B.A., on "Are Australians Too Fond of Sport?" 7.25: Mr. O. G. Riley, 7.40: Resume of Flemington and Strathalbyn race results; result of George McLeod's attempt on Adelaide to Melbourne cycling record; other sporting results.

NIGHT SESSION

8.0: Programme review.
 8.10: Holden's Silver Band, conducted by O. Sumner.
 8.20: Hilda Hammond, soprano—"Quest" (Fairfield). "Be Still, Black Bird" (Sanderson).
 8.27: Solo by member of Holden's Silver Band.
 8.31: Don and Rex will entertain you.
 8.40: Holden's Silver Band.
 8.50: Bessie Francis, elocutionist.
 8.55: Vocal number.
 9.1: Holden's Silver Band.
 9.11: Hilda Hammond, soprano—"Castilian Lam-ent" (Del Riego), "Cupid" (Sanderson).
 9.18: Solo by member of Holden's Silver Band.
 9.22: Don and Rex.
 9.30: Holden's Silver Band.
 9.40: Bessie Francis, elocutionist.
 9.44: Holden's Silver Band.
 9.54: Don and Rex.
 10.7: Holden's Silver Band.
 10.15: P. H. Nicholls and Bessie Francis in a Long-fellow interlude.
 10.15: Strathalbyn and Flemington race results; result of George McLeod's attempt on Adelaide to Melbourne cycling record.
 10.30: Dance recordings.
 11.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

For day sessions see Friday.

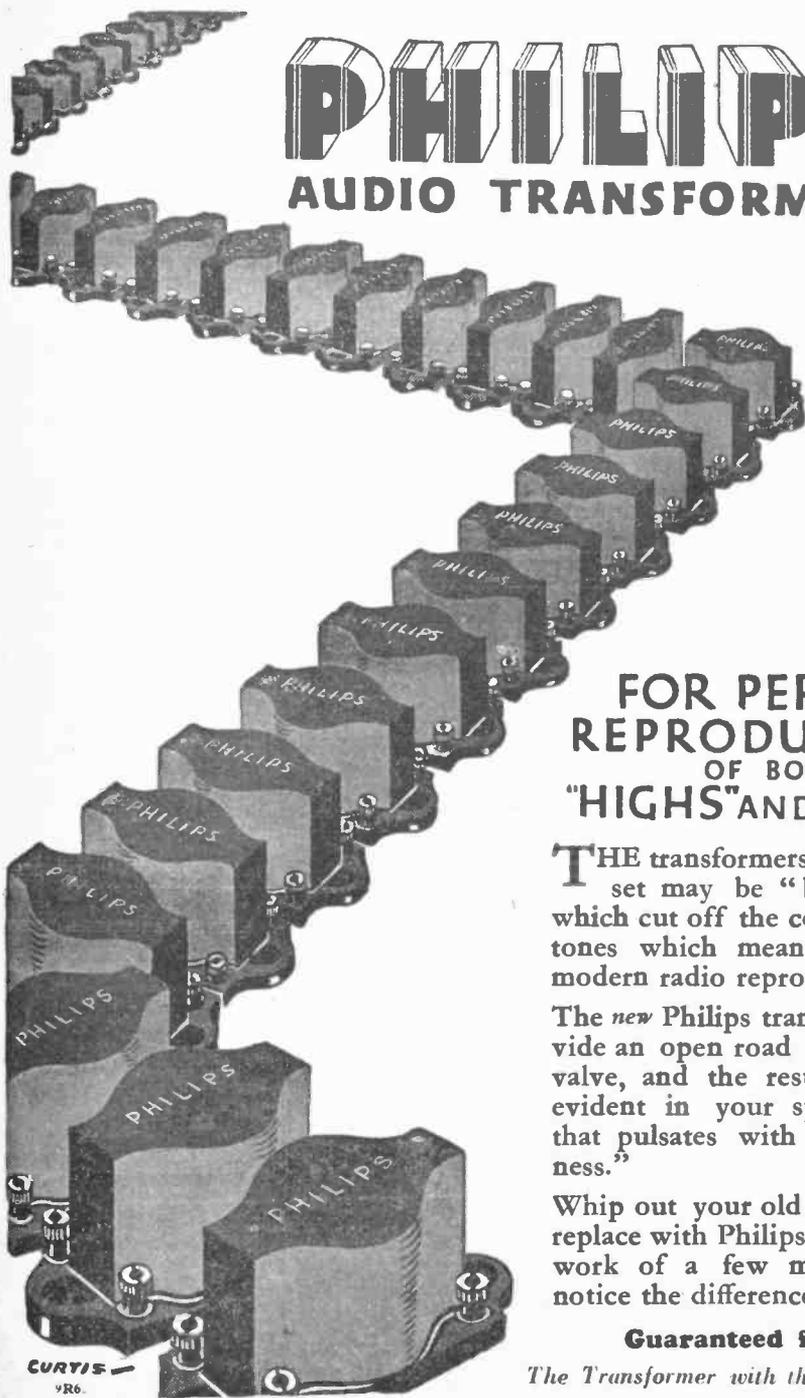
EARLY EVENING SESSION—5.45: Children's good-night stories by Uncle Bas and Auntie Maxine. 6.0: Dinner music by the National Broadcasting Orchestra. 7.30: Weather report. 7.31: A.B.C. news service. 7.35: Market reports. 7.40: Complete result of to-day's racing, including results of all athletic fixtures. 7.48: The A.B.C. sporting observer's impressions of to-day's game. 7.57: Features of to-night's presentation.

EVENING SESSION—8.0: Weather report. 8.2: Harmony Girls. 9.1: Weather. 9.2: Harmony Girls. 10.3: Dance Band. 11.0: Close.

7ZL

Tasmanian Broadcasters Pty., Bursary Bldg., Elizabeth Street, Hobart (Wavelength, 516 Metres).

11.30: Recital. 11.34: Weather. 11.35: Recital. 11.55: Weather. 12.0: Chimes. 12.1: Shipping, mail notices, housewives' guide. 12.8: Recital. 12.30: News. 12.40: Recital. 1.5: Railway Auction sales. 1.10: Recital. 1.30: Close down. 2.45: Transmission from the T.C.A. Ground, Cricket match, B Grade, Sandy Bay v. New Town, described by Sid. Jones. 4.50: All sporting results to hand. 5.0: Close. 6.10: All sporting results. 6.30: Roy Children's corner. 7.10: Recorded music. 7.40: James Coun- Johnson on "Manual Training." 7.50: James Coun- Johnson on "European Affairs." 8.1: Recital. 8.5: Transmission from Town Hall, Hobart, 4th birthday festival of Toc H, Tasmania. 10.0: From the studio a programme of popular music specially arranged by Paton's Music Warehouse. 10.20: Close down.



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Local Programmes, Sunday, November 3

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).

CHURCH HOUR—10 a.m. to 12.30 p.m.

- 10.0: Announcements.
- 10.5: Studio music.
- 10.30: This morning's news from the "Sunday Sun," "Sunday Times," and "Truth."
- British Official Wireless press.
- 10.45: Musical items.
- 11.0: From the First Church of Christ, Scientist—Morning Service.
- 12.15: Studio music.
- 12.30: Close.

AFTERNOON CONCERT—3 p.m. to 4.30 p.m.
3.0: From St. Oswald's Church of England, Haberfield—

First performance in Australia of the Cantata "The New Jerusalem," by Alfred Hill. For Solo, Chorus, and Full Orchestra, conducted by the Composer. State Conservatorium Orchestra, conducted by Cyril Monk.

4.20: Close.

EVENING PROGRAMME—6.0 to 10.30 p.m.
6.0: From Pitt Street Congregational Church—Organ Recital arranged by Lilian Frost—

- (a) "O Sanctissima" (Lux).
- (b) "La Charite" (Rossini).
- 6.12: From the Studio—Stanley Clarkson, basso—
 - (a) "Hear Me, Ye Winds and Waves" (Handel).
 - (b) "The Monkey Carol" (Stanford).
- 6.19: From Pitt Street Congregational Church: Organ Recital arranged by Lilian Frost—
 - (a) "Intermezzo" (Hollins).
 - (b) "In Springtime" (Hollins).
 - (c) "The Perfect Melody" (O'Hara).
- 6.33: From the Studio—Stanley Clarkson, basso—
 - (a) "Blow, Blow, Thou Winter Wind" (Serjeant).
 - (b) "The Pipes of Pan" (Elgar).

- 6.40: An address by a prominent speaker.
- 7.0: A celebrity recital arranged by Madam Evelyn Grieg.
- 7.15: C. N. Baeyerzt will speak on "The Melody of Speech."
- 7.45: Horace Sheldon and his Capitolians.
- 10.0: Meditation music.
- 10.30: Close.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres).

MIDDAY SESSION—10.55 a.m. to 3 p.m.

- 10.55: Announcements.
- 11.0: Salvation Army Congress Hall, Petersham—Morning Service.
 - Song.
 - Prayer.
 - Song.
 - Scripture Reading
 - Testimony.
 - Duet.
 - Testimony.
 - Music—Band.
 - Announcements.
 - Vocal male quartette.
 - Address.
- 12.15: From the Studio: Musical Items.
- 12.30: News from the "Sunday News," "Sunday Times," and "Truth."
- 12.38: A specially arranged programme of instrumental music.
- 2.15: Cheer-up session, conducted by Uncle Frank.
- 2.30: Austradio musical reproduction.
- 3.0: Close down.

LATE AFTERNOON—4.30 to 6 p.m.

- 4.30: The North Sydney Tramway Band—Overture, "Mariana" (Wallace).
- Waltz, "Flowers of Australia" (Bulch)
- 4.45: Peggy Dunbar, contralto—
 - (a) "He Shall Feed His Flock" (Handel).
 - (b) "He Was Despised" (Handel).
- 4.52: North Sydney Tramway Band—
 - (a) March, "Boomerang" (White).
 - (b) Selection, "Saueror of Spain" (Ritmer).
- 5.2: Frank Norman, tenor.
- 5.10: North Sydney Tramway Band—Cornet Solo, "Your Eyes Have Told Me So"
- Intermezzo, "Somewhere in France" (Hommán).
- 5.23: Peggy Dunbar, contralto—
 - (a) "Had You But Known" (Denza)
 - (b) "O Lovely Nymph" (Landon Ronald).
- 5.30: The North Sydney Tramway Band—Fantasia, "Spirit of Youth" (Greenwood).
- March, "Olympia" (Clark).
- 5.40: Frank Norman, tenor.
- 5.47: The North Sydney Tramway Band—Selected.

EVENING SESSION—6 p.m. to 10 p.m.

- 6.0: For Children in Hospital—Session conducted by Uncle Steve. Aunt Goodie and Cousin Marjorie.
- 6.50: From Newtown Congregational Church—Organ and orchestral recital—
 - Orchestra: "Sacred Wreath." No. 36 (Volti).
 - Orchestra. "Sacred Wreath." No. 3 (Volti).
 - Orchestra. "Sacred Wreath." No. 28 (Volti).
 - Organ Solo. "Melody in F" (Rubinstein).
- 7.0: From Newtown Congregational Church—Evening Service, conducted by Rev. Mearns Massie; organist, Mr. Allan Weekly; orchestral leader, Miss Howsen.
 - Call to worship.
 - Doxology, short prayer, Gloria (chanted)
 - Hymn No. 15, "Onward, Christian Soldiers."
 - Scripture Lesson: Matthew 11—25-30.
 - Rev. Mearns Massie.
 - Reading prayer.
 - Solo. Miss Grace Sparks. "Give Thanks and Sing" (Harris).
 - Woman No. 10. "Jesi. Lover of My Soul."
 - Messages to sick friends.
 - Announcements: Questions for October.
 - Offertory Anthem. "He Watereth the Hills" (Sonnline).
 - Solo. Mr. John Reid. "Hold Thou My Hand" (Briggs).
 - Woman No. 24. "Count Your Blessings."
 - Silent prayer.
 - Sermon. "Can We Afford to Forget God?" The Pastor.

- Hymn No. 26, "Oh, Safe to the Rock" Benediction.
- Retiring. "God Will Take Care of You."
- 8.30: From the Studio—Weather information for the man on the land.
- 8.31: Laurence Godfrey Smith, pianist—
 - (a) "Fairy Tale" (Medner).
 - (b) "Arabesque" (Debussy).
 - (c) "To Heather" (Lewin).
 - (d) "Rustic Tune" (Sgambati).
- 8.41: Senia Chostiakoff, tenor—
 - (a) "I Pitch my Lively Caravan at Night" (Eric Coates).
 - (b) "Neapolitan Serenade" (di Capua).
 - (c) "Russian Folk Song."
- 8.56: Quintet in E Flat Major, for Piano-forte, Oboe, Clarinet, French Horn, and Bassoon (Mozart).
- Laurence Godfrey Smith (piano), J. M. Post (oboe), J. Crosbie Browne (clarinet), R. H. Lawrence Toole (French horn), and C. Samuel (bassoon).
- Largo.
- Allegro Moderato.
- Larghetto.
- Rondo—Allegretto.

Here we have a delightful and unusual combination of pianoforte, wood-wind, and horn, the work standing as the finest of its kind. Composed in 1784, when Mozart was in his twenty-eighth year, it shows his complete knowledge of the technique of each instrument and a masterly sense of effect. A knowledge of this work undoubtedly inspired Beethoven, twelve years later, to write a work for the same instruments and in the same key, when he was in his twenty-sixth year.

- 9.26: Crosbie Browne, clarinet solo.
- 9.33: Senia Chostiakoff, tenor—
 - (a) "The Love" (Vrangel).
 - (b) "Russian Lullaby" (Folk Song).
 - (c) "Oh Beautiful" (Folk Song).
- 9.48: Joseph Post, oboe solo—
 - (a) Two Pieces—
 - "Romance" (Lesebvre).
 - "Scherzo" (Lesebvre).
 - (b) "The Little Shepherd" (Debussy).
- 9.55: Announcements.
- 10.0: National Anthem. Close.

2GB

Theosophical Broadcasting Station, 20 High St., Sydney (Wavelength, 316 Metres).

- 9.0: Address by Miss Mary Rivett. 9.30: Address by Mr. Victor E. Cromer. 10.0: Music from studio. 10.15: Organ music from St. Alban's Church, Regent St., Sydney. 10.30: Morning service from St. Alban's Church. 12 noon: Music from studio. 12.30: Close down. 3.0: Musical session. 5.30: Children's session, by Uncle George. 7.0: Address from St. Alban's Church. 7.35: Address from Adyar House. 8.15: Concert: Miss Ruth Pearce Jones, pianist. 8.23: Miss Gwladys Edwards, soprano. 8.30: Mr. Cecil Chaseling, baritone. 8.37: Mr. Gregory Valentine, violinist. 8.45: Miss Beatrice Kendrick, contralto. 8.52: Miss Ruth Pearce Jones, pianiste. 9.0: Weather. 9.1: Miss Gwladys Edwards, soprano. 9.8: Mr. Cecil Chaseling, baritone. 9.15: Mr. Gregory Valentine, violinist. 9.23: Miss Beatrice Kendrick, contralto. 9.30: Address by Mr. Victor E. Cromer. 9.45: Close down.

2UW

Radio Broadcasting Ltd., Pullin's Building, Ash St., Sydney (Wavelength, 267 Metres).

- 10.30: a.m.: Music and request numbers.
- 1 p.m.: Close. 5.30 p.m.: Children's hour, conducted by Uncle Jack. 6.30: Close. 7.0: Musical programme. 10.30: Close.

2UE

Broadcasting Station 2UE, Everett Street, Maroubra Sydney (Wavelength, 293 Metres).

- MID-DAY SESSION.**
- 11.0: Mass from St. Mary's Cathedral. 12.30: Studio announcements. 12.23: Orchestral and vocal music. 1.0: Close down.
- EVENING SESSION.**
- 6.0: Music from the Catholic studio. 6.5: Session conducted by Rev. Father T. Walsh. S.J. 6.50: Music. 6.55: "Question Box" talks arranged by Dr. L. Rumble, M.S.C. 7.40: Evening devotions from St. Mary's Cathedral. 8.20: Announcements. 8.21: Overture, "Morning, Noon and Night." 8.32: Orchestral and vocal concert. 10.15: Close down.



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Interstate Programmes, Sun., Nov. 3

3LO

Australian Broadcasting Co. 120A Russell St. Melbourne (Wavelength, 371 Metres).

MORNING SESSION

10.0: Time signal. 10.1: Musical reproduction. 10.20: Express train information. 10.30: British Official wireless news; items of interest. 10.30: Bells of St. Paul's Cathedral. 11.0: Morning service from St. James' Old Cathedral, corner King and Batman Streets, West Melbourne. Old Pioneers' Service, to mark the foundation of the Church in this State and to commemorate the faith and courage of the early pioneers. Preacher, The Right Rev. Bishop Green, M.A., LL.D., Senior Bishop of the Commonwealth. 11.30: Close down.

AFTERNOON SERVICE

3.0: Plesant Sunday afternoon, from Wesley Church Central Mission. Speaker: Rev. C. Irving Benson. 4.30: Close down.

THE CHILDREN'S CORNER

6.0: "Brother Bill and "Bobby Bluegum."

NIGHT SESSION

7.0: The Dorian Trio—"Tri In D Minor" (Mendelssohn). 7.15: "Scherzo in D Major" (Mendelssohn). 7.15: A talk of interest. 7.30: Victor Stephenson, a piano recital. "Rhapsody in G Minor," "Waltz in E Major" (Brahms); "Study in G Sharp Minor," "Prelude in A Major" (Chopin); "Fantasy in G Major" (Schubert). 7.45: Dorjan Trio—"Bourree" (Handel); "Sarabande" (Bach); "Rondo" (Haydn); "Romance" (Glinka); "Spanish Dance" (Moszkowski).

NIGHT SESSION

8.0: Prahran City Band (conductor, Percy Jones)—"Rigoletto."
8.10: Ernest Sage, baritone—"Litany for All Soul's Day" (Schubert). "Like as the Hart" (Allitsen).
8.11: Arved North, violin.
8.15: The "Sibelius" Sextet—Quartet (Mrs. Reynolds, Mrs. Wiltcroft, Miss Lucas, and Miss James), under direction of Madame Ella Kingston—Four Songs of Innocence, by E. Welford Davies—(1) "Little Lamb, Who Made Thee?" (2) "A Cradle Song," (3) "The Infant's Joy"; (4) "The Shepherd."
8.42: Prahran City Band—Concert piece, "Marche Militaire"; march, "Deeds of Daring."
8.52: Mary Mack, contralto—"Pearl for Every Tear" (Liddle). "The Way Home" (Liddle).
9.0: Frank Lanterman at the Wurliizer organ.
9.0: Percy Code, trumpet—"The Last Chord"; orchestral accompaniment, by Frank German.
9.12: Rear-Admiral E. R. G. Evans, O.B., D.S.O.
9.32: Prahran City Band—Overture, "Light Cavalry."
9.45: Ernest Sage, baritone—"The Swan" (Grieg). "To a Water Lily" (Grieg).
9.47: Frank Lanterman, organ.
9.57: Mary Mack, contralto—"But the Lord is Merciful" (Mendelssohn). "Our Prayer" (Goodhart).
10.3: Prahran City Band—Request number.
10.18: British Official wireless news; meteorological information; items of interest.
10.30: God Save the King.

3AR

Australian Broadcasting Co. 120A Russell St. Melbourne (Wavelength, 484 Metres).

MORNING SESSION

11.0: Service from Scots Church, Collins Street, Melbourne—sermon, Rev. Dr. W. Borland; subject, "They that wait"; anthem, "The Wilderness" (Isr. Joy Goss).

MIDDAY SESSION

12.30: Studio programme. 2.0: Frank Lanterman at the Wurliizer. 3.0: Close down.

AFTERNOON SESSION

4.30: "Winter's Journey" (Schubert), special recording. 5.30: Boris Goloubov (Moussorgsky)—"Proud Song of the Pilgrims"; "Chorus of Maidens." "Polonaise"—Berg Opera House, principals, chorus, and orchestra. 5.16: "Scherzo Tarantello" (Dvorak-Kremler); "Minuet"—Spivakovky, violin. 5.24: Beethoven's Ballad from "The Flying Dutchman" (Wagner)—Emmy Bettendorff. 5.32: The week's good news—Our Friend the Horse. 5.47: March from "Carmen"; march, "El Capitán"—Massed Military Bands. 5.53: "The Two Grenadiers" (Schumann). "The Clock" (Lowe). 6.1: Piano recital—Rubinstein. 6.12: "Hinegodd" entry of the Gods into Walhalla" (Wagner). 6.20: Request numbers. 6.45: What's on the air to-night? 6.47: St. Paul's Cathedral Bells.

EVENING SESSION

7.0: Divine service from Wesley Church, Lonsdale St., Melbourne—sermon, Rev. C. Irving Benson; subject, "Why do the Angels Sing?"

NIGHT SESSION

8.30: transmission from Sydney, relayed from 10.1. The programme will feature: "The Mozart Wind Quintet for oboe, French horn, bassoon, flute, clarinet, and piano—the piano part played by Laurence Godfrey Smith, one of our foremost artists." Vocal items by Senia Chostakoff.
9.58: Weather.
10.0: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (535 Metres).

AFTERNOON SESSION

3.0: Capital Grand Orchestra, "Faust Ballet Music." 3.30: John Coates, "Phluid Flouts Me." 4.0: Mark Hambourg, "Hungarian Rhapsody No. 14." 4.30: Close down.

EVENING SESSION

8.0: Requests. 8.0: Eddie Fitch at the Wurliizer, and Jack O'Hagan. 10.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

MORNING SESSION

11.0: The complete morning service will be relayed from All Saints' Church of England, Wickham Terrace, Brisbane. 12.15: Close.

AFTERNOON SESSION

3.15: The band concert will be relayed from the Botanic Gardens. 4.30: Close.

EARLY EVENING SESSION

6.0: A session for little listeners.

NIGHT SESSION

7.30: The complete evening service will be relayed from All Saints' Church of England, Wickham Terrace.

At the conclusion of the church service, the concert by the Brisbane Municipal Concert Band will be relayed from Wickham Park.
9.30: Close.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

MORNING SESSION

10.46: Carillon of bells from the Adelaide Town Hall. 11.0: Service from Flinders Street Baptist Church—minister, Rev. Donovan Mitchell; organist, Mr. Lawrence Hagitt. 12.10: Wireless news; close.

AFTERNOON SESSION

3.0: Plesant Sunday afternoon service from Maugham Methodist Church. 4.0: Close.

EVENING SESSION

6.0: Birthday greetings, by "Big Brother." 6.15: "The Bird Lady" and the "Sunshine Songsters." 6.45: Church choir numbers. 7.1: Senior Birthday League greetings. 7.2: Service from Unitarian Church, Rev. G. E. Hale, B.A.

NIGHT SESSION

8.30: Announcement.
8.30: Malcolm Reid's concert. Frank Roberts, Wurliizer organist—"Marcheta" (Schertzinger). "Puniculi, Punicula."
8.37: The Lyric Male Quartette—"An Evening's Pastorage" (Shaw). "Two Roses" (Everett).
8.44: The Steiner Trio—selection, "Joseph" (Muhel); "Air on G String" (Bach).
8.54: Guido Giacchino—selected 'cello solos.
9.1: Marjorie Walsh, soprano—selected.
9.8: Frank Roberts, Wurliizer organist—selection, "The Student Prince" (Romberg).
9.18: The Lyric Male Quartette—"I Hear Ken-tucky Calling" (Moore), "Just Smile" (Parks).
9.23: The Steiner Trio—"Sanctuary of the Heart" (Ketyby), "Minuet" (Beccherini).
9.33: Marjorie Walsh, soprano—selected.
9.40: The Steiner Trio—suite, "Rococo" (Messon).
9.50: Frank Roberts, Wurliizer organist—"The Rosary" (Nevin).
9.55: News.
10.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

MORNING SESSION

10.00: Sunday news service. 11.0: Church service, St. George's Cathedral. 12.30: Musical reproduction. 1.0: Close.

AFTERNOON SESSION

3.0: Chimes. 3.1: Australian musical reproduction. 4.0: Town Hall chimes. 4.1: Travogue talk by Basil Kirke, "Magic Carpet" series. 4.15: Musical reproduction. 5.0: Close.

EVENING SESSION

6.30: Children's session. 7.15: Musical reproduction. 7.30: Church service, Trinity Congregational Church. 8.45: Special music, arranged by Bert Howell, broadcast from the Ambassadors' Theatre, including assisting artists, Ambassadors' Orchestra, Les Waldron at the console of the grand organ. 10.30: Close down.

A TYPICAL Irish night has been arranged at 3LO on November 9, when many familiar melodies will be included in the programme. Anna Burke, the Irish singer of Irish songs, will contribute some favorite soprano numbers, together with orchestral selections. Rita Hilton, the popular entertainer, has some rollicking numbers, and "Anson," the fiddling jester in Irish mirth and melody, will complete the programme.

IT is seldom that listeners are permitted to peep behind the curtain drawn across the thrilling exploits of the marine powers during the Great War. Rear-Admiral Evans, however, who commanded the Dover Patrol, it to lift the curtain of secrecy to some extent, in a talk to be broadcast by him from 3LO, on Sunday evening, November 3.

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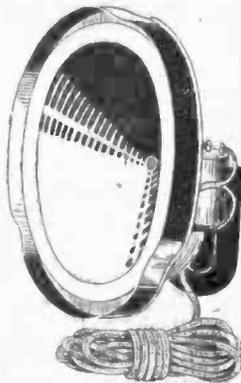
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Local Programmes, Monday, November 4

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 431 Metres).

EARLY SESSION—7.0 to 8.15 a.m.

7.0: "Big Ben" and meteorological information for the man on the land.
7.3: This morning's news from the "Daily Guardian."

7.8: Austradio musical reproduction.
7.45: Mails and shipping
7.48: What's on to-day?
7.50: Children's birthday calls.
8.0: Music from the studio.
8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

10.30: Announcements.
10.32: A.B.C. Racing Observer.
10.45: H. Weber at the Grand Organ.
11.0: Household Helps—Cooking, by Miss Ruth Furst.
11.10: Cables (copyright), "Sun"—"Herald" and A.P.A. News Service.
11.15: Morning devotion.
11.30: Austradio musical reproduction.
11.53: British Official Wireless press.
12.0: "Big Ben," Stock Exchange, and metal quotations.

12.5: V. C. Bell will speak from the "Public Forum."
12.20: Midday weather forecast and weather synopsis. Special produce market session for the man on the land, supplied by the State Marketing Board.
12.30: Close.

THE LUNCH HOUR—1.0 to 2.30 p.m.

1.0: Lunch hour music.
2.0: Stock Exchange, second call.
2.2: A glance at the afternoon "News."
2.7: An afternoon story.
2.27: Announcements.

THE RADIO MATINEE, 2.30 to 4.30 p.m.

Note: During the afternoon opportunity will be taken, if it can be arranged, of describing the cricket match at the Sydney Cricket Ground—Queensland Colts v. N.S.W.

2.30: The 2FC Instrumental Trio.
2.42: Roger Jones, baritone.
(a) "Lilies of Lorraine" (Connor).
(b) "An Answer" (Cohnreih).
2.49: The 2FC Instrumental Trio.
2.54: Laurel Mather, popular vocalist—
(a) "Sweetheart of All My Dreams" (Fitch and Lowe).
(b) "I Just Sit and Talk to the Moonbeams" (Ricketts and Stranks).

3.0: Educational Session, under the auspices of the Department of Public Instruction—

E. Breakwell, Supervisor of the School of Agriculture will speak on "The Wonders of Plant Growth."
3.15: H. F. Treherne, Supervisor of Music. Will speak on "Mozart."

3.30: The 2FC Instrumental Trio.
3.42: Roger Jones, baritone—
(a) "A Song and A Dream" (Cadman).
(b) "You" (Crosse).
3.49: The 2FC Instrumental Trio.
4.0: W. S. Reay will speak on Literary Personalities—"Tennyson."

4.15: Laurel Mather, popular vocalist—
(a) "Sleepy Valley" (Dowling and Hanley).
(b) "When the Sunset Bids the Day Good-bye" (Plantadosi).

4.22: The 2FC Instrumental Trio.
4.28: Stock Exchange, third call.
4.30: Close.

EARLY EVENING SESSION—5.45 to 7.55.

5.45: Children's "Good-night" Stories, told by the "Hello Man," assisted by Aunt Elly.
6.45: Dinner Hour music.
7.30: A.B.C. Sporting Service.
7.37: Special Country Session. Stock Exchange resume. Markets. Weather forecast. Late news from the "News." Truck bookings.
7.58: To-night's programme.

THE EVENING PRESENTATION—8 to 11.30 p.m.

Our classic programme to-night features Laurence Godfrey Smith playing the Mozart Concerto with the National Broadcasting Orchestra, conducted by Horace Keats. 2BL offers listeners the usual big Monday night feature—a description of the wrestling match from the Stadium.

8.0: Oliver King, basso (orchestral accompaniment)—(a) "Danny Deever" (Damosch), (b) "Now Phoebus Sinketh in the West" (Arne).

8.7: Bede Connolly, flute solos—"Concertino" (Chaminade).

8.15: Laurence Godfrey Smith—pianoforte recital, featuring the Mozart Concerto, in conjunction with the National Broadcasting Orchestra, conducted by Horace Keats.

8.40: Margaret James, soprano (orchestral accompaniment)—(a) "To Sing Awhile" (Drummond), (b) "Spring's Awakening" (Sanderson).

8.47: The National Broadcasting Orchestra—Overture, "Coriolanus" (Beethoven); "Fest March" (Napravnik); "Andante from Piano Quartet" (Schumann).

9.2: The Country man's weather session—(a) "New South Wales Forecasts"; (b) "Inter-State Weather Synopsis."

9.4: Bede Connolly, flute solos—(a) "Italian Serenade" (Kohler), (b) "Scherzo from Suite Op. 61" (Widor).

9.11: The National Broadcasting Orchestra—"Consolation" (Liszt), "Intermezzo" (Dubensky), Three Dances, "Tom Jones" (German).

9.26: Oliver King, basso—(a) "In the Dreamy Wood I Wander" (Franz), (b) "The Rose Complained" (Franz).

9.33: The National Broadcasting Orchestra—(a) "Grieg Suite" (arr. Rebmann), (b) "A Virgilian Rhapsody" (Wood).

9.50: Margaret James, soprano—(a) "Twas in a Land" (Chaminade), (b) "La Serenata" (Tosti), (c) "Heigh Ho" (Haynes).

9.58: Excerpts from "On Our Selection," by Steele Rudd.

10.15: Announcements and late official weather forecast.

10.20: From the ballroom of the Oriental—Sydney Simpson's Syncopaters.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 355 Metres).

OPENING SESSION—8.15 to 11 a.m.

8.15: G.P.O. chimes and announcements.
8.16: Music for every mood.
8.40: Meteorological data for the country.
8.45: Mails and shipping information.
8.50: Memory melodies.
9.0: This morning's story.
9.30: A musical interlude.
9.40: British Official Wireless press.
9.45: New music.

10.5: News from the "Daily Guardian."
10.10: Austradio musical reproduction.
10.40: The Australian Broadcasting Company's Women's Association, conducted by Miss Gwen Varley.

MIDDAY SESSION—12 noon to 2.30 p.m.

12.0: G.P.O. chimes. Announcements.
12.2: Lunch music.
1.0: Afternoon news, from the "Evening News."

1.5: Studio music.
1.15: Women's Linterest Talk, Matron McWilliam, "Plunket Mothercraft."
1.30: Austradio musical reproduction.
2.0: J. Knight Barnett at the Wuriltzer.
2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.45 p.m.

2.30: Business Efficiency Talk—C. R. Hall Made in Australia Exhibition and the Lesson it Teaches.

2.45: A talk by "Bringa."
3.0: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.

3.12: Betty Armstrong, soprano—
(a) "Maman Dites Moi" and
(b) "Jeunes Fillettes," French Bugerettes (Weckerlin).

3.19: Dance music.
3.22: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.

3.32: From the Studio—Stewart Jarbo, elocutionist—

(a) "War" (Edgar Wallace).
(b) "Any Other Time" (Patterson).
3.40: Songs of to-day.

3.43: From the ballroom of the Oriental—Sydney Simpson's Syncopaters in dance music.

3.53: From the Studio—Ethel Muller, contralto—

(a) "In the Marshes" (Del Riego).
(b) "Love's Coronation" (Aylward).
4.0: From the ballroom of the Oriental—

Sydney Simpson's Syncopaters in dance music.

4.12: From the Studio—Betty Armstrong, soprano—

(a) "Serenata" (Toselli).
(b) "Mattinata" (Tosti).

4.19: Stewart Jarbo, elocutionist—
(a) "Tommy Atkins" (Kipling).
(b) "A Decent Sort of Bloke" (Mant).

4.26: Ethel Muller, contralto—
(a) "Your Thoughts" (D'Hardelot).
(b) "Fragile Things" (Montague Phillips).

4.33: Radio rhythm.

4.45: The Trade Hour—Demonstration music.

5.45: Weather information. Close down.

THE DINNER HOUR—6.15 to 7.55 p.m.

6.15: Dinner music.
6.45: The Younger Set Session—Boys' Aero Club, conducted by Mr. Norman Lyons.

7.5: Studio music.

7.15: The Country Man's Market Session—Wool, wheat, stock, farm produce, fruit, and vegetables.

7.30: Austradio musical reproduction.

7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION—8.0 to 10.30.

Note.—Monday is still looked forward to by the sporting enthusiasts who follow the vivid descriptions of the wrestling from the Stadium word for word. Those listeners who prefer entertainment on entirely different lines turn to 2FC for their classic programme. This is always arranged on a Monday night.

8.0: Announcing a sporting programme.
8.1: Wendling and Henderson, musical entertainers—

(a) "Josie and Me" (O'Hagan).
(b) "Pagan Love Song" (Brown).
(c) "Some Day" (Friml).
(d) "Monte Carlo Song" (Endor).

8.11: Bert Gilbert continues "The Adventures of Hopcroft."

8.26: A "Talkie" Short.

8.33: From the Stadium—A Description of the Wrestling Contest by Frederick Johns.

10.0: From the Studio—Wendling and Henderson, musical entertainers—

(a) "On a Summery Night" (Tobias).
(b) "Serenata" (Toselli).
(c) "I'm Just a Vagabond Lover" (Vallee).

(d) "Collegiate Sam" (Coots).

10.10: A "Talkie" Short.

10.17: Austradio musical reproduction.

10.25: Late news from the "Evening News." Late weather forecast.

10.30: National Anthem. Close.

2GB

Theosophical Broadcasting Station, 29 Birch St., Sydney (Wavelength, 316 Metres).

10.0: Music. 10.10: Happiness talk, by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Mrs. W. J. Stelzer. 11.15: Talk by Mrs. Jordan. 11.30: Address by Miss Mary Rivett. 11.45: Close down. 2.0:

Music. 2.5: Women's Radio Service, by Mrs. Dorothy Jordan. 2.50: Movie Know All. 3.0: Music. 3.30: Close down. 5.15: Children's session, by Uncle George. 7.0: Music. 7.45: Feature story. 8.0: Miss Mary Neal, contralto. 8.7: Symphony Orchestra. 8.15: Mr. Edward Barry, baritone. 8.22: Violin solos.

8.30: Mr. Jack Win and Mr. Heath Burdock, humor. 8.35: Miss Mercy Davies, mezzo-soprano. 8.43: Symphony Orchestra. 8.50: Miss Mary Neal, contralto. 9.0: Weather. 9.3: Address. 9.15: Violin solos. 9.25: Mr. Edward Barry, baritone. 9.35: Mr. Jack Win and Mr. Heath Burdock, humor. 9.40: Symphony Orchestra. 9.50: Miss Mercy Davies, mezzo-soprano. 10.0: Instrumental music. 10.30: Close down.

2UW

Radio Broadcasting Ltd., Faling's Building, Ash St., Sydney (Wavelength, 267 Metres).

MIDDAY SESSION: See Friday. EVENING SESSION:—5.30: Children's hour, conducted by Uncle Jack. 6.30: Close. 7.0: Request numbers. 7.45: Radio talk by Mr. E. Homfray. 8.0: Organ recital. 9.0: Comments on Foreign Affairs by Mr. J. M. Prentice. 9.10: Music. 10.30: Close.

(For 2KY and 2UE, see Friday.)

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Interstate Programmes, Monday, November 4

3LO

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 371 Metres).

EARLY MORNING SESSION
7.0 to 8.15: See Friday.

MORNING SESSION
10.30 to 1.30: See Friday.

THE RADIO MATINEE

2.0: The Earth We Live On—Mr. W. C. Groves, B.A., Dip. Ed. 2.15: Musical interlude. 2.20: Science in Everyday Life—Dr. Loftus Hills, D.Sc. 2.35: Musical interlude. 2.40: Our Australian Writers—Katharine Susannah Pritchard. Mr. E. Wilmot. 2.55: Musical interlude. 3.0: Paul Jeacle and his Band—"By the Waters of Minnetonka" (Cleurance), "Stampede" (Henderson). 3.5: Tom Downie, tenor—"Red Devon by the Sea" (Coningsby-Clarke). "Reuben Ranzo" (Coates). 3.13: Bruce Wite, piano—A piano novelty. 3.17: Kate Cornell, entertainer—"Kidders," "A Kiss." 3.25: Paul Jeacle and his Band—"It Don't Mean a Thing Without You" (Davis). 3.31: Hazel Poletta, soprano—"L'Ete" (Chaminade), "In My Garden" (Liddle). 3.42: A dramatic sketch, "Rosemary." Colonel St. Clair, Chas. E. Dyson; Mrs. Neville, Mrs. Maurice Dudley. Scene: A room in Mrs. Neville's house. 3.54: Paul Jeacle and his Band—"Hard to Get" (Meyer), "I'm Just a Vagabond Lover" (Vallee). 4.0: Kate Cornell, entertainer—"The Photographer" (Leacock), "Neighbour Jane." 4.7: Tom Downie, tenor—"Pale Moon" (Logan), "Inter Nos" (MacFadyen). 4.14: Claude Jeacle, saxophone solo. 4.18: Hazel Poletta, soprano—"In My Garden" (Liddle), "If I Were a Lark" (Clusam). 4.25: Paul Jones and his Band—"I'm Perfectly Satisfied" (Leslie), "My Ideal" (Leslie). 4.30: Close down.

THE CHILDREN'S CORNER
5.45: "Humpty and Dumpty" pay a visit to the islands and take their car with them. Birthday greetings chiefly by "Humpty."

EVENING SESSION
6.35: Musical interlude. 6.45: Public School Life and Sport—Mr. E. C. H. Taylor. 6.55: Musical In-

terlude. 7.0: Melbourne Observatory time signal. 7.1: Countryman's Session. 7.25: The latest in patents. 7.45: The World's Kaleidoscope—Pro. K. H. Bailey, M.A., B.A.L.

NIGHT SESSION

8.0: Railways Military Band (conductor, Arthur Becher)—Suite, "Three African Dances" (Montague Ring), (a) "The Call to the Feast," (b) "Luieta's Dance," (c) "Dance of the Warriors." 8.15: Joe Brennan and Ida Newton, entertainers—"The Plumber's Proposal." 8.25: Victorian Railways Military Band—Porto Rican Dance, "Rosita" (Missud), "The Turkish Patrol." 8.33: Violet Colahan, soprano—Two September Songs, by Roger Quilter—"Through the Sunny Garden," "The Valley and the Hill." 8.40: "The Moonlight Sonata." An incident in the life of Beethoven. Specially written for Radio by Gordon Ireland. 8.48: A chat with the favorite, by Cecil H. J. Williams, A.F.I.A. 9.25: Norman Christensen, tenor—"Questa O Quella" from "Rigoletto" (Verdi), "Amor ti Vieta" from "Furber." 9.32: Victorian Railways Military Band—Valse "Estudiantina" (Waldteufel). 9.40: Joe Brennan and Ida Newton, entertainers—"A Cold Sketch" (Toselli). 9.48: Vassili Kister, piano—"Valse Salon" (Tschalkowsky). 9.56: Violet Colahan, soprano—"Thanks to the Brook" (Schubert) (Zamparelli) (Schubert). 10.3: Victorian Railways Military Band—Cornet solo, "Serenade" (Schubert). 10.6: Norman Christensen, tenor—"Flower of Brittany" (Lohr). "Serenade" (Schubert). 10.13: A discussion of the chances of the Melbourne Cup horses, by Eric Welch. 10.23: Victorian Railways Military Band—March, "Preciosa" (Devery). 10.24: Meteorological information: British official wireless news; items of interest. 10.36: "The Rex" Dance Band. 11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 484 Metres).

MORNING SESSION
8.15 to 11.0: See Friday.

MIDDAY SESSION
12.0 to 2.0: See Friday.

AFTERNOON SESSION

2.1: Capitol Grand Orchestra. 2.8: John Charles Thomas, baritone. 2.15: Jones and Hare. 2.18: Walter B. Rogers' Band. 2.21: Moev and Smalle. 2.24: Brunswick Concert Orchestra. 2.31: John Charles Thomas. 2.35: Adam Carroll, piano recital. 2.45: Belle Baker. 2.48: Walter B. Rogers' Band and his Orchestra. 3.0: Request numbers. 3.20: Your Clothes—modern Fashion and Health—Dr. Cecile Grell. 3.35: Musical interlude. 3.40: Your Garden, Gillums—Mr. R. Antonio. 3.55: Musical interlude. 4.0: Wanderings through Southern India—Miss Stella Parker. 4.15: Musical reproduction. 5.0: Chimes. 5.1: Musical reproduction. 5.30: Weather. 5.45: Close down.

EVENING SESSION

8.15: Dinner music. 7.32: Sporting. 7.35: Latest musical releases. 8.0: Chimes.

NIGHT SESSION

8.0: National Broadcasting Orchestra—First Movement from the "Orchestral Symphony" (Schubert). 8.8: Mary Hotham, mezzo-soprano—"Life is a Caravan," "The Love Pipes of June" (Maud Day). 8.15: Christian Science Lecture from the St. Kilda Town Hall by the Hon. William E. Brown, of Los Angeles. 8.45: National Broadcasting Orchestra—selection, "The Chimes of Normandy" (Planquette). 8.53: Wilson Muir, entertainer—"Punchinello." 9.8: Bertha Jorgensen, violin—"Minuet" (Stoessel), "Liebestud" (Kreisler). 9.13: "Anson," the Fiddling Jester—in mirth, melody, and music. 9.23: National Broadcasting Orchestra—"Breakaway" (Brown). 9.28: Elle Lumperd, piano recital—"Sarabande French Suite, E Major" (Bach), "Minuet French Suite, E Major" (Bach), "Toccata, A Major" (Paradies), "Rhapsody No. 8" (Liszt). 9.40: Mary Hotham, mezzo-soprano—"Lie There My Lute" (MacGunn), "When Phyllis Crossed the Wood" (Ina Mornement). 9.47: The A.B.C. String Quartette—String Quartette (Haydn). 10.0: Weather; news. 10.10: "Anson," the Fiddling Jester, in mirth, melody, and song. 10.20: National Broadcasting Orchestra—"The Flight of the Bumble Bee" (Korsakov), "Three Dances from Henry Eighth" (German). 10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (235 Metres).

For day sessions see Friday.

EVENING SESSION

8.0: Capitol Orchestra, "Dance Trojan." 8.30: Bruce Small's Sponsored Session. 9.0: Frank Beu-reaire's Session. 9.30: W. H. Squire (cello), "Sarabande." 10.0: Morton Downey, "Rosemary." 10.30: Milt Shaw's Detroiters, "Mia Bella Rosa." 10.45: News. 11.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

For day session schedules see Friday.

NIGHT SESSION

8.0: Radio comedy, "Waterloo" (Conan Doyle), Corporal Gregory Brewer, Colonel Midwinter, Sgt. Davis, R.A., Ernest Barry; Norah Brewster, Dulcie Crane. Scene: Living room in Brewer's home. 8.30: Jas. Brett—Songs and patter. 8.45: Stefan de Polotynski, Polish conductor-composer, in pianoforte solos, and Madame de Polotynski (soprano) in character folk songs, including: Stefan de Polotynski—"Romance in E Flat" (Rubenstein), "Irish Theme with Variations" (Polotynski), Madame de Polotynski—"Gipsy Romance" (Zouboff), "The Sweetest Story Ever Told" (Stults). 9.0: Metropolitan weather forecast. 9.1: "Tecoma" will give his fourth talk in connection with 4QG's home flower garden scheme—"The Care of Young Seedlings." 9.12: The Studio Orchestra—One Step, "Pickin' (Keplan). 9.17: Grace and Nat Gould, piano and banjo. 9.30: Ernest Harper (baritone)—"The Stars have Eyes" (Sanderson). 9.35: Stefan de Polotynski and Madame de Polotynski, Piano, "Dance of Death" (Polotynski), soprano, "By the Brook (Russian folk song), "Annie Laurie" (Scottish air). 9.50: Ernest Harper (baritone)—"The Red Star of Romania" (Sanderson). 9.55: The Studio Orchestra—March, "Flash of Steel" (Collin). 10.0: News, weather. 10.15: The Rhythm Rascals—Dance music. 11.0: Close down.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 400 Metres).

MORNING SESSION

11.15 to 2.0: See Friday.

AFTERNOON SESSION

3.0 to 4.30: See Friday.

EVENING SESSION

6.0 to 7.0: See Friday. 7.1: Special late review of the Melbourne Cup and other events to be decided at Flemington to-morrow; cycling notes and training hints. "What Young Cyclists Should Do to Be Successful" (Ank No. 2), by Hubert Opperman (world's champion cyclist); billiard notes; general market reports; Stock Exchange. 7.20: Under the auspices of the South Australian Agricultural Department, Mr. E. J. Apps (senior dairy instructor) will speak on "Some Principles Underlying Successful Dairying." 7.35: The 5CL Twinkler Boys Club.

NIGHT SESSION

8.0: Chimes. 8.1: The most popular musical hit of the week. 8.3: Symphony Orchestra (conducted by Lionel Baird)—Overture, "William Tell" (Rossini). 8.15: Vocal Championship (lady competitor). 8.19: Gentlemen competitor. 8.23: D. Bulk, violinist—selected. 8.30: Gentleman competitor. 8.34: Lady competitor. 8.39: Lady competitor. 8.43: Gentleman competitor. 8.47: "The News" Symphony Orchestra—"Largo" (Handel). 8.5: Gentleman competitor. 9.10: Lady competitor. 9.15: Meteorological; Semaphore tides; overseas grain report. 9.20: Lady competitor. 9.25: Gentleman competitor. 9.28: Mr. Bornstein, violinist. 9.36: Gentleman competitor. 9.40: Lady competitor. 9.44: June Barnes, four-year-old champion eucalyptist. 9.50: Lady competitor. 9.54: Gentleman competitor. 10.0: Symphony Orchestra—quickstep, "With Sword and Lance" (Starke). 10.8: Gentleman competitor. 10.11: Lady competitor. 10.14: Gentleman competitor. 10.18: Lady competitor. 10.22: Symphony Orchestra—Symphony, "Unfinished" (Schubert). 10.47: News, weather; sporting. 11.0: Recordings. 11.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

For day sessions see Friday.

EVENING SESSION—8.0: Chimes. 8.1: Weather. 8.2: Band recital. 9.0: Chimes. 9.1: Weather. 9.2: Revue company. 10.0: Chimes. 10.5: Dance Band. 10.20: Announcements. Temple Court Dance Band. 10.55: Weather report. 11.0: Town Hall chimes. "God Save the King."

7ZL

Tasmanian Broadcasters Pty., Bursary Bldg., Elizabeth Street, Hobart (Wavelength, 516 Metres).

11.30 a.m. to 4.30 p.m., 6.15 p.m. to 10.0 p.m. Same as Friday.

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RCA Radiotron

Local Programmes, Tuesday, November 5

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).

EARLY SESSION—7 to 8.15 a.m.

- 7.0: "Big Ben" and meteorological information for the man on the land.
- 7.3: This morning's news from the "Daily Guardian."
- 7.8: Austradio musical reproduction.
- 7.45: Mails and shipping.
- 7.48: What's on to-day?
- 7.50: Children's birthday calls.
- 8.0: Music from the studio.
- 8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

- 10.30: Announcements.
- 10.32: A.B.C. Racing Observer.
- 10.45: H. Weber at the Grand Organ.
- 11.0: Household Helps—hints to housewives, by Miss Ruth Furst.
- 11.10: Cables—(Copyright) Sun-Herald and A.P.A. news service.
- 11.15: Morning devotion.
- 11.30: Austradio musical reproduction.
- 11.53: British official wireless press.
- 12.0: "Big Ben"; Stock Exchange and metal quotations.
- 12.5: Carlton Fay will give an illustrated music lecture.
- 12.20: Midday weather forecast and weather synopsis; special produce market session for the man on the land, supplied by the State Marketing Board.
- 12.30: Close.

THE LUNCH HOUR—1 to 2.30 p.m.

- 1.0: Lunch-hour music.
- 2.0: Stock Exchange, second call.
- 2.2: A glance at the afternoon "News."
- 2.7: Popular education—Nature's Wonders—J. R. Kinghorn, "Some Snake Stories."
- 2.27: Announcements.

THE RADIO MATINEE—2.30 to 4.30 p.m.

- 2.30: The 2FC Instrumental Trio.
- 2.42: Dora Lindsay, Scottish comedienne—(a) "You'll Always Find a Scotsman There," (b) "Crinoline" (Lindsay).
- 2.49: Vera Wellings, pianist—(a) "Bourree" (Bach), (b) "Arietta" (Deo), (c) "Sonatas 3" (Scarlatti).
- 2.56: The 2FC Instrumental Trio.
- 3.8: Robert Scott, tenor—(a) "O Vision Entrancing" (Thomas), (b) "Ichabod" (Tschakowsky).
- 3.15: The 2FC Instrumental Trio.
- 3.27: From Melbourne—description of the Melbourne Cup.
- 3.33: Vera Wellings, pianist—"Papillons" (Schumann).
- 3.40: The 2FC Instrumental Trio.
- 3.53: Dora Lindsay, Scottish comedienne—"I'm Daft" (Lindsay).
- 4.0: The 2FC Instrumental Trio.
- 4.12: Robert Scott, tenor—(a) "She Is Far from the Land" (Moore), (b) "The Dream" (Rubinstein).
- 4.19: The 2FC Instrumental Trio.
- 4.28: Stock Exchange, third call.
- 4.30: Close.

EARLY EVENING SESSION—5.45 to 7.55 p.m.

- 5.45: Children's "Good-night" stories, told by Aunt Willa, assisted by Cousins Owen and Clarice.
- 6.45: Dinner-hour music.
- 7.30: A.B.C. sporting service.
- 7.37: Special country session—Stock Exchange resume; markets; weather forecast; late news from the "News"; truck bookings.
- 7.56: To-night's programme.

THE EVENING PRESENTATION—8 to 11.30 p.m.

2FC's State-wide radio dance night will continue to be held on each Tuesday throughout November. It is as popular as ever with listeners. 2BL service contrasts their programme by providing classic music, which is under the direction of G. Vern Barnett.

8.0: "Big Ben" announcing the State-wide Radio Dance Night.

8.1: The Australian Broadcasting Dance Orchestra.

8.12: Charles Lawrence, entertainer.

8.19: The Australian Broadcasting Dance Orchestra.

8.31: Maggie Foster, violinist—(a) "Le Cygne" (Saint-Saens), (b) "I'm Bringing a Red, Red Rose," (c) "Simple Aveu" (Thome).

8.38: The Australian Broadcasting Dance Orchestra.

8.50: Ad Cree, Scottish Comedian—(a) "Loch-na-Giel" (Longstaffe), (b) "The Boss o' the Hoose" (Lauder).

8.58: The Country Man's Weather Session—(a) "New South Wales Forecasts," (b) "Inter-State Weather Synopsis."

9.0: The Australian Broadcasting Dance Orchestra.

9.12: Nea Hallett, popular vocalist—(a) "When Love Comes Stealing" (Rappee), (b) "Sweetheart of All My Dreams" (Lowe).

9.19: The Australian Broadcasting Dance Orchestra.

9.31: Ad Cree, Scottish comedian—(a) "I'm 94 This Mornin'" (Fyffe), (b) "Macgregor."

9.39: The Australian Broadcasting Dance Orchestra.

9.50: Nea Hallett, popular vocalist—(a) "Just a Memory" (Henderson), (b) "A Kiss before the Dawn" (Perkins).

9.57: The Australian Broadcasting Dance Orchestra.

10.15: Announcements and late official weather forecast.

10.20: The Australian Broadcasting Dance Orchestra.

11.30: National Anthem; close.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres).

OPENING SESSION—8.15 to 11 a.m.

- 8.15: G.P.O. chimes and announcements.
- 8.16: Music for every mood.
- 8.40: Meteorological data for the country.
- 8.45: Mails and shipping information.
- 8.50: Memory melodies.
- 9.0: This morning's story.
- 9.30: A musical interlude.
- 9.40: British Official Wireless press.
- 9.45: New music.
- 10.2: News from the "Labor Daily."
- 10.5: News from the "Daily Guardian"
- 10.10: Austradio musical reproduction.
- 10.40: The Australian Broadcasting Company's Women's Association, conducted by Miss Gwen Varley.
- 11.0: G.P.O. chimes. Close down.

MIDDAY SESSION—12 noon to 2.30 p.m.

- 12.0: G.P.O. chimes. Announcements.
- 12.2: Lunch music.
- 1.0: Afternoon news from the "Evening News."
- 1.5: Studio music.
- 1.15: Women's Interest Talk—Sister Parry "Home Nursing."
- 1.30: Austradio musical reproduction.
- 2.0: J. Knight Barnett at the Wurlitzer.
- 2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.45 p.m.

- 2.30: Fred Arlington-Burke will give a talk.
- 2.45: The Magic Carpet Series—Talk by Claire Byrne.
- 3.0: Radio rhythm.
- 3.12: Dunstan Webb, baritone—(a) "The Sweetheart of Sigma Chi" (Verner), (b) "Pals, Just Pals" (Ruby).
- 3.19: Modern music.
- 3.30: Edward Trenton, violinist—(a) "First Movement from Sonata" (Handel), (b) "Lament" (Schubert, arr. Monk).
- 3.37: The newest dance numbers.
- 3.50: Hilda Nelson, soprano—(a) "But Why" (Lozan), (b) "Wait" (D'Hardelot).
- 3.57: Studio music.
- 4.4: Edward Trenton, violinist—(a) "Romance" (Wieniawski), (b) "Slavonic Dance, G Minor" (Dvorak, arr. Kreisler).
- 4.11: Dunstan Webb, baritone—(a) "I Live for You" (Thompson), (b) "Mate of Mine" (Elliott).
- 4.18: Melody memories.
- 4.28: Hilda Nelson, soprano—(a) "The Hawk" (Clarke), (b) "Delores" (Phillips).
- 4.35: Radio rhythm.
- 4.45: The Trade Hour—Demonstration music.
- 5.45: Weather information. Close down.

THE DINNER HOUR—8.15 to 7.55 p.m.

- 6.15: Dinner music.
- 6.45: The Younger Set Session—Giri

Guides, conducted by Miss Gwen Varley

7.5: Studio music.

7.15: The Country Man's Market Session—Wool, wheat, stock, farm produce, fruit, vegetable, and pig markets.

7.30: Austradio musical reproduction.

7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION—8 to 10.30 p.m.

Our classic programme to-night, in contrast to the Radio Dance Night through 2FC, will appeal to listeners who appreciate the better class of music.

8.0: Announcing classic programme.

8.1: Charles Nicis, tenor.

8.8: Athos Martelli, cellist—"Sonata III." (Boccherini).

8.15: Lily Price, pianoforte recital, with foreword by G. N. Baeyertz—(a) "Poupee Valsante" (Polding), (b) "Water Wagtail" (Cyril Scott), (c) "Liebestraum" (Liszt).

8.27: Madame Lillian Gibson, contralto.

8.34: Dulcie Blair, violinist.

8.41: Charles Nicis, tenor.

8.48: Athos Martelli, cellist—(a) "Minuetto" (Becker), (b) "Berceuse" (Godard).

8.56: Lily Price, pianoforte recital with foreword by C. N. Baeyertz—(a) "Prelude No. 13 in F Sharp Minor" (Chopin), (b) "Polonaise in C Sharp Minor" (Chopin), (c) "Waltz in D Flat" (Chopin).

9.7: Madame Lillian Gibson, contralto.

9.14: Dulcie Blair, violinist.

9.21: V. C. Bell will speak from "The Public Forum."

9.36: Weather information for the man on the land.

9.38: In lighter vein—Just a few merry moments with Charles Lawrence and his Radio Notes.

10.25: Late weather forecast.

10.32: Late news from the "Evening News."

10.30: National Anthem. Close.

2GB

Theosophical Broadcasting Station, 29 Bligh St., Sydney (Wavelength, 316 Metres).

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Mrs. W. J. Stelzer, housekeeping hints and shopping guide. 11.30: Music.

11.45: Close down. 2.0: Music. 2.5: Women's Radio Service, by Mrs. Dorothy Jordan. 2.50: Movie Know All. 3.0: Music.

3.30: Close down. 5.15: Children's session, by Uncle George. 6.50: Movie Club session.

7.0: Music. 7.30: Service talk, by Suttor's Radio Doctor. 7.45: Feature story. 8.0: Miss Kathlene Cracknell, contralto. 8.7: "Cello solos. 8.15: Mr. Cecil Houghton, tenor.

8.22: Symphony Orchestra. 8.30: Mr. Jack Win and Mr. Heath Burdock, humor. 8.35: Miss Gladys Verona, soprano. 8.43: Piano-forte solos. 8.50: Miss Kathlene Cracknell, contralto. 9.0: Weather report. 9.3: Address. 9.15: "Cello solos. 9.25: Mr. Cecil Houghton, tenor. 9.35: Mr. Jack Win and Mr. Heath Burdock, humor. 9.40: Symphony Orchestra. 9.50: Miss Gladys Verona, soprano. 10.0: Instrumental music. 10.30: Close down.

2KY

Trades and Labor Council, Gungahlin St., Sydney (Wavelength, 290 Metres).

MORNING SESSION

10.0 to 12.0: See Friday

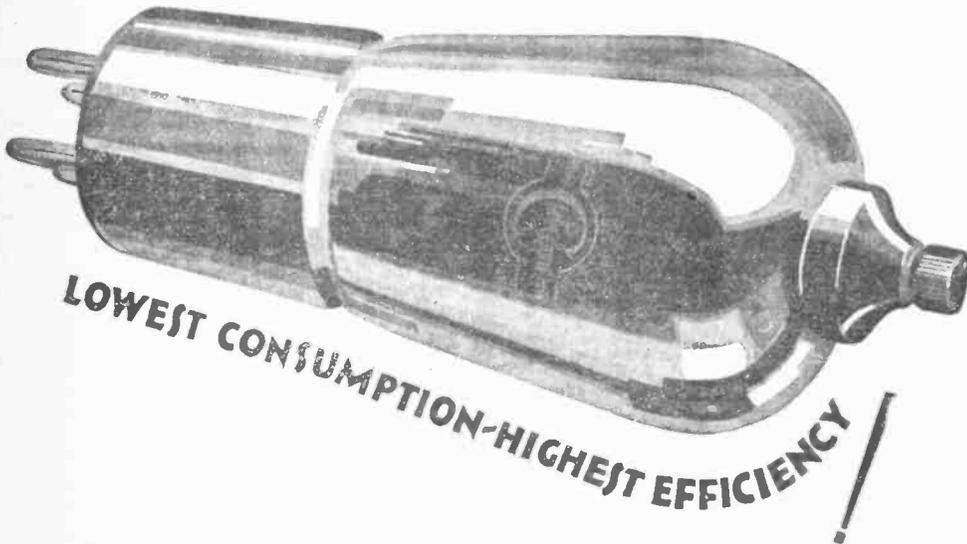
CHILDREN'S SESSION

7.0: Musical interlude. 7.15: Sporting feature; turf topics; how they should run to-morrow, Mr. Geo. A. Davis. 7.45: Request numbers. 8.0: Orchestral selections.

8.10: Women's information service, Mrs. Gray. 8.25: Baritone solos, Mr. Higgins. 8.33: Pianoforte solos, Mr. Hancock. 8.40: Music and request numbers from the Studio.

Sporting feature—from the ring-side of M'Hugh's Leichhardt Stadium; results of early events, and full description of main 15-round event. 8.40: Dance music from the Studio. 10.0: Closing announcements.

(2UW and 2UE schedules same as Friday.)



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Interstate Programmes, Tuesday, November 5

3LO

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 371 Metres).

EARLY MORNING SESSION

7.0 to 8.15: See Friday.

MORNING SESSION

10.30 to 12.30: See Friday.

MIDDAY SESSION

12.55: Description of the Cup Hurdle Race, 2 miles, V.R.C. races at Flemington, by Eric Welch.
1.15: Stock Exchange information, meteorological data; weather forecast for Victoria, New South Wales, South Australia, and Tasmania; ocean forecast; river reports; rainfall data. 1.15: Comments on the day's news. 1.30: Musical Interlude.

AFTERNOON SESSION

1.35: Description of Railway Highweight Handicap, 6 furlongs, V.R.C. races at Flemington, by Eric Welch. 1.50: Musical Interlude. 2.0: Stories from the operas, with musical illustrations—Miss Lucy Ahon, B.A. 2.15: Musical Interlude. 2.20: The romance of the Slave and Gold Coast—Mr. A. A. Downs. 2.35: Description of the November Nursery, 5 furlongs, V.R.C. races at Flemington, by Eric Welch. 2.45: A talk in French—Mons. Th. Rouel. B.A. 3.0: Melbourne Observatory time signal. 3.1: The Studio Light Orchestra—Selection, "Chu Chin Chow" (Norton). 3.50: Musical Interlude. 4.0: Melbourne Observatory time signal. 4.1: Out and About Antipal—the Cup Crowd—Geoff H. J. Williams, A.P.I.A. 4.15: Description of Cup Hurdle Race, two miles and half furlong, V.R.C. races at Flemington, by Eric Welch. 4.30: Musical Interlude. 4.35: Cup fashions. 4.5: The Studio Light Orchestra—Selection, "The Wolf" (P. Hill). 4.55: Description of Yan Yeh Handicap, one mile, V.R.C. races at Flemington, by Eric Welch. 5.10: Close down.

THE CHILDREN'S CORNER

5.45: "Bobby Bluegum" and "Clever Clarice."

EVENING SESSION

6.35: Musical Interlude. 6.40: Careers for Our Boys and Girls—How to Become an Airman—Mr. Eric Cooper. 6.55: Musical Interlude. 7.0: Melbourne Observatory time signal. 7.1: Countryman's Session. 7.25: The Melbourne Cup, Mr. Eric Welch. 7.40: News service. Cable news service (copyright by Australian Press Association and Sun-Herald News Service Ltd.). 7.45: The Odd Men Out will discuss Cup.

NIGHT SESSION

8.0: Frank Hatherley's "Review of Reviews." A big company of boys and girls, including: Mr. Robert Gillard, Mr. Herbert Sanderson, Mr. Tom Semple, Mr. Robert Allan, Mr. Les. Williams, Mr. Allan Adcock, Mr. Joe Brennan, Mr. Frank Hatherley, Miss Violet Jackson, Miss Mae Seaton, Miss Billy King, Miss Ida Newton.

8.0: You will be told "What's On" in the first part of our review.
8.1: The National Broadcasting Orchestra will set the ball rolling with Von Suppe's fine overture, "Morning, Noon, and Night."
8.5: Eric this time wished we feel sure you will "sit up" and take notice of what is to follow.

8.10: "Cos, 'What May Be Days" when things look bright for you, and "There May Be Days as Black as Night" when things look gloomy for you.
8.15: Having introduced ourselves to you in an "airy" manner, we send our little comics out after your smiles in—"The Army A.B.O."
8.18: Our soprano in love (please don't tell on us)—An Erikian Love Lilt.
8.21: Don't you wish you could see her? Well, she's pretty, with fair hair, and its not "Bobbed Hair." But this tiny sketch is!
8.24: Our snappy little soubrette not only has bobbed hair, but has PEP. Well, hear her in—"Goodness Gracious, Gracie!"
8.27: Now, we invite you to look into the future with us, say the year 1950. This is "What It May Come To."
8.37: We were about to say something at this stage, but will let Joe and Ida do it. (You don't mind, we tell you.)
8.45: Here comes that old, old subject again—"L.V." Ah! but a different kind. Girls, you'll adore our male quartette in—"The Song I Love."
8.48: Sorry, if our mutual harmony seems a shame that there should be a discord in the camp, but we are determined that they will settle their differences "over the air." The Lady (she will be nameless). The Man (he will be nameless)—"Give Me a Man."
8.52: It wasn't so bad after all, eh? But here's trouble, the sign's up—"Apartments Wanted."
8.58: While those of you with spare rooms get on the phone, we will call a halt to music and frivolity. But even our "Interlude" will be worth listening to, for it is Bret Hart's wonderful and most human story—"The Luck of Roring Camp."
9.10: Again, we would remind you of the "Bis and Pieces" in the second half of our programme.
9.12: Off we go again! The National Broadcasting Orchestra has a dinky little novelty—"The Squirrel Dance."
9.18: Here is "Tremendous" drama. The only trouble we have had has been in selecting a good title for this thrilling story. We will leave you to decide for us. "Who Did It Belong To?"
9.28: You remember in the early portion of the programme, our Soprano had fallen in love? Well, we don't want to say anything, but girls, she has got in ahead of you with our good-looking male quartette: in fact, she's quite "moony," but only under a "Pale Moon."

9.29: We can't say for certain, but it's fairly obvious that one of our "Comics" is in the Weather Bureau: anyhow, stay "foreca—" for the next three or four minutes is—"Drizzly."
9.33: Do you remember the trouble you had with your first wireless set? Talk about "Atmospherics" here's a sample.
9.39: Our tenor and baritone have asked permission to sing, jointly—"Awake Beloved" (Let's hope she's listening in).
9.40: Joe and Ida are back—"Full of the Joy of Spring." (Hope it's only spring water, Joe; we want you later in the programme.)
9.48: We feel you would like a good violin solo at this stage, so it is with very great pleasure we ask Edouard Lambert to fill this aching void.
9.52: Many listeners have had the experience of travelling in the London "Tube." To those who have not had that joy, we present this little sketch. Our male quartette refer to our soprano, in "I Haven't Told Her," and, what's more, "She Has Told Us." (May we ask, What?)
10.3: We don't know why, but the Company will recite.
10.8: Joe and Allen—"Nuff said!"
10.15: Of course, all good things must come to an end. Let us borrow some music from Mr. Wagner and Mr. Bizet, still a few words of our own, and there you are—Grand Opera Finale.
10.20: News and weather.
10.30: "Rex" Dance Band.
11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 484 Metres).

MORNING SESSION

8.15 to 11.0: See Friday.

MIDDAY SESSION

12.0 to 2.0: See Friday.

AFTERNOON SESSION

2.1: Sam Lavin's Orchestra. 2.3: Sophie Tucker, soubrette. 2.8: Queenie and David Kail, Hawaiian Duo. 2.9: "North and South" Comedy. 2.12: Sam Lavin's Orchestra. 2.15: Vocal trio—"Three Australian Boys." 2.18: Sam Lavin's Orchestra. 2.20: Sophie Tucker, soubrette. 2.33: Diana recital. 2.30: Sophie Tucker, soubrette. 2.33: Perera and Franchini, guitar. 2.39: "North and South" Comedy. 2.42: Smith Barlow's Orchestra. 2.45: Vocal trio—"Three Australian Boys." 2.48: Queenie and David Kail. 2.51: Fred Williamson. 2.54: Smith Barlow's Orchestra. 2.57: Perera and Franchini. 3.0: Request numbers. 3.20: The Baby. How long should baby sleep?—Sister Anne Purcell. 3.35: Musical Interlude. 3.40: Useful crafts at home—Making Christmas Presents—Mrs. Henrietta Walker. 3.55: Musical Interlude. 4.0: The latest fashions—Madame Lutz. 4.15: Musical reproduction. 5.0: Weather. 5.45: Close down.

EVENING SESSION

6.15: Dinner Music. 7.32: Sporting. 7.35: Latest musical releases. 8.0: Chimes.

NIGHT SESSION

8.1: Wild life afloat—Capt. Donald MacLean. 8.15: Paul Jeacle and his Band—"I'm Coming Virginia" (Heywood), "Bottles and Jars" (Reel), "Garnet Kemsley, humorous recital—"Dave Asks for a Loan" (St. Ridd), "The Family Lullaby" (V. L. Trotman). 8.28: Elsie Westcott, violin—"Allegro Brillant" (William Len West), "Rondino" (Beethoven-Kreiser). 8.30: Syd. Hollister, comedian—Holleristems. 8.44: Paul Jeacle and his Band—"It's a wonder, World, after All" (Davis), "Walking with Susie" (Conrad). 8.51: Ethel Heaney, soprano—"I love the Moon" (Rubens), "At Dawning" (Cudman). 8.58: Paul Jeacle, piccolo solo—"O, You Picco" (arr. P. Jeacle). 9.3: Martin La Matt, tenor—"Two Irish Eyes" ("Mother of Pearl") (Eall). 10.0: Paul Jeacle and his Band—"When My Dreams Come True" (Berlin), "Pork and Beans" (Bee).

A SERIOUS INTERLUDE.

9.17: Garnet Kemsley, recital—selections from "Oleber Twist" (Dickens). 9.24: Charles Short, xylophone solo—selected. 9.30: Ethel Heaney, soprano—"The Market" (Molly Carey), "To a Minature" (Brahme). 9.35: Paul Jeacle and his Band; Irving Berlin's Waltzes; "Parted." 9.44: Syd. Hollister, comedian—more Holleristems. 9.52: Elsie Westcott, violin—"Ave Maria" (Schubert-Wilhelm); Waltz (Brahms). 10.0: Weather information and Herald news. 10.10: Paul Jeacle and his Band—"By the Lake" (Lange), "Tlay Town" (Hollander). 10.17: Martin La Matt, tenor—"The Mountains of Honour" (Deetz). 10.24: Paul Jeacle and his Band—"The Mannikin Ball" (Dixon), "Slow Gee-Gee" (Bee). 10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (255 Metres).

For day sessions see Friday.

EVENING SESSION.

8.0: New Symphony Orchestra, "Henry VIII Dances." 8.30: Sponsored Session, 9.30: Harold Bauer, "In the Night." 10.0: Haring and His Orchestra, "Walden Bells." 10.30: Lotie Lehmann, "Angles Guard Thee." 10.45: News. 11.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

For day session schedules, see Friday.

NIGHT SESSION.

8.0: From the studio, a programme by the Brisbane Apollo Club. The choir—"Defiance" (Attenhoven). D. McLennan (tenor)—"Like Stars Above" (Squire). The choir (unaccompanied)—Part Song, "Not a Spot on Earth" (Winter). Vada Reik (violinist)—"Chanson Hindoue" (Rimsky-Korsakov). The choir—Chorus, "Trim Ship" (Cross). Percy Brier (pianist)—"Tempo di Minuetto, Op. 29" (Zanella). Jack Land and Leonard Francis—Vocal duet, "Love and War" (Cooke). The choir (unaccompanied)—Part song, "The Young Musicians" (Kucken). Beatrice Pugh and Mrs. Hugh Campbell—Vocal duet, "A Figma in Cautu" (Donizetti). The choir (unaccompanied)—Chorus, "The Spartan Heroes" (Protheroe). Tom Kehler (baritone)—"Pais" (Squire). Male Quartette—"Imperial Quartette." The choir (unaccompanied)—Humor part song—"Alexander" (Brewer). The choir (unaccompanied)—Part Song, "Eventide" (Shephard).

9.0: Metropolitan Weather forecast.
9.1: Movements of Travelling Dental Clinic. The choir (accompanied)—"Buccaners" (Candish). A. G. Steele (baritone)—"Youth" (Alilstein). The choir (accompanied)—Part song, "Vira" (Riker). H. A. Thiele (solicitor)—"Father Reilly's Horse" (Banjo Patterson). Beatrice Pugh and Mrs. Hugh Campbell—Vocal duet, "Shepherdess and Beau Brocade" (Phillips). L. H. Muller (tenor)—"To a Minature" (Brahme). The choir (accompanied)—Part song, "To the Death" (Walsler). Percy Brier (pianist)—"Aspiration" (Schumann). The choir (unaccompanied)—Humorous part song, "Old King Cole" (Forsyth). Vada Reik (violinist)—"Dusk on the Hawkesbury" (Alfred Hill). The choir (accompanied)—Chorus, "The Lost Chord" (Sullivan). The Chafers, male quartette—"The Two Roses" (Werner). The choir (unaccompanied)—Part song, "Old Farmer Buck" (Williams). The choir (unaccompanied)—Part song, "Lullaby" (Williams). 10.0: News. Close down.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

MORNING SESSION

11.10 to 2.0: See Friday.

AFTERNOON SESSION

2.30 to 4.30: See Friday. During the afternoon running description of the Melbourne Cup and other events at Flemington will be given.

EVENING SESSION

6.0 to 7.0: See Friday. 7.1: Birthday League greetings; resume of Flemington race results; Stock Exchange; market reports. 7.20: Under the auspices of the Workers' Educational Association, Mr. E. Burton, B.A., will speak on "Some Convicts' Personalities." 7.35: From the Theatre Royal—Miss Lillian Crispe will speak from her dressing-room. 7.45: Dr. Herbert Basedow, M.P.—talk.

NIGHT SESSION

8.0: Chimes. 8.1: Resume of the running of the Melbourne Cup. 8.10: A request presentation of the opera, "Lucia di Lammermoor" (Donizetti), Characters: Lucia (Marcelle Bernardi), Edgardo (Dino Pelard), Enrico (Bert Woolley), Raymond (Fred Guster), Alisa (Gwen Collett), Arturo (Vincent McMuray), Norman (Ann Young), and chorus; explanatory remarks by Essie Francis; music by the Operatic Orchestra. 9.0: Meteorological; Semaphore tides. 9.2: Overseas grain report. 9.3: Announcements. 9.5: Continuation of opera, "Lucia di Lammermoor." 10.15: News; weather; sporting. 10.30: Recordings. 11.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

For day sessions see Friday.

EVENING SESSION.—During the evening a description of the Melbourne Cup, relayed by 3ME, will be broadcast. 8.0: Ambassadors' unit entertainment, under direction of Bert Howell. 8.7: Les Waldon at the Wurlitzer. 8.15: Programme of solos, quartettes, and duets, arranged by Melody Four. 9.1: Weather. 9.2: Doris Horigan, soprano. 9.9: Stage presentation from Ambassadors' Theatre, under direction of Bert Howell. 9.30: Strange tales of adventure, by H. A. Dry. 9.45: Bertina Warren, popular vocalist. 10.5: Dance band. 10.50: Announcements. 10.33: Dance Band. 10.59: Weather. 11.0: Close.

7ZL

Tasmanian Broadcasters Pty., Bursary Bldg., Elizabeth Street, Hobart (Wavelength, 518 Metres).

11.30 a.m. to 4.30 p.m., 6.15 p.m. to 10.0 p.m. Same as Friday.

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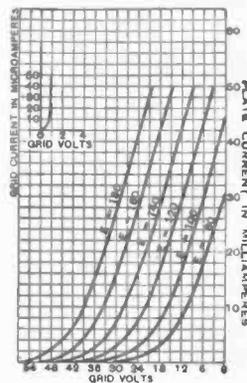
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Local Programmes, Wednesday, November 6

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 351 Metres)

EARLY SESSION—7.0 to 8.15 a.m.

7.0: "Big Ben" and meteorological information for the man on the land.
7.3: This morning's news from the "Daily Guardian."
7.8: Austradio musical reproduction.
7.45: Mails and shipping.
7.48: What's on to-day?
7.50: Children's birthday calls.
8.0: Music from the Studio.
8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

10.30: Announcements.
10.32: General sporting talk by Oscar Lind.
10.45: H. Weber at the Grand Organ.
11.0: Household Helps—Cooking, by Miss Ruth Furst.
11.10: Copies (copyright), "Sun"—"Herald" and A.P.A. News Service.
11.15: Morning devotion.
11.30: Austradio musical reproduction.
11.53: British Official Wireless press.
12.0: "Big Ben." Stock Exchange and metal quotations.
12.5: C. W. Mann will speak on "Psychology."
12.20: Midday weather forecast and weather synopsis. Special produce market session for the man on the land, supplied by the State Marketing Board.

12.30: Close.

THE LUNCH HOUR—1.0 to 2.30 p.m.

1.0: Lunch hour music.
2.0: Stock Exchange, second call.
2.2: A glance at the afternoon "News."
2.7: Studio music.

2.7: Announcements.

THE RADIO MATINEE—2.30 to 4.30 p.m.

Note: Race results from Victoria Park.
2.30: Radio rhythm.
2.42: Marjorie Pritchard, popular vocalist—
(a) "Sweetheart of All My Dreams" (Fitch and Lowe).
(b) "Honey" (Whitting).
2.49: Modern music.
3.0: Horace Keats, pianist—
"Three Prejudices" (Carse).
3.7: Songs of To-day.
3.23: Ward Leopold, the Strummin' Sereader—
(a) "When Dreams Come True" (Berlin).
(b) "The World is Passing Me By" (Leopold).
3.30: Melody memories.
3.40: Marjorie Pritchard, popular vocalist—
(a) "I'm Lonely" (Coates).
(b) "Thinking of You" (Abbot and Wimbrow).
3.47: Horace Keats, pianist—
(a) "Interlude Moderne" (Splakel).
(b) "Petite Caprice" (Ketelbey).
3.54: New dance numbers.
4.11: Ward Leopold, the Strummin' Sereader—
(a) "Good Little Bad Little You" (Green).
(b) "Mean To Me" (Turk).
4.18: Studio music.
4.28: Stock Exchange, third call.
4.30: Dance items.
4.45: Close.

EARLY EVENING SESSION—5.45 to 7.55 p.m.

5.45: Children's "Good-night" Stories, told by Uncle Ted and Sandy, assisted by the "Hello Man."
6.45: Dinner Hour music.
7.30: A.B.C. Sporting Service.
7.37: Special Country Session. Stock Exchange resume. Markets. Weather forecast. Late news service from the "News." Truck bookings.
7.58: To-night's programme.

THE EVENING PRESENTATION—8.0 to 11.30 p.m.

Here is a chance! Band music now through 2FC on Wednesday night, and through 2BL the feature and presentation from the State Theatre, and a programme on popular lines.
8.0: "Big Ben." Announcing a programme of band music.

Leichhardt District Band—

(a) March, "Palmer House" (Pettee).
(b) Overture, "Diamond Cross" (Greenwood).
8.15: Anne Mills, mezzo—

(a) "Pluck This Little Flower" (Ronald).
(b) "Love, I Have Won You" (Ronald).
(c) "It is not because Your Heart is Mine" (Lohn).

(a) "Give Little Piccaninies" (Anthony).
8.22: C. N. Baeyerz continues his series of "Humorous Stories in Dialect."
8.42: Lindley Evans, pianist—

(a) "Two Arabesques" (Debussy).
(b) "Jeux D'Eaux" (Ravel).

8.54: Rowell Bryden, baritone—
Songs of the Malvern Hills (Coningsby Clarke)—

1. "Malvern Hills in Spring."
2. "The Little Girl from Hanley Way."
3. "In the City."

9.1: The Country Man's Weather Session—
(a) New South Wales forecasts.
(b) Interstate weather synopsis.

9.3: The Leichhardt District Band—
(a) Selection, "Gralda" (Adam).
(b) Waltz, "Thoughts" (Alford).

9.21: Anne Mills, mezzo—
(a) "Longing" (Duparc).
(b) "Dream World" (Duparc).

9.28: Lindley Evans, pianist—
(a) "Autumn" (Chaminade).
(b) "Fire Flies" (Bridge).

(c) "Gavotte" (Brahms).
9.40: The Leichhardt District Band—
(a) Cornet Solo, "Ethelinda" (Clarke).

(b) Selection, "La Traviata" (Verdi).
9.53: Rowell Bryden, baritone—
(a) "A Sea Burthen" (Keel).

(b) "Si Vous L'Etoile Compris" (Denza).
10.0: The Leichhardt District Band—
(a) Fantasia, "My Old Kentucky Home" (Greenwood).

(b) March, "Rainbow" (Maurice).
10.15: Announcements.
Late official weather forecast.

10.20: From the ballroom of the Oriental—
Sydney Simpson's Syncopaters in dance music.

11.30: Close. National Anthem.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 351 Metres).

OPENING SESSION—8.15 to 11 a.m.

8.15: G.P.O. chimes and announcements.
8.16: Music for every mood.
8.40: Meteorological data for the country.
8.45: Mails and shipping information.
8.50: Memory melodies.
9.0: This morning's story.
9.30: A musical interlude.
9.40: British Official Wireless press.
9.45: New music.
10.5: News from the "Daily Guardian."
10.10: Austradio musical reproduction.
10.40: The Australian Broadcasting Company's Women's Association, conducted by Miss Gwen Varley.
11.0: G.P.O. chimes. Close down.

MIDDAY SESSION—12 noon to 2.30 p.m.

12.0: G.P.O. chimes. Announcements.
12.2: Lunch music.
1.0: Afternoon news from the "Evening News."

1.5: Studio music.
1.15: Women's Interest Talk—Goodie Reeve, "Aids to Personality."

1.30: Austradio musical reproduction.
2.0: J. Knight Barnett at the Wurlitzer.
2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.45 p.m.

2.30: The Doctor will speak on "Outstanding Personalities in Australian History—John McArthur."
2.45: C. Price Conigrave will give a talk.

3.0: 2BL Instrumental Trio.
3.12: Mab Bowyer, contralto—
(a) "Meditation" (Chemifade).
(b) "The Arrow and the Song" (Baif).

3.19: Emily Finn, violinist—
(a) "Menuet" (Pederewski-Kreisler).
(b) "Rondino" (Beethoven-Kreisler).

3.26: 2BL Instrumental Trio.
3.38: Carmen Frey, pianist—
"Air with Variations in A" (Mozart).

3.48: 2BL Instrumental Trio.
4.0: Mab Bowyer, contralto—
(a) "Still as the Night" (Bohm).
(b) "The First Primrose" (Grieg).

(c) "Twins in the Lovely Month of May" (Schumann).
4.7: Emily Finn, violinist—
"Hejre-Kati" (Jeno Hubay).

4.15: Carmen Frey, pianist—
(a) "Il Moto Continuo" (Weber).
(b) "Rosemary" (Bridge).

4.22: 2BL Instrumental Trio.
4.30: Dance items.

4.45: The Trade Hour: Demonstration music.
5.45: Weather information. Close down.

THE DINNER HOUR—6.15 to 7.55 p.m.
6.15: Dinner music.

6.45: The Younger Set Session—Boys' Radio Club, conducted by Mr. Norman Lyons.
7.5: Graham Kent will talk on "Bridge."

7.20: The Country Man's Market Session—Wool, wheat, stock, farm produce, fruit, and vegetable markets.

7.30: Austradio musical reproduction.
7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION—8.0 to 10.30.
Our routine has been altered for November, and through 2BL on Wednesday the State Theatre Overture will be broadcast, followed by a popular programme, and the feature of the evening will be a Radio Play, which to-night is being offered by Brunton Gibb.

Through 2FC Service band music will make a wide appeal to our listeners, and C. N. Baeyerz' humorous stories in "dialect" will provide a pleasing interlude. There are also song groups, and a pianoforte recital by Lindley Evans.

8.0: From the State Theatre—
Overture by Will Prior's Band, with Price Dunlavy at the Wurlitzer.

8.7: From the Studio—The Scottish Four, vocalists—
(a) "W! a Hundred Pipers" (Mansfield).
(b) "Mary" (Richardson).

8.17: From the State Theatre—
A "Talkie" Short.

8.24: From the Studio—The Janetzki Trio:
(a) "Teasin'."
(b) "When You and I were Seventeen" (Rosoff).

(c) "Tuck Me to Sleep in My Old Kentucky Home" (Lewis).
8.34: Dorothy Nall, monologues—
"At the Opera" (Kebie Howard).

8.41: Vincent Asney, violinist—
"Andante and Allegro," from "Concerto" (Vivaldi-Kreisler).

8.48: The Scottish Four, vocalists—
(a) "My Love She's But a Lassie" (Mansfield).
(b) "Lass o' Gowrie" (Mansfield).

8.58: Brunton Gibb and Company—in Two Radio Plays—
(a) "The Stepmother" (Milne).
(b) "Emma and Erb" (Grattan).

9.28: Weather information for the man on the land.
9.30: The Janetzki Trio—
(a) "Fox Trot Medley."
(b) "The Rainbow Man" (Eddy Dowling).
(c) "William Tell" (Rossini).

9.40: Vocal duets—
(a) "Dear Love of Mine" (Thomas).
(b) "Let Me Gaze" (Gounod).

9.47: Dorothy Nall, monologues—
(a) "The Women of the West" (Essex Evans).
(b) "Bank Oldie" (Barry Pain).

9.54: Vincent Asney, violinist—
(a) "Larghetto" (Weber-Kreisler).
(b) "Moment Musical" (Schubert).
(c) "Ave Maria" (Schubert).

10.4: From the State Theatre.
10.25: From the Studio—
Late news from the "Evening News."
Late weather forecast.

10.30: National Anthem. Close.

2KY

Trades and Labor Council, Geelong St., Sydney (Wavelength, 320 Metres).

CHILDREN'S SESSION. 6.0.

EVENING SESSION

7.0: Musical interlude. 7.15: Sporting feature—complete review of to-day's racing. 7.40: Health feature. 8.0: Hawaiian steel guitar selections. 8.15: Al. Rosenberg novelty pianist. 8.30: Banjo solos, Master Harry Weir. 8.36: A. Rosenberg at the piano. 9.10: Sporting feature—from Sydney Stadium: full description of main 15-round event. 9.50: Music from the Studio. 10.0: Closing announcements.

(2UW and 2UE schedules same as Friday.)
(2GB at foot of Thursday's programmes.)

Interstate Programmes, Wednesday, November 6

3LO

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 371 Metres).

EARLY MORNING SESSION

7.0 to 8.15: See Friday.
MORNING SESSION
10.30 to 12.30: See Friday.

MIDDAY SESSION

1.0: Melbourne Observatory time signal; Stock Exchange information; meteorological data; weather forecast for Victoria, New South Wales, South Australia, and Tasmania; ocean forecast; river reports; rainfall data. 1.15: Comments on the day's news. 1.30: Music.

EDUCATIONAL SESSION

7.0: Reading, Friendship, by Lord Bacon—Mr. John Coyne. 2.15: Musical interlude. 2.20: Rambles in the Bush—Mr. Chas. Daley. 2.35: Musical Interlude. 2.40: Modern Democracies—Hon. J. H. Keating, LL.B. 2.55: Musical Interlude. 3.0: Melbourne Observatory time signal.

THE RADIO MATINEE

3.0: Paul Jeacle and his Band—"Egyptian Echoes" (Block). "Lonely Little Bluebird" (Woods). 3.5: Leslie Jephcott, tenor—"Sorter Miss You" (Smith). "In April" (Peter McConachie). 3.13: Claude Jeacle—Saxophone solo. 3.17: The Melody Three (piano, cello, and baritone). Twenty Minutes of Popular Music. 3.37: Paul Jeacle and his Band—"Do Some Thing" (Green). "I'm Crooning a Tune About June" (Davies). 3.43: Doreen Berry—Humorous recital. 3.51: Horrie Cheehan—Trumpet solo. 3.55: Leslie Jephcott, tenor—"Maire My Girl" (Aitken). "Three"

(Aylward). 4.3: Paul Jeacle and his Band—"Carmen Capers" (Bick). "Sweet Day" (Shikret Remick). 4.8: Doreen Berry—Humorous recital. 4.16—Chas. Carum—Saxophone solo. 4.20: Paul Jeacle and his Band—1927-1928 Medley (arranged by Paul Jeacle). "Spectra" (Clare Berlin). "Oh, My Operation" (McDonald Remick). 4.30: Close down.

THE CHILDREN'S CORNER

5.45: "Little Miss Kookaburra" and "Billy."
EVENING SESSION
6.35: Musical Interlude. 6.45: Cultivating Good Health—Prevention of Hydatid Disease. Mr. E. M. Pullar, B.V.S.C. 6.55: Musical Interlude. 7.0: Time signal. 7.1: Countryman's Session. 7.25: Modern Steels—Heat treatment an properties of Axles. Prof. J. Nell Greenwood, D.Sc. 7.40: News. 7.45: Doing strange things in out-of-way places—Mutton-birding in Bass Straits. Mr. S. R. Leggett. 8.0: Time signal.

NIGHT SESSION

8.0: One hour of music by the masters, arranged by Professor Bernard Heinze.
9.0: Jack Houston, ventriloquist—"The Doctor."
9.10: A musical comedy in three acts, "Miss Cherryblossom" or "A Maid of Tokio." Books, lyric and music by May Hevée Dodge and John Wilson Dodge. Cast of characters (in order, as they first appear)—Cherryblossom, brought up as the daughter of Kokemo, in reality Evelyn Barnes, a girl from New York; U.S.A.; Molly Jackson, Kokemo, a proprietor of a tea garden in Tokio, Japan. Courtney Ford; John Henry Smith, a New Yorker, on a visit to Japan as a guest of Mr. Worthington, Tom Downie; Henry Foster Jones, Jack's pal, in love with Jessica, Alexander Browne; Horace Worthington, a New York stockbroker who is entertaining a party of friends with a trip to Japan on his private yacht; Hugh Euxham; Jane Young, Worthington's private secretary; Geo. Nicholson; Jessica Vanderpool, Worthington's niece. Iza Crossley, Togo, a Japanese politician of high rank. Leslie Williams. All three acts take place in Kokemo's tea garden in Japan. Act 1, afternoon; Act 2, night of the same day; Act 3, Night one week later. Time, the present. A short story of the play—Miss Evelyn Barnes, an American girl, born in Japan, whose parents die of fever is brought up as a Japanese maiden. Her father's secretary uses her property for his own ends. When Evelyn, who is known as Cherryblossom, is about eighteen, Worthington (the secretary), returns to Japan on his yacht with a party of American friends. One of them, John Henry Smith, falls in love with Cherry Blossom, and wishes to marry her, but Kokemo, who has brought her up as his own daughter, wants her to marry Togo, a rich politician. The action of the piece centres round Jack's effort to outwit Togo and Kokemo. Eventually Cherry Blossom learns her true identity, comes into her own property, marries Jack, and all ends happily.
10.10: Jack Houston—"Out of Work."
10.20: Britis Oceania wireless news; meteorological information; items of interest.
10.30: "The Rex" Dance Band.
11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 381 Metres).

MORNING SESSION

8.15 to 11.0: See Friday.
MIDDAY SESSION
12.0 to 2.0: See Friday.

AFTERNOON SESSION

RUSSIA
2.1: Balalalka Orchestra. 2.4: Chaliapin, baritone.
2.7: Rachmaninoff, piano.
FRANCE
2.12: Alma Gluck, soprano. 2.18: Jacques Thibaud, violin.
IRELAND
2.20: John MacCormac, tenor.
SCOTLAND
2.28: Bagpipes. 2.32: Peter Dawson, baritone.
ENGLAND
2.36: Royal Albert Hall Orchestra. 2.40: The English Singers. 2.44: Marie Hall, violin. 2.48: Melba, soprano. 2.52: Guards' Band.
3.0: Request numbers. 3.20: The Pre-School Child—Creating a love for Music—Miss M. Lush. 3.35: Musical interlude. 3.40: Home Management—Some advice in lighter vein—Enid and Flo. 3.55: Musical interlude. 4.0: Home Life in Other Countries—Country Life in U.S.A.—Dr. Cecile Grell. 4.15: Musical reproduction. 5.0: Chimes. 5.1: Musical reproduction. 5.30: Weather. 5.45: Close down.

EVENING SESSION

6.15 to 8.0: See Friday.
NIGHT SESSION
8.1: Why We Behave as Human Beings—Thought and Language. Prof. J. A. Gunn, M.A., B.Sc., Ph.D.
8.15: Victory Brass Band—march. "National Honour" march. "Vesuvius."
8.23: Violet Colahan, soprano—"Indian Song." "The Rose and the Nightingale."
8.30: Wool—Australia's Greatest Industry. A description broadcast from the 2nd Australian Exhibition, outlining all processes involved from the shearing of the sheep to the manufacture of the cloth.
9.0: Victory Brass Band—Intermezzo. "White Lilies", fox-trot. "Sally of My Dreams."
9.10: W. G. Phillips, tenor—"Only a River Running By" (Hopkins). "Ah, Moon of My Delight" (Lehmann).
9.17: Mabel Nelson, piano recital—Two Intermezzi (Brahms). "Capriccio in G Minor" (Brahms).
9.28: Violet Colahan, soprano—"My Mother Bids Me Bind My Hair" (Haydn). "Solange's Song" (Grieg).
9.35: Victory Brass Band—selections. "In Coon Land."
9.45: A mystery story—"The Tattooed Hands," J. Hewlett Ross.

10.0: Weather information and Herald news.
10.10: W. G. Phillips, tenor—"One Love Have I" (Cowan). "A Song Remembered" (Coates).
10.17: Victory Brass Band—march. "Stars and Stripes"; waltz, "Coquette"; march, "Sons of America."
10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (255 Metres).

For day sessions see Friday.
EVENING SESSION
8.0: Sandler and His Orchestra. "Adoree." 8.30: Rhodes Motors Session. 9.0: J. H. Sharwood Shoe Programme. 10.0: Claire Dux (soprano). "In the Time of Roses." 10.30: Lauri Kennedy. "Songs my Mother Taught Me." 10.45: News. 11.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

For day session schedules see Friday.
NIGHT SESSION
8.0: The Studio Dance Orchestra—Dance music.
8.10: The Albert Trio—A quarter of an hour's melody and mirth.
8.25: The Studio Dance Orchestra—Dance music. 8.35: Gouling, the Cigarette Box Musician—"Ora Pro Nobis" (Piccolomini). "Beneath Thy Window" (Tschenscher).
8.40: The Studio Dance Orchestra—Dance music.
8.50: Jack Lord (tenor)—"I Seek for Thee in Every Flower" (Gantz). "Beneath Thy Window" (Di Capua).
9.0: Weather; movements of lighthouse steamers.
9.5: The Studio Dance Orchestra—Dance music.
9.15: Doris McInnes (soprano)—"If You Were in My Garden" (Benyon). "Mifawny" (Forster).
9.25: The Studio Dance Orchestra—Dance music.
9.35: Foster and Dawson entertainers.
9.45: The Studio Dance Orchestra—Dance music.
10.0: News; weather.
10.15: The Studio Dance Orchestra: Dance music.
11.0: Close down.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

11.15 to 2.0: MORNING SESSION
2.0 to 4.30: See Friday.
AFTERNOON SESSION
4.30 to 4.45: See Friday.
EVENING SESSION
5.45: Victoria Park concert. 6.0 to 7.0: See Friday. 7.1: Birthday greetings; selections for tomorrow's Oaks and other races to be decided at Flemington, by "Silvius". Melbourne cricket market reports. City v. Country. Colts: Stock Exchange market reports. 7.20: SCL'S Bluebird Girls' Club. 7.40: From the Theatre Royal—dressing-room talk by Leo Darnton. of "The Desert Song." 7.55: An address to Boy Scouts.

NIGHT SESSION

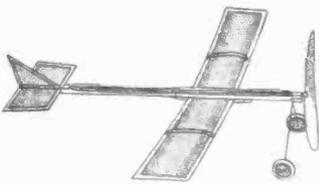
8.5: Programme review.
8.10: The Steiner Trio—"Four Favorite Airs" (Friml). "Serenade" (Schubert).
8.20: Choir community singing by the Apollo Radio Choir (conducted by Mr. Gould)—"Annie Laurie," "Comin' thro' the Rye."
8.27: Guido Giacchino, "cellist—selected.
8.35: Mostyn Skinner, baritone—"Edu Tri" (Verdi).
8.39: The Steiner Trio—"In Old Madrid" (Trotter). "Evening Melody" (Strallair).
8.49: Choir community singing by the Apollo Radio Choir—"All through the Night" (Merrily, Merrily).
8.56: Bert Hocking, violinist.
9.1: Meteorological; overseas grain report.
9.4: The Steiner Trio—Intermezzo. "Wedgwood Blue" (Kestelby). "Martha" (Piotow).
9.14: Choir community singing by the Apollo Radio Choir—"The Last Rose of Summer" (Moore). "Camp-town Races."
9.20: Guido Giacchino, "cellist—selected.
9.26: Mostyn Skinner, baritone—"Mighty Lak" a Rose" (Nevin). "Lorraine, Lorraine, Love" (Charles Spross).
9.33: Choir community singing by the Apollo Radio Choir—Kentucky Home, "Drink to Me Only with Thine Eyes."
9.40: Bert Hocking, violinist.
9.46: Mostyn Skinner, baritone—"The Sun of Life" (Stewart).
9.50: The Steiner Trio—nolette. "Rosemary" (Raynard). "Spanish Dance" (Eaton).
10.0: Bessie Francis and P. H. Nicholls in a "Long-fellow Interlude."
10.15: News, etc.
10.30: Recordings.
11.0: Close.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

For day sessions see Friday.
EVENING SESSION—8.0: Chimes. 8.1: Weather. 8.2: Zlata Kalmikoff, "cellist. 8.12: James Carmichael, baritone. 8.19: Zlata Kalmikoff, "cellist. 8.29: Norah Shirley, contralto. 8.57: Announcements. 9.0: Chimes. 9.1: Weather. 9.2: Charles Court, cornettist. 9.3: Songs of the piano, by Joan Hope. 9.16: Joan Hodgson, humorous sketch. 9.23: Songs of the piano, by Joan Hope. 9.30: Joan Hodgson, humorous sketch. 9.37: Austradio musical reproduction. 10.0: Chimes. 10.1: Weather. 10.7: Dance Band. 10.59: Weather. 11.0: Close.

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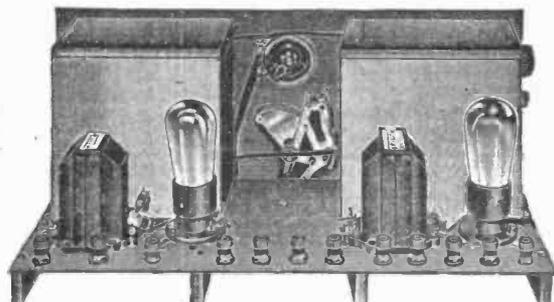
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INTERIOR OF THE SUPER-WASP.

Local Programmes, Thursday, November 7

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).

EARLY SESSION—7.0 to 8.15 a.m.

- 7.0: "Big Ben" and meteorological information for the man on the land.
7.3: This morning's news from the "Daily Guardian."
7.8: Austradio musical reproduction.
7.45: Mails and shipping.
7.48: What's on to-day?
7.50: Children's birthday calls.
8.0: Music from the Studio.
8.15: Close.

MORNING SESSION—10.30 a.m. to 12.30 p.m.

- 10.30: Announcements.
10.32: A.B.C. Racing Observer.
10.45: H. Weber at the Grand Organ.
11.0: Household Helps—Domestic Notes, by Miss Ruth Furst.
11.10: Cables (copyright). "Sun"—"Herald" and A.P.A. News Service.
11.15: Morning Devotion
11.30: Austradio musical reproduction.
11.52: British Official Wireless press.
12.0: "Big Ben." Stock Exchange and metal quotations.
12.5: A morning story.
12.20: Midday weather forecast and weather synopsis. Special produce market session for the man on the land, supplied by the State Marketing Board.
12.30: Close.

THE LUNCH HOUR—1.0 to 2.30 p.m.

- 1.0: Lunch hour music.
2.0: Stock Exchange, second call.
2.2: A glance at the afternoon "News."
2.7: To-day's acceptances, by the A.B.C. Racing Observer.
2.17: Popular Education: C. N. Baeyerz—"Spoken English."

THE RADIO MATINEE—2.30 to 4.30 p.m.

- Note: During the afternoon from Flemington a description will be given of the Linlithgow Stakes and the Oaks Stakes.
2.30: The 2FC Instrumental Trio.
2.42: Winifred Batchelor, soprano—
(a) "O Thank Me Not" (Mallinson).
(b) "From My Fifth Floor Window" (Mallinson).
(c) "Here Lies the Warmth of Summer" (Mallinson).
2.49: The 2FC Instrumental Trio.
3.0: Gwen Robson, pianist—
(a) "Concertstuck in D Flat" (Liszt).
(b) "Liebestraum" (Liszt).
3.7: The 2FC Instrumental Trio.
3.22: Winifred Batchelor, soprano—
(a) "The Old Flagged Path" (Arundale).
(b) "The Smoking Room" (Arundale).
(c) "The Night Nursery" (Arundale).
3.30: Gwen Robson, pianist—
(a) "Triana" (Albeniz).
(b) "Tango" (Albeniz).
3.37: The 2FC Instrumental Trio.
4.0: Francis Jackson will speak on "A Foot in Medieval France."
4.15: The 2FC Instrumental Trio.
4.28: Stock Exchange, third call.
4.30: Close.

EARLY EVENING SESSION—5.45 to 7.55 p.m.

- 5.45: Children's "Good-night" Stories, told by Aunt Goodie.
6.45: Dinner Hour music.
7.30: A.B.C. Sporting Service.
7.37: Special Country Session. Stock Exchange resume. Markets. Weather forecast. Late news from the "News" Truck bookings.
7.58: To-night's programme.

THE EVENING PRESENTATION—8.0 to 11.30 p.m.

- Again a slight change has been effected in the order of our programmes for November, and Thursday night is now 2FC's play night. The A.B.C. Players feature the fourth instalment of their intriguing Radio Play, "The Jazz Spider." Through 2BL the entertainment is so arranged to offer attractions to the varied tastes of many listeners. To-night there are Song Groups, Saxophone Solos, Humorous Items, and a spice of Talkie Short.
8.0: From the Capitol Theatre: The Overture by Horace Sheldon's Band, with Fred Scholl at the Wurlitzer.

8.7: From the Studio: Stanley Catlett, tenor—

- (a) "Elegie" (Massenet) (cello obbligato).
(b) "Bird Songs at Eventide" (Coates) (Trio accompaniment).
8.14: The Antique Trio—playing Old World Melodies upon Old World Instruments—
Dulcitone—Madame Evelyn Grieg.
Treble Viol—Veta Wareham.
Vio da Gamba—Keith Kennedy.
(a) Trio, "Favorite Air of Louis XIII." (arr. Ghys).
(b) Dulcitone Solo, "Prelude" from "Suite XIV." (Handel).
(c) Viol da Gamba Solo, "Minuet" (Stanley).
(d) Trio and Voice, "A Song of Old London" (Oliver).
8.24: From the Little Theatre—The Third and Last Instalment of the A.B.C. Players' Intriguing Radio Play—
"The Jazz Spider."

9.10: The Country Man's Weather Session:
(a) New South Wales forecasts.
(b) Interstate weather synopsis.

9.12: May Webster and Paul Daly, entertainers.

9.19: From the Capitol Theatre—The Stage Presentation:
Horace Sheldon's Band, with Fred Scholl at the Wurlitzer.

9.31: From the Studio: Stanley Catlett, tenor—

- (a) "O Paradiso" (Meyerbeer).
(b) "Had You But Known" (Denza) (Trio accompaniment).
9.38: The Antique Trio—
(a) Treble Viol Solo, "Rondo" (Mozart-Kreisler).
(b) Trio, "Adagio" (Haydn).
(c) "Gipsy Rondo" (Haydn), by request.
9.48: May Webster and Paul Daly, entertainers.
9.58: From the Hotel Australia—Cec. Morrison's Dance Band.
10.15: From the Studio—Announcements, late official weather forecast.
10.20: From the Hotel Australia—Cec. Morrison's Dance Band.
11.30: Close. National Anthem.

2BL

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 355 Metres).

OPENING SESSION—8.15 to 11 a.m.

- 8.15: G.P.O. chimes and announcements.
8.16: Music for every mood.
8.40: Meteorological data for the country.
8.45: Mails and shipping information.
8.50: Memory melodies.
9.0: This morning's story.
9.30: A musical interlude.
9.40: British Official Wireless press.
9.45: New music.
10.2: News from the "Labor Daily."
10.5: News from the "Daily Guardian."
10.10: Austradio musical reproduction.
10.40: The Australian Broadcasting Company's Women's Association, conducted by Miss Gwen Varley.
11.0: G.P.O. chimes. Close down.

MIDDAY SESSION—12 noon to 2.30 p.m.

- 12.0: G.P.O. chimes. Announcements.
12.2: Lunch music.
1.0: Afternoon news from the "Evening News."
1.5: Studio music.

1.15: Women's Interest Talk—Mrs. Mildred Muscio.

1.30: Austradio musical reproduction.
2.0: J. Knight Barnett at the Wurlitzer.
2.12: Studio music.

AFTERNOON ENTERTAINMENT—2.30 to 5.45 p.m.

- 2.30: Brunton Gibb—"Random Remarks."
2.45: F. H. Raward will speak.
3.0: New dance music.
3.12: Olga Le Grey, popular vocalist—
(a) "I Know a Lovely Garden" (D'Hardelot).
(b) "Was it a Dream" (Cowlow and Spicer).
(c) "Roses of Yesterday" (Berlin).
3.19: Modern music.
3.30: Madame Dobrinski, monologues—
(a) "Bullo, Lu Lu" (Scott-Gatty).
(b) "The Game of Life" (Andrews).
(c) "Peter" (Scott-Gatty).

3.37: Songs of to-day.

- 3.47: Rita Graham, violinist—
(a) "Thais" (Meditation) (Massenet).
(b) "Romance" (Wienlawski).
3.54: Memory melodies.
4.4: Olga Le Grey, popular vocalist—
(a) "Kiss Me Again" (Herbert).
(b) "Sweetheart of All My Dreams" (Lowe).
(c) "I'll Always be in Love with You" (Stept).

4.11: Dance numbers.
4.18: Madame Dobrinski, monologues—
(a) "Rosie's Relations" (Goddard).
(b) "It," or "The Land of the Might Have Been" (Harris).
(c) "Of Course" (Winter).

4.25: Rita Graham, violinist—
(a) "Paraphrase on Paderewski's Menuet" (Kreisler).
(b) "Canzone Amorosa" (Nevin).

4.32: Radio rhythm.
4.45: The Trade Hour—Demonstration music.

4.55: Weather information. Close down.

THE DINNER HOUR—6.15 to 7.55 p.m.

6.15: Dinner music.
6.45: The Younger Set Session—Girls' Radio Club, conducted by Miss Gwen Varley.
7.5: Studio music.
7.15: The Country Man's Market Session. Wool, wheat, stock, farm produce, fruit, and vegetable markets.

7.30: Austradio musical reproduction.

7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION—8.0 to 10.30.

On Thursday night 2BL offers listeners popular entertainment, and through 2FC, in accordance with the slight alteration which has taken place, the Capitol Overture and Presentation will be broadcast, followed by their Radio Play.

8.0: The Wireless Singers—
(a) "Softly Fall the Shades of Evening" (Hattori).

(b) "Ye Spotted Snake" (Wheeler).

(c) "May Day" (Muller).

8.10: Fred Bluff, comedian—

(a) "I Lift up my Finger and I say 'Sweet Tweet'" (Sarony).

"Misery Farm" (Wallace).

8.25: Al Hammett, saxophonist—

(a) "Saxophone Phantasv" (Rosebrock).

(b) "Valse Inspiration" (Haylett).

8.32: Jack Kinson, basso—

(a) "Qui S'Degno" (Mozart).

(b) "Great Isis, Great Osiris" (Mozart). (With Trio accompaniment.)

8.39: Carlton Fay, pianist—

(a) "Summer Noon" (Loughborough).

(b) "Valse Aerienne" (Leibertz).

(c) "Song of the Orient" (Chaminade).

8.49: Sibley and Sayles—"The Two Sad Sunbeams" in a "100 per cent. Talkie."

8.56: 2BL Instrumental Trio.

9.8: The Wireless Singers—

(a) "The Sea Bath its Pearls" (Pinsuth).

(b) "Sweet and Low" (Barnby).

9.18: Al Hammett, saxophonist—

(a) "Nelma" (Rosebrock).

(b) "Technicalities" (Doerr).

9.25: Weather information for the man on the land.

9.28: 2BL Instrumental Trio.

9.38: Jack Kinson, basso—

(a) "The Yeomen of England" (German).

(b) "The Randolero" (Stuart). (With Trio accompaniment.)

9.45: Sibley and Sayles, "The Two Sad Sunbeams" present a "90 per cent. Talkie—10 per cent. What Have You?"

9.52: Carlton Fay, pianist—

(a) "Song of Autumn" (Hall).

(b) "Grand Valse Canche" (Froelmann).

(c) "Inferno: Brillante" (Hall).

10.0: Vocal duet.

10.7: 2BL Instrumental Trio.

10.25: Late news from the "Evening News."

Late weather forecast.

10.30: National Anthem. Close.

2GB

Theosophical Broadcasting Station, 29 Rigg St., Sydney (Wavelength, 316 Metres).

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session by Mrs. W. J. Steizer. 11.30: Music.

11.45: Close down. 1.30: Speeches from the

Legacy Club. 2.0: Music. 2.5: Women's Radio Service, by Mrs. Dorothy Jordan. Miss O'Keefe, Motor Tours. Arts and Crafts. Miss Craig. 2.50: Movie Know All. 3.0: Labor Saving Demonstration from Nock and Kirby, Ltd. 4.0: Close down. 5.15: Children's session by Uncle George. 6.50: Movie Club Session. 7.0: Music. 7.45: Feature story. 8.0: Miss Heather Kinnaird, contralto. 8.7: Instrumental quintette. 8.15: Mr. William Green, tenor. 8.22: Symphony orchestra. 8.30: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 8.40: Violin solos. 8.50: Miss Heather Kinnaird, contralto. 9.0: Weather report. 9.3: Address. 9.15: Instrumental quintette. 9.25: Mr. William Green, tenor. 9.35: Symphony orchestra. 9.45: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 9.55: Miss Ada Brook, pianiste. 10.0: Instrumental music. 10.30: Close down.

2UW

Radio Broadcasting Ltd., Paling's Building, Ash St., Sydney (Wavelength, 267 Metres).

MIDDAY SESSION: 12.30 to 4.30, See Friday. EVENING SESSION: 5.30 to 10.30, See Friday.

2KY

Trades and Labor Council, Goulburn St., Sydney (Wavelength, 280 Metres).

MORNING SESSION.

See Friday. Children's session, 6.0 p.m.

EVENING SESSION.

7.0: Musical interlude. 7.5: Birthday calls. 7.15: Request numbers. 7.30: Hawaiian steel guitar selections. 7.45: Humorous interlude. 8.0: Orchestral selections. 8.10: Tenor solos, Mr. G. Mason. 8.18: Humorous interlude. 8.30: Frederick Holt presents a recital of Australian compositions and composers, with musical and vocal illustrations. 9.10: Request numbers. 9.40: Continue record recital. 10.0: Closing announcements.

2UE

Broadcasting Station 2UE, Everett Street, Maroubra Sydney (Wavelength, 293 Metres).

Same as Friday.

2GB

Theosophical Broadcasting Station, 29 Bligh St., Sydney (Wavelength, 316 Metres).

Wednesday, November 6.

10.0: Music. 10.10: Happiness talk by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Mrs. W. J. Stelzer. 11.15: Talk by Mrs. Jordan. 11.30: Music. 11.45: Close down. 2.0: Music. 2.5: Women's Radio Service, by Mrs. Dorothy Jordan. 2.50: Music. 3.0: Movie Know All. 3.15: Music. 3.30: Close down. 5.15: Children's session, by Uncle George. 6.50: M.G.M. Radio Movie Club session. 7.0: Music. 7.45: Feature story. 8.0: Miss Ethel Muller, contralto. 8.7: Symphony Orchestra. 8.15: Mr. Clement Hosking, baritone. 8.22: Instrumental Trio. 8.30: Mr. Jack Win and Mr. Heath Burdock, humor. 8.35: Miss Barbara Russell, soprano. 8.43: Violin solos. 8.50: Miss Ethel Muller, contralto. 9.0: Weather. 9.3: Address. 9.15: Symphony orchestra. 9.25: Mr. Clement Hosking, baritone. 9.35: Mr. Jack Win and Mr. Heath Burdock, humor. 9.40: Instrumental trio. 9.50: Miss Barbara Russell, soprano. 10.0: Instrumental music. 10.30: Close down.



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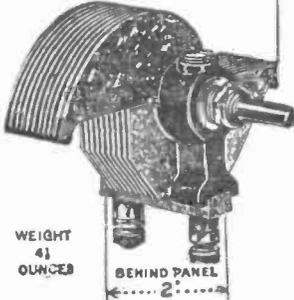
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Interstate Programmes, Thur., Nov. 7

3LO

Australian Broadcasting Co., 129A Russell St., Melbourne (Wavelength, 371 Metres).

7.0 to 8.15: See Friday.

MORNING SESSION

10.30 to 12.30: See Friday.

MIDDAY SESSION

12.55: Description of November Hurdle Race, 3 miles, V.R.C. races at Flemington, by Eric Welch.

1.0: Time signal; Stock Exchange. 1.30: Melody broadcast. 1.35: Description of Byron Moore Stakes, 8 furlongs, V.R.C. races at Flemington, by Eric Welch. 1.45: Melody broadcast.

EDUCATIONAL SESSION

2.0: Great Australians—W. B. Dalley, Mr. J. Howlett Ross. 2.15: Musical interlude. 2.20: Music explained and illustrated—Dr. E. Lloyd. 2.35: Description of Linnithgow Stakes, one mile, Flemington races, by Eric Welch. 2.45: Australian adventures—Captain Donald MacLennan. 3.0: Melbourne Observatory time signal.

THE RADIO MATINEE

3.0: St. Augustine's Brass Band (conductor, Percy Jones)—Selection, "Faust" (Gounod). 3.8: Violet Colahan, soprano—"Lost Love" (Brahe), "Question" (Brahe), "A Spring Triolet" (Brahe). 3.15: Estelle Sheehan, piano—"A Sea Song" (MacDowell), "In Nomini Domini" (MacDowell), "Soiree Japonaise" (Cyril Scott), "Gigue" (Ernest Pauer). 3.25: Description of Carnival Handicap, 1 1/4 miles, V.R.C. races at Flemington, by Eric Welch. 3.35: St. Augustine's Brass Band—Waltz, "Ariadne" (Trussell). 3.42: A Comedy Sketch, "Think About It," produced by Dulcie Hall, Mr. A. Nobody, Mrs. Anybody, Dulcie Hall; Miss Nobody-in-Particular, Leonie Levy. 3.54: St. Augustine's Brass Band—Selection, "Scottish Melodies" (Newton). 4.5: Violet Colahan, soprano—"Robin Adair," "Comin' Thro' the Rye" (4:12); St. Augustine's Brass Band—Cornet solo, "The Trumpeter" (Dix). 4.15: Description of Oaks Stakes, 1 1/2 miles, V.R.C. races at Flemington, by Eric Welch. 4.25: St. Augustine's Brass Band—Intermezzo, "Laughing Maniacs" (Collins) march, "The Washington Post" (Souza). 4.30: Close down.

FROM FLEMINGTON

4.55: Description of Veteran Stakes, 1 1/4 miles, V.R.C. races at Flemington, by Eric Welch. 5.5: Close down.

THE CHILDREN'S CORNER

5.45: "Bobbie Bluegum" and "Clever Clarice" have a new budget of songs and catches. Birthday greetings from "Bobbie Bluegum."

EVENING SESSION

6.35: Musical interlude. 6.45: Let's talk about our animals—English Terriers. Mr. Fritz Hart. 6.55: Melody broadcast. 7.0: Melbourne Observatory time signal. 7.1: Countryman's Session. 7.25: For the Man on the Land—Colle in Horses. Mr. R. J. De C. Talbot. 7.45: The latest books—Mr. E. McMichael.

NIGHT SESSION

8.0: National Broadcasting Orchestra—Overture, "Penguin's Cave" (Mendelssohn). 8.8: Allan Mitchell, tenor—"O Mistress Mine" (Quilter), "Blow, Blow Thou Winter Wind" (Quilter). 8.15: You will hear the outstanding personality of the week. 8.30: Paul Jeacle and his Band—Dance music. 8.40: Melba Stocks, soprano—"The Carnival" (Molloy). 8.43: Paul Jeacle and his Band—Dance music. 8.53: Allan Adcock, entertainer—Songs at the piano. 8.56: Paul Jeacle and his Band—Dance music. 9.8: Nina Seax, contralto—"June's Golden Song" (Dale). 9.9: Paul Jeacle and his Band—Dance music. 9.19: Thos. George, bass—"Brian of Glennaar" (Gramham). 9.22: Paul Jeacle and his Band—Dance music. 9.32: Melba Stocks, soprano—"Love's Garden of Roses" (Haydn Wood). 9.35: Paul Jeacle and his Band—Dance music. 9.45: Allan Adcock will entertain. 9.48: Paul Jeacle and his Band—Dance music. 9.58: Nina Seax, contralto—"Sunday" (Moult Carew). 10.1: Paul Jeacle and his Band—Dance music. 10.10: Thos. George, bass—"Muleter of Malaga" (Protere). 10.13: Paul Jeacle and his Band—Dance music. 10.23: Melba Stocks, soprano—"In the Garden of Tomorrow" (Reppen). 10.25: Paul Jeacle and his Band—Dance music. 10.35: British Official wireless news; items of interest; meteorological information. 10.45: Paul Jeacle and his Band—Dance music. 10.52: Allan Adcock, entertainer—Tuneful ditties. 10.58: Paul Jeacle and his Band—Latest and brightest jazz numbers. 11.30: God Save the King.

3AR

Australian Broadcasting Co., 129A Russell St., Melbourne (Wavelength, 483 Metres).

8.15 to 11.0: See Friday.

MORNING SESSION

12.0 to 2.0: See Friday.

MIDDAY SESSION

2.1: Vesella's Italian Band. 2.4: Theo. Tharlie, tenor. 2.7: Herman's Concert Trio. 2.10: Gutsinn, Danise, baritone. 2.13: A. and P. Gypsies. 2.16: P. and J. McCravy—comedy. 2.19: Vesella's Italian Band. 2.23: The Yacht Club Boys quartette. 2.26: Herman's Concert Trio. 2.29: Theo. Tharlie, tenor. 2.32: Vincent Lopez, piano. 2.42: Giuseppe Danise, baritone. 2.45: A. and P. Gypsies. 2.48: P. and J. McCravy. 2.51: Vesella's Italian Band. 2.55: Ichna Jones's Orchestra. 3.0: Request numbers. 3.20: A bridge afternoon—Miss Hattie Knight. 3.35: Musical

interlude. 3.40: Food and cookery. 3.55: Musical interlude. 4.0: Your Health and Appearance—The Importance of Relaxation and Rest—Miss Evelyn N. Ellis. 4.15: Musical reproduction. 4.45: Evenson, transmitted from St. Paul's Cathedral. 5.30: Weather. 5.45: Close down.

EVENING SESSION

6.15 to 8.0: See Friday.

NIGHT SESSION

8.1: Harmonists Male Quartette—"Lullaby" (Brahm), "My Bonnie Lass" (Morley), "When Evening" (Wright) (Hatten). 8.7: Victor Stephensen, piano recital—"To the Spring" (Grieg), "Lullaby in A Flat" (Brahm), "Spinning Song" (Mendelssohn), "To a Water Lily" (MacDowell), "Shadow Dance" (MacDowell). 8.17: Beryl Hallinbourg, soprano—"The Blackbird's Song" (Cyril Scott), "Spring" (Henschel). 8.24: Edouard Lambert, violin—Variations (Tartini). 8.30: Harmonists Male Quartette—"Little Tommy Went a-fishing, 'Lulu" (Rubinstein), "Morris Dance" (Noble). 8.37: National Broadcasting Orchestra—"Trepak" (Rubinstein), "Morris Dance" (Noble). 8.45: Comedy in one act—"The Touch of Truth" (E. J. Walbrook)—characters, Richard Cumberland, an actor (Thomas Leslie); Jimmy Bray, a journalist (Gerald Heathcote). 9.0: Cairns Memorial Church Choir (organist Miss F. Thurman, conductor, Mr. R. J. Oehr)—selections from "Judas Maccabaeus" (Handel)—chorus, "O Father whose Almighty Power the Heavens and Earth and Sea Adore"; recit. air, "I feel the Delty within" (Arm. arm, ye brave, Mr. Frank R. Thomas); chorus, "See! the Conquering Hero Comes"; ever smiling liberty"; Miss Louise Thornton; chorus, "Lead on, Judah disdains the galling load of hostile chains"; air, "Sound an Alarm"; Mr. A. J. Etheridge; chorus, "See! the Conquering Hero Comes"; duet, "O Lovely Peace"; Miss Louise Thornton and Mrs. Abery; chorus, "Hallelujah Amen."

POPULAR MUSIC

9.30: National Broadcasting Orchestra—"In a Monastery Garden" (Kettlby) (Dahl). 9.38: Alan Mitchell, tenor—"I Hear a Thrush at Eve" (Cadmam), "The Pipes of Gordon's Men" (Hammond). 9.45: Victor Stephensen, piano—"March Militaire" (Schubert). 9.50: Beryl Hallinbourg, soprano—"Deh Vieni non Tardar" (O Come, do not Delay), from the "Marriage of Figaro" (Mozart); "Non so piu cosa son" (I forget what I am), from the "Marriage of Figaro" (Mozart). 9.57: National Broadcasting Orchestra—"An Ethiopian Rhapsody" (Hosmer). 10.7: Harmonists Male Quartette—"O! Man River," "Honey, I Want Yer Now." 10.14: Weather. 10.24: National Broadcasting Orchestra—selections from "Queen of Sheba" (Green High). 10.30: God Save the King.

5CL

Central Broadcasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres).

MORNING SESSION

11.15 to 2.0: See Friday.

AFTERNOON SESSION

3.0 to 4.30: Friday. During the afternoon running description of the races at Flemington will be given.

EVENING SESSION

6.0 to 7.0: See Friday. 7.1: Sporting, including Melbourne cricket, Australian Country, Stock Exchange; market reports. 7.20: Dr. O. H. Wright. 7.35: From the Theatre Royal, dressing-room talk by Don Nichol, of "The Desert Song." 7.40: Mr. S. J. Low, "Motor Cycling Activities." 7.45: Mr. A. M. Whittenbury, hints to poultry breeders.

NIGHT SESSION

8.0: Programme review. 8.10: Mrs. A. C. Williams' Mandolin Band—"Lulu Band March" (Lulu Little Cottage), "Gaiety." 8.20: Gordon Hele, baritone—"Blow, Blow, Thou Winter Wind" (Sargeant), "Sincerity" (Clarke). 8.27: Hilda Reimann, violinist—"Legende" (Wienlawski). 8.34: Mrs. Leslie Matthews, contralto—"Keep on Hopin'" (Stanton), "The False Prophet" (Scott). 8.42: Mrs. A. C. Williams' Mandolin Band—"Pipers of Valer" (soloist, Mrs. A. C. Williams; "Song of the Lark"; "Observatory March." 8.52: Miss Geraldine Cash, soprano—"Pipes of Pan" (Lionel Monckton), "Si mes vres avaient des Hilles" (Hahn). 9.0: Meteorological, including Semaphore lides. 9.2: Overseas grain report. 9.3: Announcements; Progress report of Hubert Opperman's attempt on cycling record, Sydney to Melbourne. 9.5: Mrs. A. C. Williams' Mandolin Band—"Carolina Moon," "Until To-morrow," "Alexandra Waltz." 9.15: Gordon Hele, baritone—"The Cobbler's Song," "A Sprig of Boronia" (Hill). 9.22: Jean Finlay, pianist—"Ballade in G Minor" (Chopin). 9.29: Mrs. Leslie Matthews, contralto—"Caro Mio Ben" (Goardani), "The Lover, the Wind" (Guylleluna). 9.36: Hilda Reimann, violinist—"Souvenir" (Drala), "Waltz" (Brahm). 9.45: Geraldine Cash, baritone—"Sing, Joyous Bird," "Spring Sorrow" (John Ireland). 10.0: Mrs. A. C. Williams' Mandolin Band—"Cuban Independence March," "Carita Perfect Day"; soloist, Mrs. A. C. Williams—"Carita Perfect Day." 10.10: Jean Finlay, pianist—"Military March" (Schubert). 10.15: News; weather; sporting. 10.30: Recordings. 11.0: Close.

(CONTINUED ON PAGE 59).

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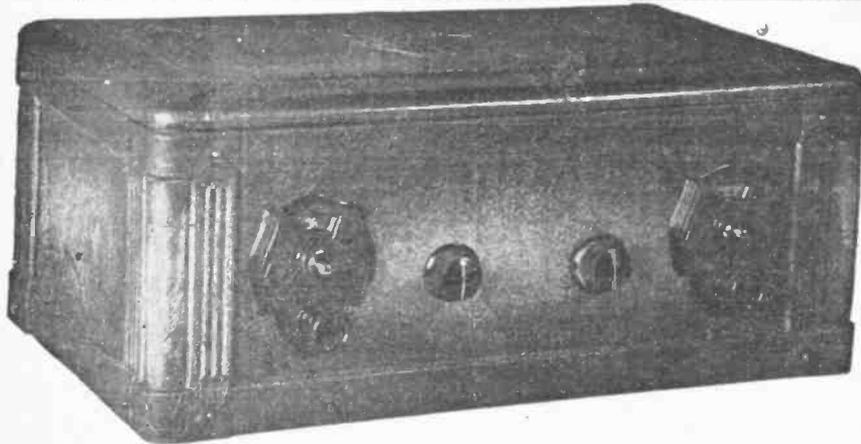
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Reinartz Tuners, plug-in type, for UX sockets, d.s.c. wire, ea.	5 0	"Marco 4" type coil kits, enamelled wire, coloured celluloid formers of diameter 3in. or 2½in., per kit	8 0
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		Ditto, 3in., per kit	10 6
		Ditto, 3in. space wound coils, per kit	12 6

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The Radio Information Service

Why Accumulators Sometimes Lose Life



F.A.J. (Wollongong).—"I have a six-volt radio battery, and I find that after two years' good use it won't hold its charge. I think it could do with a washing out. Please advise procedure."

Answer: An accumulator generally has an efficient life of about eighteen months. After that the wet battery will not hold its charge for several reasons. In the first place the plates are liable to become bent through constant heating and charging. The paste falls away from the plates, and lies at the bottom of the cell where it shorts what small charge the accumulator might hold. The plates themselves become eaten away through the action of the acid. It will not help much flushing the battery out and replacing the acid, because the plates are probably useless now. To repair the battery would cost almost as much as a new one, and the old battery would not be as efficient as a new one. You should, of course, make sure that the battery had ended its useful life by referring it to some reliable battery service station. Test the specific gravity of the electrolyte with a hydrometer. There is no need to change the acid if its specific gravity reads as recommended by the makers of the battery. When adding acid to the battery, or when mixing fresh acid, use distilled water only, and add the acid to the water, not water to the acid, otherwise an explosion is likely to occur. The battery should not be washed out with anything but distilled water, and it should not be left in a dry state, as the plates, when drying, will buckle and the paste will fall away at the slightest jar. The best plan is to take the battery to the makers in its present state. They will be able to advise you if the battery is worth further treatment.

G.J. (Geelong). Impossible to wind such a transformer yourself unless you have a machine. In any case, it would be necessary satisfactorily to know the ratio output transformer required, together with information on the type set, speaker, power supply, etc.

W.A.P. (Brisbane). Do not change the transformers round. Leave them as they are.

G.C.W.T. (South Australia).—Fifteen turns inductance coupled. Wind coils on a three-inch diameter former. Primary inductance coupled 15 turns, 24-gauge D.C.C. wire. Secondary 75 turns following W-inch space, tapped at 47th turn. If you are using the correct tuning condenser (.0005 mfd.) this should cover approximately 200-600 metres.

"PRONTO" (Gulargambone).—Which Browning Drake circuit do you want? Several circuits have been published, including the 1928 Browning Drake, the Browning Drake A.C. Two, the screen grid Browning Drake, etc.

K.F.B. (Burwood).—Circuit O.K., but you won't get much out of that band. Build coils on valve bases, as discussed in short-wave article last week.

E.M. (Waterfall).—Circuit is quite O.K., but see reply to K.F.B. (Burwood). We do not reply to queries by post.

"CONDENSER" (no address).—"How can I go about finding how to make condensers to any specified capacity? I wish to know a simple method."
Answer: As the capacity of the condenser will depend upon the area of the plates, number of plates, and spacing, the best plan is to set out the formula as follows:—AK (n-1) over 4pi9d (10) to the fifth power, then place the required capacity in the answer. For instance, in your letter you say you wish to know how to make a condenser of 1 mfd. Do it this way—

$$AK (n-1) \div 4\pi 9d (10) \text{ to the fifth power.}$$

equals 1 mfd. Substitute figures in place of the symbols until the lower row (or top row) will cancel exactly into the other, once. When you have got the correct figures you can work out the details, since A equals

area of one plate in square centimeters. K equals the specific inductive capacity of the dielectric, n minus one equals number of plates minus one, pi equals three and one-seventh, d equals distance between plates in centimeters, ten to the fifth power equals 100,000. One inch equals 2.54 centimeters. If you required a 2 mfd. condenser, the lower row of figures should cancel into the upper row twice. Always keep the figures as low as possible (particularly the upper row), as otherwise the dimensions of the condenser are likely to be very large. Though this method is rather rough and ready it will give you a correct answer, and is the simplest possible way of getting around an intricate subject.

S.O.S. (Barraha).—"Where could I obtain a copy of the examination papers of questions set for amateur transmitting licenses?"

Answer: From the Radio Inspector, Mr. Crawford, 219 Castlereagh Street, Sydney.

(2) "Is the examination hard, or would the average person be able to pass?"

Answer: The examination is not particularly hard, though the average person would not pass, a study of fundamental principles, not only of electricity, but of radio receivers and transmitters in general, is necessary. The A.R.R.L. Handbook treats all subjects in detail, and you would be advised to study up "Proving Radio" and "Amateur Proficiency" articles in WIRELESS WEEKLY. The latter series of articles are being written especially for the A.O.P.C. aspirant. Provided you can absorb a certain amount of interesting yet sometimes complicated formulas you need not be frightened. It is necessary to know how to calculate the capacity of a condenser, how to calculate the number of plates required for a certain capacity condenser when other details are given, ohm's law, and know how to apply it to practical calculations, construction of rectifiers, use, etc., of wet batteries, memorise the fundamental radio transmitting circuits and a number of receiving circuits, method of keeping a sharp wave, and precautions that would be taken, etc. In addition you will need to know operating practice, the meaning of various abbreviated signals, including the Q signals, method of sending and accepting radio-telegram and so on.

(3) "What percentage of marks is required for a pass?"

Answer: 75 per cent.

(4) "Can I step up 230 volts d.c. to say 800 volts d.c. for the purpose of power amplifier for a pick-up?"

Answer: D.C. cannot be stepped up or down satisfactorily in a simple manner. A rotary converter would serve, or a d.c. motor driving an alternator of suitable voltage and frequency for the power transformer.

A.R.J. (Macleay River).—Have no record of any such calls as VK4KO or VK4NA. They may be new names. Write to the Radio Institute of Australia, Queensland Division, Queen Street, Brisbane. VK2LG is the call of W. Wallace, 119 Faithfull Street, Goulburn. VK2WJ is W. P. Poell, 3 Chapman Street, Summer Hill. VK2RB is R. E. Belton, 92 Lawrence Street, Lithgow. Thanks for offer of copies. See below.

GENERAL.—Mr. A. R. Jones, Gladstone, Macleay River, N.S.W., writes:—"I have several back numbers of WIRELESS WEEKLY. I shall be glad to forward these to any reader requiring them."

M.R. (Leichhardt).—May be faulty r.f. valve or wrong valve in that stage. Presume you are using wrong dial. Blue prints obtainable from Messrs. Colville Moore, Levenson's, Price's Radio, etc. Your request published below.

GENERAL.—Can any reader please supply Mr. M. Rich, 66 Marion Street, Leichhardt, Sydney, N.S.W., with a copy of WIRELESS WEEKLY dated 10.8.28. He is willing to pay cost and postage.

W.D.S. (Croydon).—Economic Radio can supply Price, 12/, extra.

(2) "If a telephone was connected across the primary of the first audio transformer, would the voice spoken into the telephone be reproduced in the speaker?"

Answer: Yes, but it would be advisable to use a microphone transformer and a battery. The resistance of the ordinary telephone is very low. Old discarded post office telephone microphones that are still in good order are obtainable from a number of second-hand shops. One shop near the railway, in Elizabeth Street, sells them at 1/ each, and the transformers are the same price. An ordinary receiving earphone, as used on crystal sets, can be used as a microphone. The Morse keys can be obtained from the same place. The price of the A.R.R.L. Handbook is 5/, and the Admiralty Handbook costs 5/6. Both books are obtainable from Messrs. Angus and Robertson, Castlereagh Street, Sydney.

M.H. (Wagga).—Please sign in right place. Was about to head your query "No Name." A Mercury arc rectifier would be desirable to handle this large power. Mercury arcs are awkward pieces of apparatus to manage, but are very efficient. You will probably be able to obtain one from the Australian General Electric Co. The output depends on the number of turns in the secondary of the transformer and the gauge of wire.

(2) "Will you please publish a table showing the current carrying capacity of the standard wire gauges?"

Answer: List is herewith appended:—44 gauge .0025 amps; 40 gauge .006; 38 .010; 36 .017; 34 .026; 32 .042; 30 .067; 28 .11; 26 .17; 24 .27; 22 .43; 20 .68; 18 .1.1; 16 .1.7; 14 .2.7; 12 .4.4. These ratings are for copper wire at 1500 circular mils. per ampere, which allows for continuous use without overheating. For intermittent use the rating could be at 1000 circular mils. per amp, and for the same gauges of wire, in the order given above, the following current could be carried:—.004, .009, .016, .025, .039, .063, .1, .16, .25, .41, .54, 1 amp, 1.6, 2.6, 4.1, 6.5 amperes

M.K. (Belmore).—A screen grid valve added to the Go-Getter will make it an "All Empire." Circuit of which appeared some time back. Receiver should be shielded. We do not reply to queries by post.

F.D. (Randwick). "I have a three-valve set, and I cannot cut out 2BL. I can get any other station when 2BL is closed down."

Answer: 2BL's aerial is very close to you, so that it will probably be necessary for you to use a wavetrapp. You did not forward your circuit, so that it is impossible to help you further, except by giving you details of a simple wavetrapp. If readers would only co-operate in matters like these it would be to our mutual benefit. If you care to send circuit (and don't forget to repeat query) we may be able to help you further. For the wavetrapp, wind 50 turns 24-gauge wire on a 3-inch diameter former. Take the first turn to the fixed plates of a .0005 mfd. variable condenser, and the last turn to the fixed plates. Remove the lead-in from the set, and connect it to the first turn of the wavetrapp coil. Then take the last turn of this coil to the aerial terminal of the set. Adjust the wavetrapp so that 2BL is tuned out, then, without touching wavetrapp again, tune the receiver for other stations. When adjusting wavetrapp, the receiver should be tuned to 2BL, and the wavetrapp adjusted till 2BL is heard at greatest volume.

A.R.T. (Anbura). "I have a five-valve radio set. The aerial is 100 feet long and 50 feet high. Should I be able to get Inter-State stations? Would it be necessary to make it into a six-valve receiver?"

Answer: You should be able to receive Inter-State stations without adding the other valve. Try shortening the aerial. Perhaps valves or batteries are faulty, or if the receiver is a Neutrodyne perhaps it is not properly neutralised.

J.J.G. (Morisset). Do not change your valves unless they are faulty. They are a good selection.

QUERY COUPON

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 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 in which they are received.

The Radio Information Service, WIRELESS WEEKLY.

Please answer the accompanying queries, at your earliest convenience. I enclose this coupon in order to indicate that I am a bona-fide reader. Box 3085PP, G.P.O., Sydney.

A.E.B. (Pymont): The whole trouble with this type set is in balancing up. It will be necessary to adjust the turns on the coils until they match. The writer has built a good number of these receivers, and results are very poor until these adjustments are made. Do not remove turns from detector coil. Your aim should be to match other tuned circuits with the detector. Add turns to the R.F. coil. The number of turns will vary with the numerous plug-in coils to cover the various bands, but you will find between one and six turns will be all that is required. The best plan is to add about 10 turns to the large coils and reduce by half a turn at a time till dial readings match. Each coil must be treated in this manner.

W.R. (New Zealand) writes: "I have to thank you for sending me, per medium of your magazine, to obtain particulars of the Midget All-wave Screen Grid Four, as requested a few weeks ago. I received three copies of the paper giving the desired information, two from New South Wales, and one from Queensland. I am writing to thank the donors. I regret that through indisposition I have been unable to write sooner. I wish to thank you, and your readers, for your service in this matter."

Answer: Glad to assist. Hope you have recovered from your illness.

J.B.S. (?????): Please write plainly. If the receiver will not work at all, it is very hard to say what might be wrong, since there are hundreds of things that might be causing the trouble. However, you will probably find that some lead has been connected to the screen when this should not have been. Otherwise, all we can advise under the circumstances is that you may have an open circuit, a short, or faulty valves, batteries, or transformers. Place a voltmeter across filament terminals of each valve socket, and see if reading is correct. Place speaker leads across them, and see if you hear a loud click. Test valve filaments for continuity by means of a "C" battery and a pair of headphones. Clean valve legs, and bend up socket prongs. Test batteries. See that when connecting up the screen grid valves you do not connect the plate terminal of your valve sockets to the plate, since, with the S.G. valve this terminal is used for the S.G. connection, and the plate terminal is at the top of the valve.

"Colis" (Muttaborra): "I have built a Marco Four, with very good results, getting daylight reception on all stations with earphones, up to about 3 p.m., after which I could use the loud speaker. But R.F. tuning is very broad. I get ZBL on 98, while the tuning condenser shows 30 degrees. 3AR comes in on 5. If I took about 10 turns off the R.F. coil would it make any difference to the volume? I have about 55 feet of aerial, and I am not using a fixed condenser in the aerial."

Answer: No; do not remove turns from the R.F. coil in order to make the dial reading lower. By reducing the number of turns on the R.F. coil you reduce the inductance of the circuit, and in order to strike resonance with the detector circuit it will be necessary to have an even greater reading on the dial, since the condenser must make up for the deficiency. Add about 15 turns to the R.F. coil, reducing by half-turns until the dials match. You should then be able to get even better results.

(2) "I built a Go-getter, detector part only, and used the amples of my receiver. Though the rotor plates are etched, get hand capacity. I have a choke in the Marco. Do I need one for the adapter, too?"

Answer: Try a .002 mfd. fixed condenser across the telephones. If the dials do not draw any hand capacity, it may be necessary to place a shield at the back of the panel of the adapter. It is not necessary to use an R.F. choke in the adapter if you are using one in series with the plate lead of the first audio transformer of the Marco receiver.

J.H.Y. (Brisbane): Your query has been answered previously. Though you did not repeat your query, I understand that you had difficulty in forming the rectifier. This may have been through using impure aluminium or poor borax. Obtain your aluminium from a chemist, and not from a hardware shop. If the aluminium is greasy, clean with lye. Use 20 Mule Team borax.

H.C.W. (Wanpan Vale): Impossible to tell you this, since makes vary, according to the size of the plates. Some condensers of the same capacity have twice the number of plates as those of a different make but of equal capacity. A .0003 variable condenser double spaced would have a maximum capacity of .00015 mfd., if all the plates were used, and it would, therefore, be quite suitable for a short-wave receiver. If the plates were discarded capacity would be .000075. This would still be O.K. if suitable coils were made.

H.A.T. (Mumbill): "I have built a Marco Four, and I get good reception in the evening, but in the daytime I can only get a whisper. I would be glad if you would advise me how to improve the reception during the daytime. The aerial is 23 feet high and 110 feet long."

Answer: Daylight reception is always inferior to night reception. You might try adding the screen grid R.F. stages, as published in an article entitled, "Adding a Stage of Screen Grid R.F. Amplification to the Marco."

A.H. (Kelso): "Could a short-wave adapter be used on the Renown Three?"

Answer: Yes.

(2) "Can I use a .00016 mfd. condenser instead of .00015, as shown in enclosed circuit?"

Answer: The .00016 mfd. condenser will be quite O.K.

(3) "Where can I get details of coils?"

Answer: See last week's WIRELESS WEEKLY, special short-wave number.

(4) "Where does the other end of the choke connect to on the socket of the adapter?"

Answer: To the plate connection. There is no need to use this choke if one is already used in the plate lead of the amplifier in the receiver.

M.A. (Lithgow): There were six pages of useless matter in your letter. Your query amounts to: "What could cause a buzzing sound in my receiver?"

Answer: There may be an open grid circuit in the detector stage. Try change of grid leak and condenser. See that valve is making good contact in its socket. If you are using a grid bias choke see that connections are tight. Test transformer. Try removing aerial, and if buzzing is eliminated or decreased, trouble will almost certainly be due to some local interference. Cut off any electrical appliances, such as coffee heaters, etc. that are in use. Resistors usually cause interference, or any machine in which an electric motor is used. Please write non-de-plume below name.

J.O. (Randwick): The Cossor Melody Maker is an efficient battery-operated receiver, and will suit your requirements admirably.

"DEEJAY" (South Australia): Sorry cannot locate the station. Think K7FB is a Manila station, though have no confirmation of this. WCYK is an American short-wave station. We have not his GR. VK3PR is not mentioned on the latest lists, but he is probably a new Victorian ham. You may be able to trace him by writing to the Wireless Institute of Australia (Victorian Division), GARDENVALE, N.O. VK9NO is not on our staff now. His address is 102 Nelson Bay Road, Brisbane.

G.H. (Forbes): "Please give me particulars of dimensions and material required for making an Exponential horn."

Answer: See article by Mr. Calvin Walters in last week's issue.

(2) "Is there any advantage or disadvantage in making it spiral shaped?"

Answer: The chief disadvantage is the increased difficulty in construction. It has the advantage of requiring less space. Your other questions are answered in the article.

S.E.B.K. (Waverley): "I have a three-valve Reinartz, which I desire to reconstruct into a four or five valve. Please advise."

Answer: You could either make it into a Marco Four by adding a stage of R.F., or into a Marco Four by adding a stage of R.F., or into a Marco Four by adding a stage of R.F., or into a Marco Four by adding a stage of R.F.

GENERAL: Can any reader please supply Mr. S. E. B. King, 37 Arden Street, Waverley, with a copy of WIRELESS WEEKLY containing the Marco Four, and also a copy containing the Screen Grid Marco Five.

E.W.G. (Dorrie): "I desire to change my valves (500 volt type), and wish to use the following valves: Two A635, two A615, and one B605. Will it be necessary to alter the wiring of my receiver for these valves?"

Answer: No; but additional grid bias will be necessary for the power valve.

"MARCO FOUR" (North Sydney): "Kindly inform me through the columns of WIRELESS WEEKLY what would be the quarterly bill for current consumption at the council's rates using a "B" eliminator on a four-valve Marco Four set, including power valve from the light socket, say eight hours daily."

Answer: Assuming that the eliminator gave 260 volts at 50 mls., this would be V x A, equals 80 over 1000 x 200, equals 16 watts. Allowing say an additional 2 1/2 watts, this would make it 12 1/2 watts. The B.O.T. unit is 1000 watt-hours. If the price per unit is 5d, then the cost per hour, assuming that the draw of the set is 50 mls. maximum (this allowing a large margin for overload) would be: As 1000 is to 5d, so would 12 1/2 be to X pence. This equals one-sixteenth of a penny per hour. For eight hours' use, the cost would be one-sixteenth of a penny multiplied by 8, equals 1/2 penny. As there are 365 days in the year, one quarter would represent 365 over 4, equals 92 days (near enough for our purpose). Then the quarter's bill would amount to 1/2 multiplied by 92, equals 46d, equals approximately 5/. Your receiver may only draw, say, 20 mls., but 50 mls. have been allowed.

E.M. (Newcastle): "There is a peculiar noise coming into our speaker. It is just like someone grinding his teeth. Sometimes it gets so loud that it is cruel to listen to, and it has to be shut down. When we twist the dial down to 0 the sound gets louder. Do you think it advisable to change the speaker?"

Answer: The fault is not in the speaker, but is probably electrical interference or open grid circuit in the receiver itself.

J.W.McC (New Zealand): Your letter has been passed on to Mr. Martin.

W.F.B. (Lane Cove): It is unreasonable to suggest that the Marco Four be published so soon after the many recent adaptations. In any case, instructions have already been prepared for converting this receiver into one using a single screen grid stage very many times. You will find remarks almost every week to the effect that the Screen Grid Marco Five has just been published, and all you have to do is to leave out the second R.F. stage.

E.P. (Queensland): The resistors with variable centretap for blissing screen grid valves can be obtained from Messrs. Colville Moore, Ltd., Rowe Street, Sydney.

R.B.T. (Coogee): Please write plainly. With a screwdriver open the ends of the legs of the coils. You will then find they make a good fit. This type of coil is quite O.K., but the contact pins are very soft, and often require opening. Clean plugs and sockets also.

A New Pick-up

NO enthusiasts are quite as enthusiastic as the "pick-up" addicts. The game of comparing pick-ups and testing one after the other has proved to be an even more absorbing and illuminating pastime than that of comparing valves or speakers. All gramophone pick-up enthusiasts have been seeking the ideal pick-up, and most of them imagine that they have attained their objective. They are all willing, however, to try theirs against some other.

The newest welcome addition to the line of pick-ups available is the "Toman"—a unit manufactured by E. Toman and Co., of Chicago, for whom the representatives are Messrs. Mick Simmons.

We have been supplied with two models by this firm for test purposes. One is the standard size for home use, and the other is the longer tone-arm type designed for playing the 16-inch records used in "talkie"



installations. Both of them are beautifully built and well finished.

The base of the tone-arm, in which the volume control resistor is housed, is of cast aluminium. A splendidly solid swivel arrangement is provided, the tone-arm movement being very free and smooth. The tone-arm itself consists of two octagonal brass rods terminating at the joint which permits vertical movement of the pick-up itself. The mechanical features throughout are engineered with particular care.

We have been able to give the pick-up a thorough test, in conjunction with a high-grade amplifier and a fine speaker. Not having the equipment necessary to take an actual frequency characteristic curve, we hesitate to say anything definite about its performance in relation to the average pick-up of to-day. Nevertheless, we were impressed by its unusual high frequency response and generally robust "tone." We would judge from its performance that it is of the "2 volt" or high output type, capable of driving a speaker at high volume with only two stages of amplification.

Thursday, November 7

(Continued from page 52.)

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Metres).

For day session schedules see Friday.

NIGHT SESSION.

8.0: The grand concert organised in aid of the Limbless Soldiers' Association will be relayed from the Exhibition Hall.

10.0: From the studio, movements of the Travelling Dental Clinic; news; weather. Close down.

6WF

Australian Broadcasting Company, Ltd., Wellington Street, Perth. (Wavelength, 435 Metres).

For day sessions see Friday.

EVENING SESSION.—8.0: Weather. 8.2: Overture. 8.7: Beryl Scott, entertainer at the piano. 8.14 Versatile Two, entertainers. 8.24: Beryl Scott, entertainer at the piano. 8.31: Special classical music. 9.1: Weather. 9.2: Classical music. 10.1: Weather. 10.7: Dance Band. 10.59: Weather. 11.0: Close.



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