Detailed Broadcasting Programmes a Week in Advance



OPERATING THE 1930 SUPER-HETERODYNE

Also: THE SIMPLEST EXPLANATION OF A RADIO RECEIVER On September 2nd, the Australian Prime Minister at Sydney, conversed with the Secretary of State for Dominion Affairs in London, by Wireless Telephone.

The plant and equipment used here for this epoch-making achievement was designed and manufactured in Australia by Australian engineers and artisans at A.W.A. Radio-Electric Works.

We have been informed by competent authorities in other countries that the Australian Wireless Telephone Tests are equal to the best Trans-Atlantic Service. Amalgamated RELESS Wireless

AUSTRALIA'S NATIONAL WIRELESS ORGANISATION

(Australasia) Itd.

WIRELESS WEEKLY

-of the family circle!

<u>en</u>

Rever in the joy of entertainment, over the air, after a day's strenuous business. Joy that is not confined to an individual, but which the whole family can enjoy!

£27/5 The Stromberg-Carlson Treasure Chest All Electric-3 Loud Speaker Extra -Brings you Manifold Joy!

Just sit in your easy chair—listen in to the latest Jazz, Song and Dance numbers, Classic Music, Election Speeches, News and everything worth while that you should know. Just plug in—no batteries to worry about—and dial your favourite items.

If you want to hear the best in radio, arrange for a demonstration of a Stromberg-Carlson All Electric Six. Obtainable from all Authorised Stromberg-Carlson Dealers who will gladly arrange a demonstration without obligation.

MADE IN AUSTRALIA



WIRELESS WEEKLY

Friday, 4th October, 1929

AA. 4/3/29





You can move it here

No aerial ... no wires ... no batteries. So mobile and compact

... completely self-contained. Yes, certainly you can move it here





there's a lamp or power socket, you can place it anywhere !

The New Tone and new volume-control of the Astor-Aladdin provide a new conception of radio enjoyment. New Triplex Junction ensures razor-edge selectivity. New panel "Phono" control for phonograph radio reproduction. Current consumption less than that of extra light. Handsome console

model with antique figured The NEW posit from £3 : 15.

right against your favourite chair.

Now just plug in . . . that's all. The solo-dial is arm-chair high so lie relaxed in your favourite chair and turn to the programmes as fancy dictates . . . programmes from everywhere!

steel cabinet by Butler, in four optional colours of Jade Green, Brown, Peacock Blue and Copper. 12 months' guarantee. Price 35 gns., absolutely complete. Nothing extra to buy. Terms are easier and lower than for any ordinary radio set on the market. Weekly payments from 9/6 to 14/3 weekly. De-

for Every Purse.



With the Magical New Philips' Wonder Valves

See and Hear it

At any Astor Dealer or

the N.S.W. Distributors

AMPLION AUST. LTD., Bradbury House, 53 York Street, Sydney

Friday, 4th October, 1929

Value in Selected RADIO COMPONENTS !!!

Blue Spot Pick-up

One of the finest instruments in the pick-up line, a tone control is embodied in the tone-arm column.

USUALLY 55/-SPECIAL 47/6

Hydra 2 M.F. Condensers

This condenser can be used in any "B" Eliminator circuit, and will take voltages up to 500.

USUALLY 4/6 SPECIAL 3/6

Hecworth 4 M.F. Condensers

These are Heavy Duty Condensers and rate at 1000 volt testing, every one tested before sale and Guaranteed.

> USUALLY 8/6 SPECIAL 6/6

Amplion Speaker Cones

A special moulded buckram cone with sewn felt edges, bronze or silver duco sprayed. Used with the Six-Sixty Cone Unit equals any £5 speaker.

> USUALLY 9/6 SPECIAL 5/9

Country Clients Kindly Add Postage To These Specials.

Six-Sixty Cone Units

This little 2000 ohm Unit of which we have sold over 400 is equal to any unit on the market. Your money cheerfully refunded if not satisfied.

ONLY 12/6

Midget Diora Vernier Dials

This is a first quality bakelite job suitable for receivers requiring small panels, they are $2\frac{1}{2}$ inches in diameter and equally as robust as the larger types.

ONLY 3/6

Tefag Quality Phones

Each earpiece has a separate adjustable diaphragm enabling the utmost in sensitiveness to be achieved. A comfortable leather covered steel band for the head.

ONLY 12/6 Pr.

Monarch Transformers

These have been selling at 35/- and are well worth this. It is a remarkable transformer, the core and windings weighing 33 ozs. Every one guaranteed.

> USUALLY 35/-SPECIAL 15/6

> > Cash Orders Accepted.

PRICE'S RADIO SERVICE

53

WINGELLO HOUSE, ANGEL PLACE

Phone, B4146.

Box 3326PP, G.P.O.



in this article reluctantly says there isn't



Mr. Halbert.

dinner-jacket from Saville Row. George Robey is pos-

THE red-nosed come-

at the identical mo-

ment when radio, from

an entertainment point

of view, was born 'ine

old order changeth, and

now we have the old

school of slap-stick

comedians appearing on

the stage in the latest

dian died practically

sibly one of the few highly-paid comedians who still remain true to the red nose, tousled hair, arched eyebrows, and exaggeratedly shabby evening dress. Charles Chaplin also is a typical example of the red nose comedian-minus the red nose. Who has not felt a lump rise in his throat when the little chap, who a minute before had been making us laugh with his whimsicalities, suddenly gets into a heap of trouble, and when the picture fades away with the quaint little figure walking down a deserted road, forlorn and alone. The fine line between laughter and tears is humor.

On the stage, it is the comedian's misfortune which gets the laugh, whether occasioned by losing a fiver to the "straight" man, or by being made to look a fool by the same person, or by tripping up and falling; and the fact that television is not yet accomplished robs him of at least half his chance of success. He commences his "act" in front of that little piece of inarticulate marble called the microphone, at a tremendous disadvantage. To begin with, he finds

that the most abused section of his comedy make-up, his voice, which he was used wrongly for years, and which, by this time. has developed a huskiness, is now the most important feature of his performance.

No longer does he get that big burst of laughter which greeted him as soon as he put his face round the wings, and which at once created a bond between himself and his audience. Remember, laughter is the life blood of the comedian-always he is in search of a laugh-not necessarily a clever line; but certainly a laugh. How, then, can he be funny or even feel he is being funny in a comparatively cold studio? Where is the crash of the overture, or the "till ready" bars of the orchestra which support the preliminary funny "business" which draws him into sympathy with his audience, bringing them into closer and closer intimacy, until, in the end, ne has only to raise his little finger to get a scream of laughter?

Another thing tremendously against him is his limited repertoire. In the old days, 'Chirgwin, the White-Eyed Kaffir," sang "The Poor Blind Boy" nightly for over 20 vears; but two years would elapse before he

Please, Mr. Producer.

appeared again to the same audience. Thus we have him singing the same songs, saying the same string of patter to a different audience at a different theatre On the vears. the stage nosed g gentleman has the advantage of

comedy make-up. the scenery. his his arched trousers absurd and enormous eyebrows, which he has a knack of elevating in mock modesty at the opportune moment. Again, the sallies of individual members of the audience helped him immensely; but possibly the strongest point in his favor was

that the audience had come specially to see him. and, moreover, had come prepared in the knowledge that it was going to enjoy his "act." What a differ-

ent tale radio has to tell. endeavoring, as it does, to cater for every section of the community. The comedian is announced-he can-

coming in 2 humornot herald his way-and he feels cold; he has ous nothing to respond to; he is out of his ele-Ask anyone else of a similar type ment. to go through his patter and sing his song over the air; and the majority of listeners would not be deceived, but would say. "of course he sounded a little different over the Put a deputy in his place on the stage, air." and none who had seen or heard him before would be deceived

No. There is no place in radio for the rednosed comedian, with his husky, raucous voice. Alas! Neither is there on the legitimate stage in these days of the American "Mother Song," although, to us old stagers, who still love the smell of the circus sawdust, and who can still enjoy the beauteous maiden's daring performance in the lion's den, Little Tich, Harry Weldon, George Robey, and Harry Champion, in the pre-war days at the old Tivoli in the Strand, at the Empire and the Palladium, still bring back a host of very kindly memories.



Friday, 4th October, 1929



RUSH election," said WIRELESS 66 WEEKLY in one of its communicative moments, "shows the outstanding value of broadcasting as a means of campaigning." Specimen opinions of famous men who were not consulted are appended.

Page Four

BRUTUS HUGHES: I find the wireless one of the most Powerful weapons concelvable. It throws the greatest number of spanners into the greatest number of works. One of my sentences, spoken in a hall, upsets the minds of a hundred or so people. Spoken over the air, it gives the whole nation a headache. I am delighted with the possibilities of the wireless.

CAESAR BRUCE: One of the greatest things that has ever happened to the civilised world, besides myself and the Nationalist Party, is undoubtedly wire-less. Ever since I have been in command of the party which I have the honor to lead. I have recognised that wireless must play a fundamental part in the affairs of the community as a whole, and that the centralisation of the control of this great organ of public opinion and the rational-isation of thought, public communications. and finance consequent on its national-isation would have its consummation in the prevention of disintegration. It is the duty of everyone to see that their thoughts on this issue are those of a Thinking Man and Woman etc.. etc.

CALPURNIA PAGE: Broadcasting the greatest magnifying influence in the world. It makes a small man equal to a large man, and places a small party on the same level of appeal as a large party. I believe in broadcasting.

CITIZEN SCULLIN: Whether the Labor Party supports broadcasting or not I would scarcely like to say, purely from consideration of truth and public benefit, as any statement of mine in this matter might be reviewed by caucus in a light in which I have not seen it. In the circumstances, however, it seems safe to assert that broadcasting is essentially a democratic institution, made specially to en-lighten the masses. That broadcasting is fulfilling this function is amply borne out by the fact that my recent policy speech was broadcast.

Interviewed last night in our busiest I like broadcast speeches of politicians when they are better than wrestling matches; but I like Billy best because he always does his best to entertain you. Bruce and Page and Scullin are all right as a dog-fight; but you get tired of that. I don't think, for instance, that Bruce or

Page or Scullin could get a job on a Radio Revue. Nor could Billy, for that matter-he's too bright. My opinion of the educational value of broadcast speeches? Well, they are educational to a certain extent; but my wife and I are getting tired of listening to Children's Sessions; and my kids are out dancing almost every night of the week. You see, what we generally do when these politicians are speaking is, turn on the set. and invite the neighbors over to a game of bridge so they can listen in. Our neighbors can't afford a wireless set; and I always believe in helping people who are not quite so fortunate as I am.

Mr. Meadows came in the other day and asked us to go out and see someone outside. So we went out and see someone out-side. So we went out and she was very pretty indeed. Brown eyes, and a peculiar, crinkly blue felt hat, with dia-mond pieces cut out of it so that you could see her hair. Coat was also blue if we remember rightly; and her dress was one of those clinging silky affairs which clothe innocence in provocation.

"This," said Mr. Meadows, "is James." "James who?" she looked blankly at

Mr. Meadows

We frowned.

Mr. Meadows said "Oh. don't you know James? I thought everyone knew James. He's the man who writes" and so He's the man who writes" and so on. Has this ever happened to you? You know, your admiring friend saying what a fine chap you are, for the wrong reason to someone who doesn't know you or want to know you from Adam. Like a husband's old friend praising him up to his brand new bride for his "way with women."

The fact is," she began. Mr. Meadows floated out of our consciousness. We were alone in the Sun's magnificent new building, or perhaps in the Infinite, with two brown eyes and a blue hat. "The fact is, I've come up to get some

advice. I filled in a form, some time ago, and sent it into the Broadcasting Company; and I had a reply the other day asking me to come up at three o'clock this afternoon for a trial."

"Ah?"

"Well, I've come up to see what I ought to do. You know all about the wireless, don't you?"

We admitted it.

"Well, what do you advise me to do?" "Why. that's simple. What are you-contralto or soprano?"

"I don't know. Do you think I'm one of those?"

"Oh. you're a soubrette, then?"

"What's a soubrette?

"Someone who sings jazz stuff. Have you much experience?"

"Oh, no. In fact I haven't done much singing at all-you know, I've just picked up the songs as they come out. . . ."

"But haven't you ever learned singing?" "Oh. no."

"Oh!"

"But I thought you'd be able to advise

"You haven't specialised in any kind of singing at all?" "No

"No." "Well, of course, you must do sketches or monologues or something like that..." 'Monologues' tricked her. We explained what monologues were; but her forte wasn't monologues. Nor had she ever studied dramatic art.. When she had been very young, however, she studied Elocution. 'Isn't there SOMETHING you could advise me to do?" She asked.

We thought of something, and checked it. "You see," we said; "most of the people who go on the air have had some sort of experience. Most of the soubrettes you hear have either had their voices trained or they've been on the stage, or they've had a nice friend. Then, the people who put over sketches have generally had stage or vaudeville careers; and the people who put over funny stories, like Lawrence and Ryan and Cahill and Bluett have faced the turnips all their lives. Then a good few of the people who give travel talks have actually travelled, and some of the lecturers on special subjects know a little about their subjects. So, if you want to break in on broadcasting without any technique whatsoever, you'd better make sure you've got an original act. Have you got an original act?" "Oh, no," she said. "I thought you'd be

able to suggest something. You're not very helpful, are you?"

'No, but what's the point

"See, the point's this: I've got to give a trial performance this afternoon.

Fifteen minutes later she left us. We had not been able to think of anything. She left us as one convinced of our total inadequacy. We have not seen her since. Summing up the whole business, with-

out prejudice, we think she really knew as much about broadcasting as we do. Our bluff about artist's technique was wasted SHE

ame

HAD BEEN LIS-TENING IN TO THE A.B.C. PRO-GRAMMES! We can conceive no other explanation of her

strange behaviour.

The DOVER PATROL

Exciting Experiences in the English Channel during the Great War. From a talk broadcast through 2FC last Sunday.

By Rear-Admiral E. R. G. R. EVANS

HAVE been asked to tell you something about the sea patrols, and to turn the searchlight on to the men and units who worked apart from the Grand Fleet during the Great War.

The work of keeping the seas, as I propose to describe it, was largely performed by fisher-folk, Naval Reserve men, and Volunteer Reserve men, with little or no naval training, who were led by a sprinkling of officers and highly-trained seamen from the Navy proper. But the work of keeping the seas, as I propose to describe it, would never have been possible had it not been for the Great Silent Navy itself, with its magnificent organisation, its perfectly-trained personnel and its fighting leaders—Lord Jellicoe and Lord Beatty. My own service commenced with Dover,

My own service commenced with Dover, and on the eve of hostilities I took twelve destroyers, known as the Sixth Flotilla, to patrol that little strip of blue water that for hundreds of years has defied enemy invasion and kept sacred our Mother Country. Owing to the needs of the Grand Fleet, all the best destroyers were absorbed into the great fighting flotillas, whereas we at Dover had to put up with obsolete vessels which, when compared with the German destroyers, might almost be said to be armed with bows and arrows.

Closing the Straits

We had a dozen destroyers of the "Tribal" class, quite fast, but far too lightly armed, and also 12 dirty little pre-War craft of hardly any fighting value, with three or four light crusters to support us if attacked by overwhelming forces.

Our first work lay in closing the Straits of Dover to friend and foe alike, and the patrols were so disposed as to intercept all vessels passing through the Straits of Dover. and divert them into an anchorage where they were examined by officers with Merchant Service experience, who pretty shrewdly distinguished between fool and knave.

The Admiralty had evidently thought things out well when the selection of vessels for the Dover Patrol was made. To start with, the Germans did not know everything. They did not know what submarines were held in readiness to rip open the steel hulls of any of their attacking ships that might come our way by day. At night luey were hardly likely to risk battleships on cruisers in Dover Straits under conditions most suitable for attack by destroyers, and German destroyer attacks in daylight hours were improbable because the splendid force under Commodore Tyrwhitt at Harwich would have cut off their retreat, so that what we really had to face was not much until the days grew shorter and the first winter set in.

Under Cover of Darkness

Any diversion from the monotony of patrolling was welcomed by us all, and those of us who escorted troop transports conveying Royal Naval Divisions to Ostend and Zeebrugge rejoiced in the freshness of duty Stealthilly we moved away from Dover under cover of darkness in the early dim night, when no moonlight could give away our movements and lay the transports open to torpedo attacks. In the grey dawn the steamers were berthed at the Belgian coast ports, and we in our destroyers watched them glide



Rear-Admiral Evans

into harbor, gazing hungrily after them, and wondering when they would meet the foe, confident that those on board would bring honor to the white ensign.

The first important news of naval engagement was the Heligoland battle, and shortly after this, Admiral Hood took command of the Dover Patrol, and, with his fighting in-stincts, could not keep us long away from the Belgian coast. It fell to him to organise the preliminary bombardments, and, leading the destroyers close into Ostend Roads he shelled the right wing of the advancing German Army. We got so close in shore that the enemy opened fire with their light field and machine guns, but we inflicted considerable damage, owing to the surprise attack and although one of our little ships, the Siren, ran ashore, she got off unaldod, and we had comparatively few casualties.

Bigger Ships, Bigger Guns

After this first assault, our Army Headquarters asked for ships with bigger guns to fire further inland, and so Mr. Winston Churchill, who was then First Lord of the Admiralty, gave us some antiquated gunboats which had been used for training seamen in peace time. We also had some little monitors armed with 6-inch guns. They drew less than 6ft. of water, and inflicted considerable damage, which seems to have pleased our condition friends ashore; but they were very greedy, always asking for more ships with bigger and bigger guns. Accordingly the old battleship Revenge, mounting four 67 ton guns, next came along and fired enormous projectiles, which whirled over and over in the air, owing to the wearing down of the inner tube of the guns, and I believe the Germans called these big shells "portmanteaux." Still demands for naval assistance came from the military, and then Winston Churchill, with perhaps a vein of humor. sent two absurd little vessels across to the Belgian coast. They were known as "flat-iron" gunboats, built about 1875. and these literally crawled about like tortoises, one fir-ing a 22-ton gun, and the other a smaller weapon. Whatever damage they inflicted I cannot say, but I admired them for their plucky obstinacy. They took hours to get into position, and, once within range of the enemy guns, they stopped there until the day was spent, and then plugged stolldly homeward to their anchorage for another load of shells.

Bombardment

We in the destroyers patrolled the Belgian coast at night, and, closing into the shore, had a splendid view of the burning houses and bursting projectiles as the two opposing armies made battle in the darkness—it was all unuterably weird and sad to watch the devastation of the Flanders seaside health resorts. Personally, I shall never forget the red flashes of the exploding shells and the uncanny flames that burnt in the houses and showed through the battered windows of the poor Belglans' abandoned homes.

dows of the poor Belglans' abandoned homes. In the winter of 1914-5 the German sub-marine campaign commenced, and to my mind this first winter took more out of the destroyer crews than anything we subsequently faced. The aircraft carrier Hermes was torpedoed and sunk, and everybody began to see submarines after this. The fins of blackfish and purpoises were frequently taken Ail for periscopes, and reported as such. sorts of wreckage, with anything vertical sticking out, that might be mistaken for the offensive periscope, was so classified, and the poor destroyers hardly spent an hour of their resting-time in harbor without receiving the oft-recurring signal. "Submarine sighted in position so-and-so. full speed, and search area." Proceed at It made us tired! The signal was no sooner shown than the destroyers, provisioning or oiling at Dover, would dash out of the harbor at everincreasing speed, and race to the area in-They literally took sheets of cold. dicated. green water over their forecastles and bridges, shaking themselves free ten times to the minute. The senior officer of the bunch would organise the search, and the Dover 'search deer" would hunt around until no further reports were received, or until the submarine was demolished.

Ship With Six Funnels

I now commanded the destroyer called the Viking. She was a sort of freak shin with six funnels, and if ever I did anything wrong, and that was pretty often. I was given eway by those six funnels. However, although we were fitted with the most primitive antisubmarine devices, including a sort of Heath Robinson arrangement called the "Modified Sweep." we managed to get a submarine quite early in the war with this contraption, which was much laughed at by our own submarine officers.

It happened this way. On March 1, 1915. after a long run of bad weather, we vere suddenly blessed with calms. That day, when I took up my patrol, a thick fog was rolling up the Channel, and we were almost smelling cur way along, when suddenly a breeze sprang up. The fog lifted like a great pall of smoke, and under it, about a nille away, we sighted the grey form of a German submarine's conning tower just emerging 'rom the sea. We went full speed at her in the Viking, firing out foremost gun, and eagerly hoping to ram; but although our shots fell

very close, the submarine dived before we could strike her, and the fog closed down again. Rapping out wireless signals, we called all the Dover Patrol to our position, and the fog lifted slightly. As each destroyer came along, she was given an area to search. We all got over our Heath Robinson modified sweeps, and were lucky enough to sight the submarine's periscope occasionally. Each time we sighted the periscope, the search was drawn in closer, and at last the modi-field sweep of the destroyer Ghurkah caught in an obstruction, and was promptly exploded. Then after a few seconds of hopeful expectancy, we had the satisfaction of seeing the submarine reappear on the surface with a great list to starboard, like a huge disabled fish. The conning tower hatch was thrown open, and the captain shot up through it like a jack-in-the-box, with his hands above his head, in the attitude of surrender. Boats were lowered, and the crew of the submarine taken prisoner. She turned out to be U.8, and the Admiralty was so de-lighted that we had sunk a submarine with this funny Heath Robinson contraption that the D.S.M. was awarded to the man who pressed the electric button and blew up the submarine. He certainly deserved it, for it was an achievement equal in magnitude to the slaying of a lion with the jawbone of an ARE

Auti-submarine Devices

It was usually a thankless task, this submarine hunting business, when we were so deficient in arms to meet them with. But the Admiralty devised more and more schemes, and invented weapon after weapon with which to assist our efforts, and eventually we got sufficient patrol craft and reliable anti-submarine devices, particularly mines and depth charges, and then, although it was not before 1917, we fairly put the fear of God into all but the most valorous of the pirate submarine skippers.

There are so many things that I would like to tell you about the Dover Patrol and about the sea patrols generally, but twenty minutes does not permit me time even to souch upon what the sea patrols really did in more than four years of war at sea. The work of the Merchant Service, who, by sailing their ships in convoys, magnificently handled and managed by our glorious Mercantile Marine officers, makes fine telling, and perhaps Broadcasting will allow me to relate some day the story of Captain Gordon Campbell, V.C., D.S.O., the king of the mystery ships, and, to my mind, the greatest hero produced by the sea's service. However I must conclude now by telling you the story of the Broke and Swift affair, which took place one dark night off Dover.

Torpedoed !

Imagine two big destroyers, their 500th night at sea, patrolling to the eastward of Dover-a very dark night, overcast, and with no moon. Shortly after midnight, gun flashes were seen to the westward, that is down channel, and we in the two destroyers realised that a number of enemy vessels had felt their way past us in the dark. It turned out afterwards that they their way close in shore, and had felt navigated unobserved to a position close off Dover, with a view to bombarding that port, in what may be described as a "tip and run" raid. Actually they had made a large error in their navigation. and although six German destroyers of a very modern type fired between two and three hundred rounds into old England, they inflicted no damage beyond killing a superannuated donkey turned out to grass by the vicar of Saint Margaret's, a small village near Dover. However, directly we sighted the

gun flashes, we made for them at full speed. The Swift (Commander Ambrose Peck) was the senior officer, and his ship being much faster than mine, left me in the Broke very rapidly dropping astern. Nothing could have suited

us better, because the Swift, meeting the six enemy destroyers retiring at full speed. engaged each vessel with great gallantry as she passed down the line, inflicting considerable damage. Eventually the enemy concen-trated their attention upon the Swift, for we in the Broke approached apparently unobserved. We, therefore, held our gun fire until the track sights came on for torpedoing the second destroyer in the enemy line. This was intentional, as we considered from what we had seen that the leading enemy vessel had already been badly purished. Lieutenant Despard, who was controlling, waited until he was certain of securing a hit, and then he fired our port foremost torpedo. Directly it had cleared the tube we put our helm over in the Broke, with the intention of ramming the vessel against which we had fired. the torpedo missed. in case Despard watched the torpedo speeding through the water by its phosphorescent wake. Suddenly he yelled out, "We've got her!" and, as he spoke, there was a sharp explosion, and from our bridge came a glad little cheer. We put our helm over and headed away for a short while, then starboarded again, and made to ram the next vessel in the enemy line. By this time we were fairly close, and those on board of her gathered what our in-tention was. But for them it was too late. A cloud of smoke and sparks belched forth from her funnels, and then, after a few thrilling seconds, my destroyer, the Broke. crashed into the unfortunate German, hitting her abreast of the after funnel, whilst we were steaming 27 knots. I shall never forget the excitement of the moment, and in my boyish enthusiasm I shouted out, "That means two months' leave!"

We struck this vessel, which turned out to be one of the newest destroyers in the German navy, with such force that heeled over on her side, and her guns would not bear upon us at their maximum depression, which suited us very well. We were now firing upon her with the three guns that would bear, including the anti-aircraft pompoms, whilst officers and men from the bridge were shooting the enemy down with revolvers. Suddenly a crowd of them rushed to our stem and clambered on board over the anchors. Most of them met with instant death from our well-armed seamen and stokers, but a fourth enemy destroyer, passing close to us, fired heavily, and one of her shells exploded on the Broke's forecastle, in turn exploding two of our lyddite shells, and killing all the foremost gun's crew except midshipman named Giles, and a young leading seaman named Ingleson. These two alone repelled a second invasion of boarders. although Giles was wounded in the eye.

Directly we saw what was happening from the bridge, we piped the after guns' crews and boarding party up on to the forecastle

Friday, 4th October, 1929

I had always anticipated a close action of this sort—the sailors called it a "dog fight" and, in consequence, we always kept in readiness loaded rifles with bayonets fixed at each of the guns and searchlights. Besides this, pretty officers were all armed with cutlasses and revolvers, and when the order for boarders was given the weapons literally fell into the hands of the men who were waiting to use them. With a loud cheer, these men rushed up to our forecastle, where a handto-hand fight ensued between our boarders and the last of the Germans who had managed to clamber on board. I sometimes think that these men climbed up on to our forecastle to save their own lives as their ship was rapidly sinking, but what with the confusion of gunfire, star shells, clouds of funnel smoke, and small fires starting everywhere, the Broke's men took no chances. Eventually we steamed right over the destroyer we had rammed and left her with no light and no life on board, sinking rapidly by the stern.

A Shell in the Boiler Room

We then made to ram another enemy destroyer, I think the last in the line, but the vessel ahead of her engaged us heavily and put a shell into our fore boiler room, which exploded and killed everyone down below. This ended our ability to steam and manoeuvre

Mr. Grinney, the torpedo gunner of the Broke was looking after the two starboard torpedo tubes, and whilst endeavoring to fire the foremost torpedo, a shell fragment hit the firing lever and killed the torpedoman there. Mr. Grinney then rushed to the after torpedo tube and got off that torpedo He was, however, too excited to get a good shot, and although the torpedo reached its mark and hit the German destroyer G.167 near the stem, she was not too badly crippled to get back to her base at Zeebrugge.

Finding ourselves without any manoeuvring power, we drifted towards the destroyer we had torpedoed and could read her number, G.87, quite plainly on her bows. She was badly on fire, the oil fuel tanks burning, and her sides were lined with men shouting Surrender!" and "Save!" in what appeared to be organised cries. Their hands were above their heads, and we were near enough for me to shout through a megaphone, "All right, we will pick you up." But whilst the port whaler was being lowered to save life, some inconsiderate fellow on the enemy's forecastle fired a shell from the foremost gun which tore through the bridge and killed the signalman standing by my side. After that, we let her have it. We opened fire with every gun that would bear, and Sub-Lieutenant Peppy discharged the port after torpedo, which hit her near the stern and down she went. Boats were then lowered and 140 Germans were picked up and saved.

57 Killed and Wounded

Our casualties in the Broke were fairly We had 57 men killed and wounded. heavy. which is rather a lot for one destroyer's crew, but our men soon got over their annovance with the Germans who opened fire after they had surrendered, and soon after dawn, when no enemy vessels were in sight, I came down from the bridge to tell my men what had happened in the little fight off Dover. but when I entered the forecastle I found the British satiors so keenly interested in giving their German prisoners a fried egg and bacon for breakfast that I pocketed my little speech of explanation and returned to the bridge to bore myself of thoughts as to how I could get back to Dover in a somewhat shattered destroyer without any steam.

This was only an incident in the Dover patrol. I suppose we enjoyed ourselves after our fashion. There was plenty of excitement. We did our best and what we really fought. with our funny old-fashioned ships, could best be described as a Naval War in miniature



Page Seven



N interesting analysis has been made by the Australian Broadcasting Company, Limited, between the times devoted to various sections of the programme by the Sydney "A" class stations, as compared with the record of the British Broadcasting Corporation.

Although it is not possible to make an altogether analogous comparison, these fig-ures showing a winter month in the B.B.C programmes, are ranged against a winter month of the Australian Broadcasting Com-pany's sessions in New South Wales. We find that there is a striking similarity in several of the sections of the two programmes. and where wide difference exists this is accounted for by local characteristics and conditions of the countries.

For example, we find that the B.B.C. devoted 15.45 per cent. of its total programmes to talks of an educational character, and the A.B.C. gave 10.97 per cent, to work of the same nature. The first impression in one's mind is that much less attention is given in Australia to this very important side of broadcasting, but when we look at the figures compiled under the heading of "Utility" (and utility comprises news, weather, markets, commerce, etc.), we find that New South Wales gives 10.88 per cent. to this section of the programme here, against 5.38 per cent. in England.

So we have the remarkable figures of 20.83 given to talks in the B.B.C. as against 21.85 similar class of work with the A.B.C. If only 20 per cent. of the listener's time is given up to this feature, it is interesting to find how the balance of the session time available is utilised. Let us take an item which bulks large in both programmes-music. The B.B.C. devoted during this month's survey 62.17 per cent. to music, the A.B.C. 59.90—so there is only 3 per cent. less time here than in Eng-land devoted to the backbone of broadcasting. How is this made up? We find that the Australian listener demands more "feature" broadcasting than the English listener. BV "feature" broadcasting we mean sporting descriptions, outside functions, and novelties. So the figures under these relative headings are: England, 1.67; New South Wales, 3.39.

The next item on the list is drama. This covers plays and sketches from within and without the studio. The B.B.C. devoted 1.69 per cent. of its time to this very interesting.

IS THERE TOO MUCH MUSIC ON THE AIR? How Sydney Compares with London

By OSWALD ANDERSON

side of broadcasting, the Australian Broad-casting Company 1.52 per cent. The ten-dency is to devote more time to plays and sketches, partly due to the fact that they are being broadcast from the studio, where very much realism is being introduced by means of the special sound-effects.

When we come to the very debatable subject of church services, we find with a certain amount of surprise that more time is given to religious services in New South Wales than in England. The B.B.C.'s percentage is 4.18, that of the A.B.C., 5.32. With the children's sessions the reverse is the case, as England devotes 7.40 per cent to this feature. against 5.92 in New South Wales. Now, there is left only a small percentage

under the heading of "Miscellaneous." which covers all sorts of extraneous items, not specified in the regular programme. figures show as follows:— The total

	British	Australian
Bro	adcasting	Broadcasting
C	orporation	
	Per cent.	Per cent.
Music	62.17	59.90
Drama	1.69	1.52
Features (including		
sporting descrip-		
tions)	1.67	3.39
Talks-Utility, Educa-		
tional	5.38	10.88
Church services	4.18	5.32
Children's session	7.40	5.92
Miscellaneous	2.06	1.10
	100.00	100.00

Under the heading of "Music" it is interesting to find what types are being presented and the proportion given to each. Nearly 23 per cent. is allowed to vocal works and 37.94 per cent. to instrumental offerings. The natural tendency throughout. in these days

of mechanised effort. is an increase in inmusic strumental Many suggestions are being put forward for this. It is generally believed, how-ever, that the main reason is the intro-duction of the microphone, which made it possible to bring into prominence the wonderful orchestras whose records are so popular.

The public have been trained to appreciate and ask for concerted music, so that the vocal item is, to a certain extent, over-shadowed. Take the catalogues issued by the leading record manufacturers in the world, and we see that where quite a lot of space was given in the earlier days to records of solos for sopranos, contraltos, and so on, their place is gradually being taken by instramental items, and, except for a few outstanding vocal artists, this side is relegated now mostly to items of a popular nature.

With the intimacy that has sprung up be-With the initimacy that has spring up be-tween the recording artists and the micro-phone the effect is to bring into being an entirely new type of production, which, al-though not altogether pleasing to people whose tastes run to better-class music, still is calculated to give vast pleasure to the majority. Record-making and broadcasting are allied, and thus the same trend is notice able in radio.

More and more orchestras and bands are being used and fewer vocalists. One reason that has been advanced for this is that invocal work. The variations in pitch in the human voice are harder to record than instruments, and this accounts for the per-centages in vocal, as against instrumental music, being so much less.

In the vocal section the most work is given voices of the modulated registers, such as baritones and mezzos. Those receiving the least work were sopranos and bassos. Duets and quartets had more than half their fair share, but less time is devoted to choirs. The broadcasting of choirs from outside halls is for this reason choral work is not heard to any great degree on the air. Grand opera was represented very strongly in the vocal side.

In the instrumental section orchestras led everything else by a big margin, and coming next we have string quartets and trios, followed very closely by organ and brass bands. Then followed in this order:—Piano, violin, cello, flute, and harp. Saxophones, novelty planists, dance bands, etc., will be dealt with later on under the heading of "Popular."

Leaving the more romantic side of broadcasting, as indicated by music, we come to the commercial side. There are some listthe commercial side. There are some list-eners in the country who get more than their share of satisfaction from wireless by hearing regular reports from the Stock Exchange and all the various market results. Others are satisfied with the news that comes through every day, and this listener who gets direct commercial benefit is the last one to com-plain, as does the city listener if every night of the week the programme is not entirely to his liking.

While not in any way to be taken as an answer to Mr. John Benson's comparative review of the B.B.C. in a recent issue, this article by the N.S.W. Manager of the A.B.C. affords many interesting figures in connection therewith.

On the "utility" side the news of the day and cables have leading posi-tions, closely fol-lowed by markets lowed by markets and weather and the official wireless news which is picked up from England every morning. Shipping and mails also have their due percentage of time in the

Age of thite in the daily programme Next to the "utility" side of the programme is that portion devoted to TALKS. The very mention of the word "talk" is inclined to make the average listener say: "I never listen to talks-they are not interesting enough." But it has been necessary to increase the percentage of this section from time to time owing to popular demand. Admitting that the educational side is given more promi-nence in England, there are other types of talks which find ready favor. Under the heading of travel and adventure we find the greatest percentage. followed closely by edu-cational readings, talks which are supplied by speakers from the Department of Education, the Conservatorium, and leading music teachers, the Museum, etc. Then, under the heading "Studio Readings," we find there is a big following for the stories given by popular announcers from both stations.

The women's session covers cooking and household hints, the hundred and one things a woman should know, and has a large following. The business man is catered for by efficiency talks. It has been necessary to place most of these speakers in the daytime, but it has been claimed by quite a number that the time is coming when more and more time must be devoted at night to prominent speakers. The public, as it becomes better equipped with the right type of loud-speaker, will sit down and enjoy the talks which will then be given. Against this is the argument that wireless is becoming merely a background of our daily and nightly pleasures. With loud speakers operating and instrumental music being broadcast it can be tuned so softly that one can continue reading, cards, talking, or any other particular recreation while still listening. But when a talk is announced one either has to listen intently or turn the set off, because it obtrudes itself between the listener and his thoughts.

Sporting

This brings us to that very important item in the listener's fare. SPORTING. It is only when one of the sections of sporting descriptions is temporarily eliminated from the programmes that the Broadcasting Company finds how big a part these things play in the average daily menu of the listener. Let a race description be omitted, and protests will be quickly forthcoming by telephone, wires, personal calls, and later on by letter from listeners scattered far and wide. But if a musical item is dropped one regrets to say that the world rolls on and neither artist nor company knows whether the item is missed or not. It is only natural that a sport-loving. open-air Australian should insist on and expect that these advantages should be his.

The descriptions of last year's Test matches held to their seats for hours thousands of listeners who previously had not realised what radio geally meant. The description of the Melbourne Cup must have held enthralled for that brief ten minutes not thousands but hundreds of thousands. Probably two million people either listened directly or were acquainted immediately by agency of wireless of the result, and thus the worldwide Melbourne Cup is linked by radio and telephone line to every hole and corner of this vast continent. Actually last year when the Cup was described it was broadcast on short-wave, and heard more or less distinctly in overseas countries.

Children's Session

Now to discuss the time given to the children's sessions in New South Wales against the same feature in England. It is found that the reason that the percentage is greater in the Old-country is due to the fact that in Sydney only one station gives a session to children every night. This is not sufficient to bring up the percentage to equal that of the B.B.C., where a number of stations embrace these sessions.

With religious services the reason the percentage is higher here than in England is because there are generally four church services every Sunday in addition to a special devotional service each morning from one of the stations.

Popular Itenis

We have left to the last the discussion of the time given to popular items. The word "popular" is as much misused and misunderstood as "classical." To the musician the word "classical" will always bring a smile. One can almost say that the term "highbrow" more closely indicates what is meant than the word "classical." Under the heading of "popular items" many sins are committed. Looking through these percentages one finds that under this elastic heading there are listed comedians, entertainers, popular vocalists, revue artists, "talkie" shorts, popular records, novelty instrumentalists, from planists to mouth-organ players, saxophones, Wurlitzer organs, and last, but not least, dance bands.

Would it surprise the average listener to know that the time devoted to dance music is greater in England than it is in Australia? It is probably safe to say that, under the heading of "popular," the percentage in New South Wales is greater than the time devoted to the same thing in London, and it is also quite a natural assumption, as we are not yet musically educated to the same degree as in the Old-country. This is due mainly to the lack of opportunities of hearing and understanding music, and, further, the temperament of the Australian is suchdue in many cases to our climatic conditions -- that we do not expect from our radio the more serious side of entertainment.

The instinct which prompts us into the open air to spend every moment of our spare time is the same which urges us to turn on the radio to see if there is anything sufficiently entertaining to hold our attention. Taking all factors into consideration and

Taking all factors into consideration and giving due regard to the conditions existing in the two countries, the Australian Broadcasting Company's New South Wales stations can feel satisfied that they are holding the balance evenly between "highbrow" and "lowbrow."

PLANTING FOR EFFECT Ø

T HE photograph shown is of Alexandra Gardens. Melbourne. The background of trees, shrubs and palms is faced with a variety of plants, from the tiny pansy to the rhododendrons, azaleas camellias. hydrangeas, delphinlunns. double hollyhocks, perennial phlox, perennial asters. herbaceous hibiscus, Japanese maples. English ash (golden).

* Twenty-five years ago this spot was a swamp at the rear of the boat sheds. Princes Bridge. Melbourne: so that everything in the picture may be termed artificial beauty. That is why greater credit is due to the Melbourne gardeners than to our local gardeners. Here, natural beauty is such a commonplace that gardeners have not been called upon to exercise their landscape knowledge as they have been forced to do in Melbourne and Adelaide for many years. The mound shown In the photograph was designed by the late Mr. Catanl. who was chief engineer of the Victorian Public Works Department, and carried out by myself. Every load of soil, clay, stones, bricks, ashes manure, etc. was placed in its proper place in the first instance. The after results depend entirely on the manner in which the foundation is laid by the original designer of any garden. A few remarks on the above will prove helpfull to all amateur gardeners who wish to make the most of their material at reasonable expense.

Wherever you have paths, put the biggest boulders and stones in the bottom of the path. and finish off with the smaller stones, etc. For lawns, a clay subsoll is the proper thing. Wherever the water pressure is weak



In summer, as it is here in Sydney, a buffalo or couch grass lawn can be made with four inches of soil and twelve inches of clay; or, if clay is hard to procure, six inches will do. In dry weather, with the clay four inches from the surface, the moisture is held in suspension in the soil, quite close to the surface; also, light showers will penetrate a few inches only, and the clay will hold their moisture for the benefit of the lawns.

Where it is intended to grow trees, and shrubs, a greater depth of soil is necessary, and the clay subsoil should be eighteen inches to three feet from the surface. When the roots of the trees get down into the clay they will stand a long while without water, even in the dryest weather during our hot summer months.

(By G. W. COOPER, who talks on Gardening from 2BL at 10.40 every Saturday morning.)

Drainage of surplus moisture in the subsoil must be seen to before plants are put in. Never plant a big tree in front of your house. Plant it at the back, so that from the street the tree will act as a background to the house. Of course, this applies only to those who have plenty of space.

A letter to me at 2BL, Bligh Street, Sydney, will find me, and if you write down your troubles in the formation of a garden, will answer you over the air from 2BL yvery Saturday morning at 10.10.

German Experts Develop Ultra-short Wave Bands

D EVELOPMENT of ultra-short wave lengths of three metres and less has been the problem before leading German scientists during the last year. Experiments on wave lengths of three metres with generating apparatus no longer than an ordinary radio valve have been successfully carried on under the direction of the German Ministry of Traffic.

German scientists are of the opinion that wave lengths as low as twelve inches will be developed into practical use. They have found that a three metre wave may be directed readily to any given station. In experimenting with ultra-short wave lengths these German experts hope to make available considerably more channels for telegraphic communication. At present waves below ten metres are considered impracticable for commercial use.

WIRELESS WEEKLY

EXPLAINING THE RECEIVER An Unusually Simple Description of How a Set Works

By R.W.M.

Although a technician could raise

many points of strict definition

against certain broad statements in

this article it must be admitted

that an elementary explanation of

radio reception is such a difficult

subject for compression into a

single article that the sacrifice of

exactness for comprehensibility is

here pardonable.

 ${\bf T}$ must be admitted that a detailed explanation of what happens in a radio replanation of what happens in a radio te-ceiver would take up several hundred volumes of WIRELESS WEEKLY, and wen then there would always be much left The main features, however, will unsaid. serve to give the layman a good understanding of the principles underlying radio reception. In any case, the explanation following is to be made as detailed as possible within reason, without going too deeply into technicalities which have no direct bearing.

In the first place, we must understand just what radio waves are. They consist of move-ments, in what is termed the "ether"-a medium which is considered to permeate everything.

These waves, for such they are, have the ability to spread out in ever-widening circles from the source. This is illustrated by a simple and hackneyed analogy. If you throw a stone into the water, you will notice that

tiny wavelets spread out from the centre of disturbance, in ever-widening circles. As the circles become larger, that is, the further away from the source, the small-er becomes the wave in height. In other words, it loses some of its energy. This also takes place with radio

FIG-1

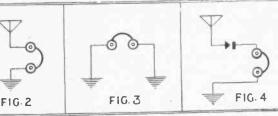
waves, and explains why we can receive a local station better than an inter-State one.

Analogy of Water

With water waves, the energy is expended In radio in pushing the wavelets along. waves this also happens, and, further, some of the energy is expended on obstructions, such as metal buildings, etc., in the same way that an obstruction in the path of a water wave would tend to reduce its energy.

Radio waves lose a great amount of their energy in metal buildings, because metals have a peculiar property known as "conduc-tion," which only means that it will allow tion," which only means that it will allow currents to flow in it. Materials that will not allow currents to flow through them are klown as "insulators," but there is no perfect known as "insulators," but there is no perfec-insulator, i.e., the best of insulators will al-low a current to flow if the pressure is high enough. From this we see that even brick buildings will absorb a great amount of en-This is why we should always be careful of the placement of our aerial, i.e., the metallic device which "entices" the radio waves in to the receiver.

In Fig. 1, you see a very simple circuit. It consists of an aerial connected directly to



earth. Here, we are assisting the waves (remember they are alternating-backwards and forwards), to the ground. Under this arforwards), to the ground. Under this arrangement, nothing can be heard. Fig. 2 shows the same circuit with a pair of telephones connected betweeh the aerial and earth. Now, if we listen, a hum can be heard, but we should not be able to hear the radio wave. The reason for this is that the radio waves are causing vibrations so high in frequency that the telephone diaphragms cannot respond to them. The hum that can be heard merely results from induced currents. If you desire to listen to these, bury two iron pipes three feet in moist earth, then attach a pair of headphones to the earths, as shown in Fig. 3.

Too High To Be Heard

The vibrations caused by the incoming radio waves are too high in frequency to be heard, but the voice and music vibrations (which are, of course, of audible frequencies) are really buried in the radio waves, and can be extracted from them if we cut off half of each wave that arrives. The process of cutting off each half-wave is called "rec-tification," and the apparatus that performs

this service is termed a "rectifier" or, in \mathfrak{a} radio receiver, a "detector."

A very simple type of rectifier is the crysta: It has been found that if a suitable contact is made with a piece of crystal, it will operate as a rectifier providing the contact is made at a sensitive point on its surface.

Now, in order to make contact to one of these points, we use a fine plece of wire (of a type that will not corrode-such as silver wire, platinum wire, etc.). coiled into a spring. This is made to rest lightly on the sensitive point of the crystal. The arrow-head in Fig 4. represents the piece of whre (which was once given the name "catswhisker." and the name has stuck ever since), and the oblong block represents the crystal, which is placed in a metallic cup. Fine copper wire can be used for the catswhisker, but it has the disadvantage that it easily corodes, and requires cleaning frequently.

Listening with this minute radio receiver near a broadcasting station, we can hear the speech or music quite plainly. If we are between two stations we shall hear both. The volume will be very poor, because it is necessary to have our receiver "tuned" our receiver to the wavelength of the station we desire to receive if best re-sults are to be ob-

tained

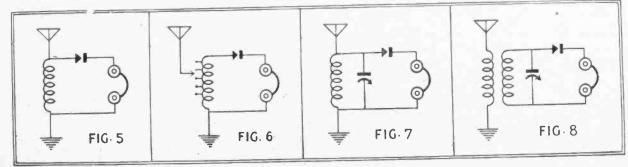
To do this, we must provide in the receiver a circuit capable of being tuned to the wavelength of the transmitter.

Coils and Signal Strength

Coils and condensers are the essentials of tuned circuits, and if we wind a coil (for those that care to try the experiment, fifty turns of 24 gauge double cotton covered wire on a round cardboard former will suffice), we will find the strength of the signal is stepped up considerably, especially if the capacity in the receiver wiring happens to tune the coll to anything near the wavelength of one of the local broadcasting stations.

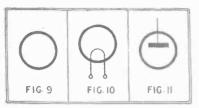
By removing one turn of wire at a time, the circuit may be adjusted to accomplish the

necessary tuning. See Fig. 5. Another way of doing this (and we have now reached the stage when the old type "tapped coil" crystal receivers were in use-we can take a short lead from each turn of the wire, cleaning off the insulation in each case, and clipping the aerial wire on to each "tap" and chipping the aerial wire on to each "tap in turn until the best adjustment is found. See Fig. 6. Another way (used in the "slider" type crystal set of ten years ago) is to use enamel covered wire for the coil, and connect



ł

Page Nine



the aerial wire to a metallic knob which can be made to slide evenly over the whole length of the coil, in a path that has been scraped free of enamel insulation.

We now progress to the use of the variable condenser. This is a component having a certain number of vanes, half of which are fixed, and the other half variable. If we connect the condenser in the circuit as in Fig. 7. and rotate the variable plates, the capacity of the circuit will be varied. This method has long ousted the tapped coil and the slider methods, and is still in use to-day; the only difference being that the design of the condenser has been vastly improved, and it is now a much more efficient plece of mechanism than it was even four years ago.

Altering Capacity

With the circuit just treated, we can now alter the capacity of our circuit so that quite a number of stations can be tuned in, but the trouble found is that if two or more stations are close together in their wavelength, both or all stations will be heard at the same time, though the station whose wavelength mostly coincides with that of the receiver will be heard at greater volume, presuming power of the two transmitting stations, and all other such details, are equal.

In order to do away with this bugbear (we know it as "interference"), we use an extra coll in the circuit. We now have two colls, so it becomes necessary to distinguish one from the other by calling one the primary (or aerial coil) and the other the secondary coil. The primary coil may consist of about 15 turns of wire placed in close proximity to the 50-turn coil (i.e. the secondary). The distance between the two colls is generally dependent on the rest of the circuit, but it may be anything between half an inch and a few inches. For this experiment, the primary may be wound directly over the centre of the secondary.

Invisible Force

Looking at the circuit diagram in Fig. 8, the beginner often marvels at the fact that there is no connection whatever between the primary coil and the rest of the circuit. The explanation is quite simple. When a current of electricity is passed through a coil, it causes energy to spread out from the coil This energy is termed "magnetic lines of force." If another coil be placed near the first one, these lines of force will induce a current in the second coil. Therefore we call this method of coupling "inductive coupling." When the radio waves flow through the pri-

mary of our receiver, they set up lines of force which induce currents into the secondary.

So much for the general principle. We have treated crystal receivers first. not be-

cause they are still in use, but because it will enable the reader to grasp just what takes place in a valve receiver.

Now the only difference between a valve receiver and a crystal receiver is that, in the former the crystal is done away with, and a much more sensitive piece of apparatus—the valve itself—is used.

In the symbol used for a valve, a circle (Fig. 9) represents the glass envelope that encloses the elements.

In Fig. 10 we see the symbol for an ordinary electric light. It was from this that the first valve was developed. The loop inside the globe is the filament, and the two leads that are shown outside the globe are the filament leads.

Many years ago an experimenter noticed that a black deposit often formed on the glass walls of an electric globe. He knew that when a current of electricity is passed through a wire, or any conductor, some action took place—some transference was responsible for the current to reach the other end of the conductor. Exhaustive experiment proved this to be the case

Electronic Theory

Many explanations of the effect have been put forward. Each one has in turn been ridiculed, but the "Electronic Theory" seams to fit in most with every other rule of electricity, and, it is around this that the fundamentals of electricity and radio revolve.

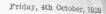
Briefly stated, the Electronic Theory is this: The smallest observed division of matter is a molecule, and this is further subdivided into atoms. These latter are generally supposed to be tiny magnets, i.e., the centre of the atom is positive, whilst around revolve tiny particles of negative electricity, which we call electrons. The atom is called a "normal" one if it has just enough electrons to neutralise the effect of the positive nucleus, but if one electron is missing, the atom exhibits the same properties as a magnet. These properties are fairly well known, but are stated here in case some reader is not familiar with them. Unlike kinds of electricity are attracted towards one another, i.e., a positive pole of an ordinary toy bar magnet will attract the negative pole of a similar magnet. If the two negative or two positive ends of the magnets were to be placed near one another, they would repel.

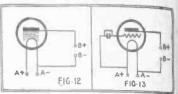
In the atom, if one electron is missing, the atom becomes a "positive" one (only instead of calling it an atom, which we understand possesses just enough electrons to make it neutral, we call it a positive ion). An attraction will take place if an electron (particle of negative electricity) is placed near it.

Now if the atom has a surplus of electrons it is called a "negative ion," and it will endeavor to reel just sufficient electrons to make the atom neutral. These "free" electrons will be attracted to any positive ions that are in the neighborhood, because unlike kinds of electricity attract.

In Lamp Globe

Now a flow of electrons constitutes a flow of electricity. If electricity was caused to flow through a wire electrons would flow. This





is exactly what happens to the filament of the lamp globe, only here the current is so great that the electrons move at a terrific rate, causing the filament wire to become incandescent, and to throw some of these electrons off into space. This is what causes the black deposit to settle on the inside of the glass

It was reasoned that, as unlike kinds of electricity attract, an additional element (a metal plate) placed inside the globe, and made positive, would attract the electrons. This was how the first "valve" came to be made. It was called an "Audion." (Fig. 11)

The valve rectifies in the following manner: Imagine the filament to be emitting electrons. These being of negative polarity would be attracted to the plate of the valve when that latter is of positive polarity. When it was negative, the negative polarity of the plate would are the electrons so that a current would only flow in one direction.

The source of current for the filament is termed the "A" battery, whilst the current for the plate of the valve is supplied by a "B" battery. This latter usually has a volage at least ten times that of the filament Note that the negative terminal of the "B" battery is connected to one of the terminals of the "A" battery, in order that the electrons may complete the circuit, flow through the filament again, and once more be utilised Fig. 12.

In the Radio Valve

In the next illustration, we see that two parallel lines, surmounted by a wavy line, connect on one side to an additional element in the valve. This element is the grid of the valve. The two parallel lines, which represent a fixed condenser, is the grid condenser, and the wavy line over the condenser is called a grid leak.

The other side of the grid leak and condenser is connected to the opposite side of the "A" battery to which B negative is connected.

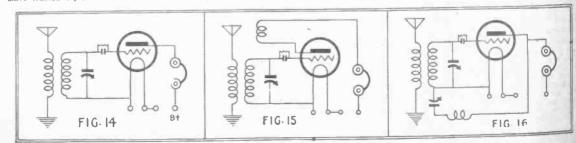
Now the purpose of the grid of the valve is perhaps one of the most interesting. The grid itself consists of a spiral of wire placed between the filament and the plate. By placing various voltages on this, the grid can be niade to control the flow of electrons to the plate—to act as a gate valve so to speak, and to influence the flow of electrons around the plate circuit.

The circuit is shown in Fig. 13.

Valve Instead of Crystal

Now, if we combine our original crystal circuit, with the improvements outlined, and using a valve in place of the crystal, the drcuit becomes as shown in Fig. 14.

The next improvement was in connection with what we term "regeneration," or "re-



This Week's Programme Personality SOME SAY "Hunty Goody" BUT WE SAY GOODIE REEVE

THE Borcarglian muse now hitches up her socks in preparation for striking a multitude of lyres. Of cosmetics and jungle wanderings we sing. and visits to Hollywood and children's sesions, and publicity departments and theatrical appearances and underclothes and tragedy and comedy-all summed up in the diminutive Miss Goodie Reeve, of the pale face and the experienced grey eyes, and the lips which seem to form ideas instead of words. We found the usual corner seat in the 2FC hallway, and Miss Goodie Reeve said :--

"The first interesting thing I remember about myself was that I went to school when I was two years old; as my mother (Ada Reeve) was on tour. At fifteen I had a thrilling experience. I was taken away from school to go on a tour of South Africa with my mother. We had a great time there, as my mother was wonderfully popular, and had a special coach on the railway wherever she went. During this tour, to fill in time, we went on a trip with fifty natives into the heart of Africa, where no white woman had been before The children of one little village we passed through screamed with terror at the sight of our white faces. We

saw the Victoria Falls, the largest in the world

"Going back to school was a frightful blow. I finished my education in Germany, on the Rhine, studying music and languages, and going into Cologne to the Opera House every week. With rumors of war, I had to leave suddenly. During the earlier part of the war I studied at the Guildhall School of Music, under Franklin Clive, who taught Mr. Roland Foster. The Guildhall is a kind of preparatory school for artists, and producers in search of new talent go there regularly, and it was while I was at the Guildhall that I was booked to take the lead in the first production of Captain Bruce Bairnsfather's 'Better 'Ole' in 1916. I had to double on another girl's part on the first night, and it was one of her songs which stopped the show and brought the house down-"Good Lord!"

"No-I mean the audience was so pleased with it, you see!" "Oh!"



Roy's caricature of Miss Goodie Reeve.

"Well, that show ran for one and half years, giving two performances daily, in London, while only four other theatres continued. The air raids, you know-people were frightened of theatres while the air raids were on. The only reason we were able to go on was that we had property guns booming away offstage, and the audience, hearing an air raid, would think the explosions were only our dramatic effects: I often visited the Australian camps at Salisbury Plains during this time, and I have since met many Australians out here who remembered.

"While the 'Better 'Ole' was still going strong, Mr. H. D. M'Intosh saw me, and booked me to play the same part out here. Captain Bairnsfather was also booked to give lectures on a guarantee of £20,000, which shows what they must have expected to make out of the venture. Our company set out for Australia, but Captain Bairnsfather was recalled by the War Office, and all the

other artists were held up by transport difficulties; so I arrived out here alone. My first experience of Australia was in Quarantine, where I was pushed during the pneumonic flu. At last I opened in revue, at the Tivoli in 'Everybody's Doing It,' and followed on with 'My Lady Frail' and 'The Officers' Mess,' during the first or second week of which I got influenza and had to leave the cast. Later I met Dr. Reg. M'Gillicuddy in Melbourne, to whom I was married. We were married two years when my husband died.

"After a while I started journalism. I can give you that in a few words. Odd articles on the stage; dramatic critic for three years on the "Times," 'Referee,' and 'Arrow.' Then I edited the 'Theatre Magazine' for a year, and later became New South Wales publicity manager for J. C. Williamson's in the absence of Mr. Martin. I stayed there and assisted him on his return. I was taken seriously ill three years ago, and since then have had twenty operations performed on my head. The doctors have been very, very kind. "Recently I went to America for a pleasure trip, and while I was there I went to see Holly-

wood, where I was wonderfully received and had a glorious time, meeting all the big artists. When I came back here I did publicity work for the film people I had met on the other side, and gave some lectures from 2FC on Hollywood. I had to give up the publicity work for some time on account of ill-health, and my broadcasting sessions are my first appearances for some time.

"My Children's Session is on Thursday nights, and seems to be rather popular. I have been written to as "Hunty Goody" and "Goodyear Reeve" and "Hurdy Gurdy," if that's interesting, and you can say that my small child Yuki has been very popular over the air during her holidays all the kiddles are sorry that Yuki is going back to school. I write most of the songs I sing during the children's session, and recently I have conducted essay competitions, and have written a song specially for the writer of the best essay.

"For the next four Thursday nights Jack Lumsdalne and I are combining to produce "Something Different," which will be a novel serial sketch. He will sing to me a song he has composed, and I will slng him songs I have composed, and the whole thing will have a background of story which I am sure should be very interesting. I seem to have done most things on the air-Central African travel talks, talks on face creams, children's sessions, a Bible story playlet for Sunday night at 2BL. Then you mustn't forget the "Aids to Personality" talks from 2BL on Wednesdays. Telling women how to improve their appearances, you know-it's wonderful what interest those talks have created. I don't know how to deal with some of the letters

Clearly, this was very interesting. "Suppose you tell us something about women's personality. Miss Reeve."

"In what way?"

"Well, what IS woman's personality, at any rate?"

"Now you're asking.

"Suppose you tell us something about it. then?

"Why, a woman can enhance her personality by being individual, instead of following fashions. Too many women just follow the fashions, without asking themselves whether a particular fashion will suit their type— Type?"

"Yes, there are Exotic Types. Baby Doll Types. Mousey Types, and Nondescript Types, and every woman should find out what type she belongs to and dress and surround herself accordingly.

"The chief thing to remember." sald Miss Reeve. "is that Beauty is inseparable from health. Health gives bright eyes, red lips,



This is Yuki, 9-year-old daughter of Annt Goodie, who helps during the childrens' session.

and a clear complexion, without which all cosmetics are useless. The majority of Australian girls don't understand how to make up artificially. You'd hardly believe it, but nine out of ten think nothing of using rouge of a different shade from their lipstick!

"Good heaven! Dear. dear! Tut-tut!" But it's true. A girl who wouldn't DREAM of wearing a hat of a different color from her frock will use one color on her lips and another on her cheeks. They give very little expert women with eyes are the French and Americans. Do you know, a French woman will spend half an hour on shading her eyes

and only three minutes on the rest of her face?

"No, Miss Reeve!"

"Oh, yes! Eyes are most important. They should always be very bright, and there is nothing which enhances appearances more than careful attention to the lids. Brown

than careful attention to the lids. Brown makes the eyes look sad and tearful. Blue and mauve are not so good, except at high. "I have been explaining how to make up faces for some time, now; and I shall go on with hands, hair, dress, furnishing, colors, and everything which enhances a women's and everything which enhances a woman's and everything which emances a woman's appearance. Women from away back in the country write in to thank me. They say that, as they live so far away from the town they have been helped considerably by the few things I have been able to tell them."

"And, now, Miss Reeve, can you tell us why women want to have a personality?"

"Because the one thing every woman craves for its admiraton, and especially that of the man she loves." "Ah!"

"Although, of course. some don't do it just for that. I know a great many women who spend more money on underclothes than on outer clothes. They like the touch of beautiful silken things, and, of course, how they feel demonstrates itself in their personality.

"Of course," we said. "Of course. Exactly " How well we understand these things. . .

NOTHING new under the sun? People of the present day, with its wonderful progress and marvellous inventions, are apt to forget that the culture of our ancient civilisations reached a very high water mark.

Recent discoveries have proved that the craftsmanship in the wrought gold and silver was perfect in every detail, and sets of teeth with perfect gold filling have also been unearthed. A most interesting series of talks on Ancient Civilisation is being given from 3LO by Dr. E. Sweetman, M.A., Litt.D., who will continue his lecturettes from the Studio on October 11.

AMONG THE MELBOURNE PROGRAMMES

THE JEWISH NEW YEAR will be celebrat ed at 3AR with a special programme of Jewish music on Saturday evening. October 5. Prominent In the programme are Jovan 5 Massenoff, tenor, and Sybil Graham, soprano, who will render some beautiful duets. whilst the former will produce the song-scena, "Kol Nidrei," from the opera. This will be accompanied by Alfred Bourne at the organ. Edouard Lambert, violinist, is also included in the programme.

N VIOLINIST of celebridy sales on Fri-Sarcoli is to broadcast from 3LO on Fri-VIOLINIST of celebrity rank. Pietro day night. October 4. a special recital in-cluding "Chaconne." by Vitali.

()NE of the most successful organisations of the kind in Australia is the St. Augustipe's Band. conducted by Percy Jones, which is coming up from Geelong specially to broadcast from 3LO Saturday evening, October 5

T is doubtful which is more popular, the community singing broadcast from Ballarat, or that from Geelong. There is always Fat, or that from Geelong. There is always healthy rivalry, and the singing is followed enthusiastically in almost every part of Aus-tralia and New Zealand. The community singing at the City Hall, Ballarat, on Fri-day night. October 4, will be broadcast by S_{AD} 3AR .

Stan Jones will be the conductor. Several special request numbers for West Australian listeners are included in the programme.

OFFICAL ACCOMPANIST

The Editor has received the following letter from Mr. Horace Kcuts:-

Daer Sir .-- In this week's issue of WIRELESS WEEKLY, under the heading of "A.B.C. Staff Changes" a statement is published to the effect that I am taking a share of the accompanying, using a string trio, $-1 \times$ I have been appointed official accomponist to 2FC, and, consequently, will do all the accompanying on the station, the abave statement hardly does the situation justice. In fair ness to me, I trust that you will correet the statement.-Yours, etc. HORACE KEATS

Sutien

ONE of the latest professions, full of possibilities for dauntless young Australians, is that of an airman, and the talk on "How to become an Airman" which will be given from 3LO on October 8 by Mr. Earle Cooper will contain much valuable information for their parents.

DOREEN BERRY, who will be remembered for her delightful talks descriptive of her trip through Europe, will shortly be heard over the air in some beautiful old Spanish legends, which will be recited to the mandolin accompaniments of Signor Manzoni.

MANY people forget the rich field of romance contained between the two covers of a history book, the stirring deeds that have been performed through the ages-the scenes that have been enacted under the shadows of some ancient cathedrals and the ruined fortresses, that would have so much to tell if the walls could only speak. Mr. Lyall will have further adventures to relate from 3LO on October 11.

THE touch of comedy that enables all listeners to thoroughly appreciate a pro-gramme will be supplied at 3AR on October 9 by De Raine and Dixie. Miss De Raine has an excellent soprano voice, which is heard to great advantage in light ballads, while her partner, "Dixie," as the name suggests, is a past master on the banjo.

DAWN HARDING, the popular young mezzo-soprano, will be singing from 3AR on October 7. She has been selected to play the principal part in Fritz Hart's forthcoming producton, "The Woman who Laughed at Faery." In connection with the Melbourne Phiharmonic Society, she made her debut in oratorio in the contralto role in "The Messiah," and acquitted herself admirably.

- #

. ATE CORNELL will be broadcasting from

10 .

3AR on October 7. Kate Cornell has a ber audience; with a few cleverly drawn word pictures you see Mrs. Murphy pouring her confidences into the willing ear of her neighbor, as together they discuss the ques-tion of "How to be happy though married."

WIRELESS WEEKLY

OUT OF THE RUCK

The week's best broadcasting features—Spring Race Meetings— Election Results-"The Ghost in the Pantry"-"The Jazz Spider"-The Apollo Club Choir-The Unfinished Symphony-Talks of the Week

LISTENERS will be given a very complete service on polling night of the Federal elections. The ABC will establish a staff in the tally room at the G.P.O., Sydney, and the results will be made available on the air as fast as they are received by the returning officer.

Not only will the figures for New South Wales be handled, but the inter-State results will be put on the air just as rapidly as those from local centres. Arrangements have been made to keep both 2FC and 2BL open until the completion of the count be-tween 1.30 and 2 o'clock on Sunday morning.

THE Derby, Epsom, Metropolitan, and the big classic weight-for-age races will be big classic weight-for-age rates will be broadcast through both 2FC and 2BL, so that listeners in all districts throughout New South Wales will have the opportunity of tuning-in the station which gives them the most satisfactory daylight service.

ALTHOUGH Lynn a ver-Smith is satile pianist, his name is best known to 2FC audlences as the leader of the jazz band he has formed. The proud leader of this combina-tion will infuse a lot of snap into the revue from 2FC on October 10.

. NEXT Monday, from 2FC, Mr. Scott Alexander produces the week's first ghost play -"The Ghost in the Pantry." It is described as a comedy of adventure.

A man wants to lease a suburban house, and goes down with a friend to look it over.

He loses his friend, by some strange cir-cumstance, and goes to see the house alone. in a cab, at midnight. The driver tells him on the way that the house is haunted.

What happens in the house when he gets there; how each one mistakes the other for the ghost, and how the ghost eventually appears, is too intricate a business to be explained on paper; but Mr. Alexander says that each situation will be made as clear as day from 2FC on Monday night, at 8.27. .

"WITH the Pilgrims to Mecca" is the title WATH the Fragmus to breed is the thr of Mr. T. S. Gurr's talk from 2BL on Tuesday, October 8. Mr. Gurr dealt with part I last week, explaining the various reli-gious obligations and the preparation prior to the pilgrimage. This week he will deal with part 2.

He will outline the Sai ceremony-the Well of Zem-Zem and the value of prayer, and describe Meena, or the Valley of Desire-Mount Arabal—the sermon from Adam's Pillar—and the return to Mecca. He will also tell of the insanitary condition of Mecca the Mountain of Narah-the arrival of the Medina and the Prophets; Mosque, and Tomb. A Night on Sydney Harbor A NOVEL broudcast to take place on October 19 through 2FC will take the form of a "Night on Sydney Harbor." A special launch will be A special launch will be chartered by the Australian Broadcusting- Company, and will ply the harbor with a group of singers, who will treat listeners to a number of plantation melodies. There will also be some comedians abourd, and incidents of the trip will be described by the 2FC evening announcer.

"THE JAZZ SPIDER" is webbed in mystery. No one will know very much about him until he crawls forth over the air from 2FC at two minutes past nine next Wednesday night. As the result of assiduous investigation in the Australian Broadcasting Underworld, however, we have caught a few sinister rumors. . . .

He is at once a play and a man; created by Mr. James Donnelly and produced by Mr. Laurence Halbert. The universe has been scoured for sound effects. Mankind has been surveyed for suitable players. The A.B.C. Players are the result.

.

The play will be produced in serial form, and next Wednesday's contribution will be simply the first of the series; and will be prefaced by a prelude of introductory cameos in which "Digger Downs" will be introduced with the effects of "loud applause" at an A.I.F. annual smoko reunion.

.

The second cameo will introduce the noto-And second dameo win introduce the noto-rious "Joe Fang," known to the underworld of Shanghai as "The Red Spider," to the effects of Chinese music. You will hear a knock at the door, a door being unlocked and unbolted, stealthy footsteps, the closing of the door. the door. ... Such Horrors! .

. The third cameo introduces the adventuress Who Is Not-a Miss Vernie Vivian. through the hum of traffic in a busy city street. A charming girl. And so to the first instalment of the play, of which we know nothing.

SYDNEY'S premier male voice choir, the Appollo Club, will give its 230th concert on Wednesday, at the Conservatorium. This will be broadcast through 2BL.

The principal items are: "The Bandits Chorus" (all welcome the bowless drivers The principal items are: "The Bandis Chorus" (all welcome the bowl--a drinking song) from "Ernani"; a first Australian per-formance of a part song, "The Buccaneers," by Candish; "The Sailors' Chorus" from "The Flying Dutchman," by Wagner; and "The Phantom Host," by Hegar. Mr. Arnold R. Mote is the conductor.

Interspersed among the choir's renditions will be items by Miss Constance Burt, so-prano; Mr. Raymond Beatty, basso; and and Cedric Ashton, 'cellist.

"IN my capacity of dramatic critic and subeditor of the 'Bulletin' I knew every actor and actress in Sydney during the days of the 'eighties and 'nineties," said the Hon. George Black. "I have always been interested in things theatrical, and the "Tales of the Tivoll" with which I open my series of talks are absolutely true." Mr. Black's talks will are absolutely true." Mr. Black's talks will revive all the memories of the old days in the minds of many listeners.

"I have known the Tivoli since 1876, when it used to be called the Scandinavian Music Hall. Entrance was sixpence and threepence a head The waitresses were dressed in head. Scandinavian costume and skated from one table to another. Drinks and music were provided. The next stage in the evolution of the Tivoli was when it was taken by a famous actress, who re-christened it the Victoria Hall. ÷.



"The next owner built a gallery and He sloped the floor. called it the Academy of Music. It was at that period that the Federal Minstrels performed there. They were fine singers, and they made the Academy their headquarters for a number of years. Then the Academy was altered to the Garrick The-atre, and later to the Tivoli Theatre. When HON. GEORGE BLACK, It was burnt down, about 1904 or 1905, the com-

pany was shifted to the

"In My Anecdotage." 2BL, October 8.

Palace Theatre, but returned when the Tivoli was rebuilt. Be-cause of its historic associations, many will be sorry to see the old building go." 10

The Hon. George Black has been a member of Parliament since 1891, and has sat in four Parliaments. He has been a member of the Parliaments. He has been a memory of the Legislative Council ever since 1917, and was also Chief Secretary to the Minister for Public Health for a number of years. He is one of the founders of the English-Speaking Union, and a director of Sydney Hospital.

He commences his series, "In My Anecdotage," from 2BL on Tuesday, October 8.

THE Strumming Serenader, otherwise Ward Leopold, has recently come from Melbourne to broadcast through 2BL on October 7. The guitar makes a fitting background to his singing. Later he will broadcast some of his own compositions.

SINCE the inception of the Australian Broadcasting Company, Limited, twenty-six church services have been broadcast. In future, no denomination will have two ser-vices in one day. In this way an endeavor will be made to spread the interests of fol-lowers of various church cervices. Commence lowers of various church services. Commencing on Sunday night, October 13, two church services will be given each alternate Sunday night.



LYNN SMITH

jazz planist. Oct. 10.

2FC

MR. C. N. BAEYERTZ will talk on "Modern Philosophy" from 2FC on Sunday afternoons, from 5.10 to 5.30. He has planned a survey of philosophic thought from Bacon to Bergson. His next talk, October 6, will be on "Spinoza and the Odyssey of the Jews."

Spinoza's best known work is his "Ethics," in which he has evolved a code of moral conduct on the same principles as Euclid used in geometry. He was ex-communicated by the Jews for the doctrines stated in his works, his chief offence being his conception of God-in-everything. Mr. Baeyertz will also talk of the influence of great Jews on many divisions of modern thought.

On Friday evenings, at 9.5, Mr. C. N. Baeyertz will tell dialect storles. Mr. Baey-ertz is a master of languages, and promises that Scottish. Irish, French, German, Aus-tralian, Jewish, Maori, English, and Ameri-can dialects. can dialects will be represented in due course.

MR. WALLACE NELSON will speak on the "Humor of Press, Platform, and Parlia-ment" through 2BL on Friday. October 4. Mr. Nelson is an ex-member of the Legislative Assembly of West Australia, and was leader writer on the "Daily News" in Perth for ten He was official lecturer on the Great vears. White Train, which a year or two ago toured the States of Australia. He was also the hon. secretary of the New South Wales Scottish Delegation that went to Scotland last year.

During his visit to England and the Continent he interviewed many celebrities, the notable being most John Galsworthy. Professor Gilbert Murray. and Sir Roland Ross and wrote several articles for the press in Paris and London, His talks will deal with the humorous, unrehearsed incidents that occur from time to time on the platform, in the press, and in Parliament.



WALLACE NELSON "Humors of Parilis ment." 2BL, Octobe

ROM 2BL at 9 o'clock next Thursday night, which we hope may be as cheerful as possible under the circumstances. Mr Varna and company will produce "The Ghost of Jerry Bundler." which is full of mysterious possibilities. Put out your lights!

.

The guests are assembled in the oldfashioned commercial room of an English inn. Outside the wind roars. The firelight flashes on trickling window panes. The talk turns on ghosts; and everyone is convinced that ghosts are impossible. "I don't know about that." says the ostler. "This house used to be haunted." He goes on to tell of the ostler. Jerry Bundler, who was also a h'zhwayman, whom the police found out and followed. They tracked him to the inn. his bedpost

"His ghost still haunts this inn." added the Boots. One of the guests thinks it's a great joke, and decides to make up as the ghost of Jerry Bundler. The practical man of the party says he will shoot the ghost if he sees him. WHAT HAPPENS?-2BL. Thursday, at 9 o'clock.

COMMENCING on Saturday, October 5, and each Saturday until further notice, there will be a broadcast through 2BL from the Speedway Royal, Moore Park, at 8.45 to 9.5 p.m. and 9.50 to 10.10 p.m.

THE National Broadcasting Orchestra, which will be heard through both Stations 2FC and 2BL on Monday and Friday nights, under the conductorship of Horace Keats, has been considerably strengthened by the inclusion of six members of the New South Wales Conservatorium Orchestra From October 7 the following comprise the personnel of the Orchestra :- Dulcie Blair, leader-violin; Vincent Aspey, violin; Max Saunders, violin; Marjorie Hinley, viola; Murielle Lang, 'cello; Louis Blitz, bass; Bede Connolly, flute; Joseph Post, oboe; Clive Amadio, clarinet; Laurence Toole, horn; J. Pheloung, trumpet; R. Pheloung, trombone; Charlesworth, tympani; as well as organ and piano.

()N October 6 Horace Keats, conducting the National Broadcasting Orchestra, will commence a series of Sunday evening reci-tuls. The first programme will feature the Unfinished Symphony and several numbers with choir, accompanied by the orchestra and organ. Many novelties will be included in this programme. The recital on October 27 will have the famous "1812 Overture" as the main item, also using the organ and choir in conjunction with the orchestra. quintet by Frank Bridge will also be included in this programme.

COODIE REEVE and Jack Lumsdaine will broadcast a novel little sketch on October 10 through 2FC. Both artists will play and sing their own compositions, which have been arranged to fit into the unique setting contrived by Miss Reeve.

The experiment lies not so much in the dramatic situation which furnishes the plot. for both Miss Reeve and Mr. Lumsdaine can handle the emotional moments with restraint and delicacy, but the sound effects are elaborate and take expert management.

TO celebrate the opening of the springsummer season of the Newcastle branch of the Roval Motor Yacht Club on Saturday, October 5, at Toronto, Lake Macquarie, a concert has been arranged at the club house, Toronto, and to be given by Ye Idlers. Ar-tists will include Syd. Shipway and company, Wally Baynes, Seg. Sergeant, the Four Wally Baynes, Seg. Sergeant, the Four Waifs, Ed. Wright, C. Ross, R. Potter, and Brunton Glbb. This concert will be broad-

cast through 2FC from 8 p.m. onwards. A MONG the lecturers for October is the Rev. F. H. Raward, of the Manly Methodist Church, who will speak for three Mon-days during October, his first being on October 7 from 2FC at 10 p.m., when he chooses as his subject "The Streets of London," to be followed by "Famous Restaurants of Lon-don" and "Boston, the American Athens." In addition, Mr. Raward speaks every Thurs-

2BL in the Magle Carpet Series. Mr. Raward :ays claims to having visited twenty-three different countries, and is the author of many unpublished diaries of his impressions of the countries he has visited. Mr. Raward is a journalist as well as a cleric, and many of his articles have been published in various papers.

day afternoon through

ev. F. H. RAWARD, 2FC, October 7. Rev

their pleasing solos and duets, have established themselves as firm favorites with listeners, will be on the air from 3LO on October 9 in some tuneful numbers. Both sisters have sung together since early child-hood, and have appeared in "presentation work" in most of the well-known picture

theatres throughout Australia.

DA and LORRAYNE WRIGHT, who, with

AILIKS OF The WEIEK

DAY SESSIONS

DAY SESSIONS. FRIDAY, OCTOBER 4--2BL: 10.40: A. C. C. Slevens, "Romance"; 1.15, Mrs. Meredith. Atkin-son, "An Australian in Venice"; 2.30, C. R. Hall, "What's in the Homeland"; 2.45, Major Sandford Morgan, "A Voyage on a Kelek." 2.F.C. Noon, Francis Juckson, "Edmund Burke, No. 1"; 2.2: Captain L. Roberts. "The Diamond Mining Industry"; 4.0, Redgum, "Gardening."

SATURDAY.--2BL: 10.10. G. W. Cooper, "Gar-dening": 10.40. A. C. C. Stevens, "Life's Little Problems."

MONDAY.--?BL: 10.40. A. C. C. Stevens, "Ro-mance": 1.15. Matron M'Millen, "Plunket Mother-craft": 2.30. Brunton Gibb, "Random Remarks"; 2.45. C. Price Conigrave, "Mountaineering in the Stirlings." 2FC: 12.0, V. C. Bell, "The Public Porum": 2.2, W. S. Reay, "Literary Personalities"; 4.0, A. S. Cochrane.

Cochrane. TUESDAY.-2BL: 10.40, A. C. C. Stevens, Humor': 1.15, Annie Hughes, "Palestine (where I have recently been!": 2.30, Fred Arlington-Burke, "Ireland-a Nation of Contradictions": 2.45, Tom Gurr, "With the Pilgrims to Meeca." 2FC: 1.20, Illustrated Music Lecturette; 2.2: Rose Antill de Wardren; 4.0. Louise Homfrey. "Impressions of a Wanderer."

WEDNESDAY.-2BL: 10.40, A. C. C. Stevens, Travel and Adventure": 1.15, Gdodle Reeve, Alds to Personality": 2.30, Dr. Harold Norrie. 'Gregory Blaxland''; 2.45, The Storyteller, "Random om Tales." 2FC: 12.0. Micheal Sawtell, "A Day in a Buffalo Camn

THURSOAY.--2BL: A. C. C. Stevens, "Histori-cal": 1.15 Mrs Mildred Muscio, "A Uniform Di-vorce Law": 2.30, Jean Armstrong, "What Would Gleopatra Say?": 2.45, F. H. Raward, "Venice. the World's Wonder City." 2FC: 12.0, Eleanor Ross, "With the Poets": 2.2, C. N. Baeyertz, "Spoken English."



Sir KEITH SMITH, who will give this week's Sunday Feature Talk from 2FC at 6.40, on "Commercial Aviation."

EVENING SESSIONS

FRIDAY.--2BL: 7.5. Claude Corbett, "Sport-ing": 9.30, Wallace Nelson, "My Greatest Agri-cultural Lecture" (humors of Parliament), 2FC: 9.5, C. N. Baeyertz, "Dialect Stories."

SUNDAY .- 2FC: 6.40, Sir Keith Smith.

MONDAY .- 2FC: F. H. Raward, "The Streets of London

TUESDAY .-- 2BL: 9.30, George Black, M.L.C., "In My Anecdotage."

WEDNESDAY .- 2BL: Graham Kent, "Bridge."

Friday, 4th October, 1929

WIRELESS WEEKLY

Amateur WRESTLING

Notes on the favorite holds of popular professional wrestlers, for the benefit of the amateur.

By FRED JOHNS

Official Describer of the Wrestling Contests for the A.B.C.

The writer has received numerous letters asking that the Stadium authorities be approached to arrange matches between certain favorite wrestlers of the fancy.

These requests have been handed to the Stadium authorities, who state that they fully realise and appreciate the keen interest that is being manifested by the huge audience of listeners-in, and will, as far as possible, use these requests as a guide for future matches. But the fact must be borne in mind that Stadiums, Ltd., bring out a



team of wrestlers from America under contract for a certain number of matches, and the contract must be fulfilled. Further, it would not do to work any one of them to a standstill by matching him every week as each must be rested. Everyone in Australia would like to have Pesek, Eustace, Browning, and Santel in action always. The wrestlers must be spelled to be at their best when called upon. We can all rest as-

sured that the wrestlers of our favor will be

well in the public eye before the season closes. While we are thinking well of the art of wrestling, and trying to study the various special holds of the masters of the mat, it is surprising that wrestling is not taken more seriously as a sport than it is at present As an amateur, I, personally, found it very disheartening to train for one competition series in a year—the State Boxing and "Trestling Championships, which are conducted by the New South Wales Sports Club.

Wrestling should be popular. I would like to see four or five competitions running throughout the winter, as is done in Melbourne and large country districts, and I'm sure it would give encouragement to the amateurs and make many more young men take on wrestling as a means of keeping fit Anyone wishing to join the New South Wales Wrestling Club, which meets on a Wednesday at Withrow's, in William Street, can do so by communicating with Mr. Withrow, who will be pleased to advise them fully.

The plates shown herewith depict the various favorite holds of the wrestlers named.

BROWNING AND PARTNER

(1) The referee hold. After shaking, the contestants come together in this manner. Each usually has one hand on his opponent's neck, and both men look for an opening into which his adversary can be drawn.

(2) Standing side head lock, or side chancery. The opportunity to secure this hold may be offered from the referee hold, shown on Plate 1, by slipping your left arm around your opponent's neck, stepping sideways at the same time, and locking both of your hands as shown.

(3) Bringing your opponent to the mat from the side head hold. Keeping a firm hold of the head, step smartly in underneath your opponent, using your back as a lever, jerk down on the head, and swing your left shoulder towards the ground. Your opponent comes over your back and lands on the mat heavily.

(4) Pinning from a head lock. You now have your opponent on the mat; retain a firm hold. Swing your legs around at right angles to him and lean back and put all



your weight on your adversary, and you can easily secure a fall.

EUSTACE AND PARTNER.

(5) Double wrist lock, standing. This hold is taken from a standing position. You grasp your opponent's left wrist in your right hand, reach over in back with your left arm, taking hold of your right wrist, and locking it as illustrated. Push his wrist back as far as possible, falling backwards on your shoulder, carrying him over.

(6) Fall from double wrist lock with head scissors. By carrying over your opponent, as explained above, he is now brought to the mat. But while he is falling, you shift into a position that will enable you to secure a head scissors combined with a double wrist lock, as shown above, thereby securing a fall

1all. (7) Short arm scissors. This hold is better described in the illustration than by word. The elbow is scissored between the legs, from the wrist lock position, and the legs used to scissor the elbow instead of the head. Put your own wrist through the elbow, using it as a toggle. Your opponent's shoulders can be pinned to the mat, and he can be made to suffer severe pain as you increase the pressure on your legs.

A N original vocal and instrumental programme will be presented from 3LO on October 7, when listeners will be taken to every form of entertainment in turn. Commencing with a peep at a vaudeville performance, they will be whisked off to the time-honored circus, where the clown will crack some amusing jokes.

The next step will be to a popular musical comedy with its liiting melodies, and, by way of a change, a little drama will follow. The finale will come with passages from grand opera, when gems from "Il Trovatore" will be given. Popular vocalists and novelty instrumentalists will be included in the programme, assisted by the National Broadcasting Orchestra.

THE National Broadcasting Orchestra, which will be heard through both 2FC and 2BL on Monday and Friday nights, under the conductorship of Horace Keats. has been considerably strengthened by the inclusion of six members of the New South Wales Conservatorium Orchestra.



Incorporating "Radio in Australia and New Zealand"

FRIDAY. OCTOBER 4. 1929.

THE DOMAIN IN THE DRABING ROOM

W E have been hearing a lot of political speeches over the radio during the last few weeks. It is interesting to note the inexperience of otherwise hardened speech-makers with broadcasting methods.

Old theatrical people know that it helps an actor or an actress to single out a person in the audience and roplay to that person. Successful radio announcers will tell you that when they face the microphone they try to put themselves in the attitude of one speaking to some individual.

Yet most of our political speechmakers talk away as if they were facing hundreds of people en masse. The whole secret of successful broadcasting, it seems to us, is illustrated in this small error of the imagination.

Broadcast speakers, performers, and producers must recognise the need of limiting their imaginations. Although collectively great, in its single units the radio audience is seldom of large proportions.

It does not react to the same infections suggestion as a crowd in a hall or theatre for instance. The peculiar, and often pleasant, self-hypnosis which seizes individuals in a mass, rationalises otherwise comic demonstrations or makes more enjoyable what might have been a dull performance soberly considered, is absent in the small individual radio audiences.

Except only in that rare instance when an announcer (generally from the ringside) by an extraordinary stianlus of the imagination is able to vreate the illusion that the listener is present in a crowd. But the political speaker, ostensibly appealing to reason, fails here. His excited words over the air are, more often thao he realises, coldly analysed to his detriment.

The problems of individual and group psychology have long occupied the attention of the most learned psychologists with practical results for the political speaker, the broadcast performer, and the programme arranger. Fortunately for these poor people, however, there is no need, in a search for desirable illumination, to consign them acres and acres of what would he very dult reading.

If a pardonable vanity has lent magnitude to the audiences of their imagination, then the thing for them to remember is the foolish pieture of a wildly gesticulating figure performing before one or two people alone in a room. The successful broadcaster, especially the political speaker, is the one who remembers this and who speaks before the microphone with restraint, as he would in the drawing or living room of the listener's home.

Early Condensers Used to Shock Animals and Man

While mishandled condensers often cause unpleasant shocks to careless radio men and experimenters, that

is not their prime function to-day. Yet time was when the earliest forms of condensers were employed to shock animals and man. It appears that almost two hundred years ago the condenser phenomenon was discussed by learned and lay persons with as much excitement as we now discuss radio and aviation.

Gralath, one of the electrical experimenters of the eighteenth century', maintained that the discharge of the early condensers or Leyden jars, caused nose bleed with some persons. He wrote to one Reaumur, and referred to "a new and terrible experiment," and said that his arm and body "were effected in a manner more terrible than I can express." The Abbe Nollet, in France, used to kill birds with the discharge to entertain the ladies of the court. Gralath tried to emulate him, but succeeded in killing beetles and worms. Later, by grouping several Leyden jars, he succeeded in killing birds easily.

Succeeded in Kning ords easily. The most daring and imaginative of all experimenters was certainly the Abbe Nollet. To amuse the French King he sent a discharge through 180 soldiers, and later through a line of Carthusian monks 900 leet long. He electrified seeds, vegetables, and animals, and noted the effect with painstaking accuracy.

Later came Benjamin Franklin, who conducted the first scientific research that threw real light on the action of the electric condenser.

To-day, the condenser is the basis of radio communication. It plays a leading role in the transmitter, the receiver, and the power unit. Its shocking power is confined to rare accident

SUPER HET BECOMES A SUPER----!



James and John consider Mr. Hull's most recent achievement.

Safety Valve

TWO DIFFERING VIEWS OF THE A B C

Re the New Era

Dear Sir,-On the inaugural night of the A.B.C.'s control of broadcast programmes Mr. Stuart F. Doyle told us of the wonderful things his company was going to do to broadcasting. Highly-paid artists were to be a prominent feature of the programmes, very select orchestras were to supply dinner and other music. Wonderful dance bands would, on certain evenings, provide dance music until 12 o'clock, and never, never, on any occasion whatever, would more than one station be heard at one time putting out a spoken item.

Among other things, Mr. Stuart F. Doyle did not tell us, however, was that the published programmes would not be adhered to. That those very highly-paid artists would be very few and far between. That the orchestras, both dinner and dance, would soon dwindle away to gramophones. That more often than not the same artists would be broadcast from two stations, and that the

broadcast from two stations, and that the "spoof" about only one station at any time on spoken items was only "spoof." Candidly, when the old companies were providing the programmes they were often poor, but now they are very rarely anything else. From all directions one hears the same oplnion expressed: "A change for the worse." Taking my own case, I am what might be termed a distant listener. living as I do in

termed a distant listener, living as I do in the coastal belt of Central Queensland. Early in the year I purchased an expensive multivalve receiving set, but am now thinking I would have done much better to have gone in for a good gramophone. Sometimes, after trying all round the different stations for an hour or so, the set is switched off in disgust. There is one consolation, the A.B.C. cannot mess up the "B" class stations, but it is mess up the 'B' class stations, but it is manifestly unfair that the "Octopus" should get the "kudos" while putting out pro-grammes vastly inferior to the "B" class stations, who get what they can make by advertising.

Unless a radical change occurs in the standard of programmes mine is one license that will not be renewed next year, although I have held one since 1925.—Yours, etc.,

"ALL BLUFF COMPANY."

Yaamba, Q.

Wish for Nothing Better

Dear Sir,-I have read with a good deal or interest the criticism of station 2FC in your "Safety Valve." I should like to give my ideas on this subject. I get 2FC as clear as 5CL or 3LO. without noise, hum, or background noises. I am only three miles from 5CL station, and get no interference other than atmospherics at odd occasions. I think your critics must be in poor reception locallties, or their sets are at fault. I am listen-ing to their programme now, and wish for nothing better. I have a 4 valve electric. home made, "Bitzer" set, with Baby Grand speaker.

I hope your critics will look elsewhere for their noises, etc., and not blame the trans-mission all the time.—Yours, etc., : "A.W.W."

Allenby, S.A.

Whispering "Louise" Dear Sir.-I wish to express my disgust at the way 2FC treated listeners this morning the way 2FC treated listeners this morning (Sept. 23). I tuned in and heard the fol-lowing:—"My next number will be a request, 'Louise," then followed about two minutes of organ music, when it was cut off, and "2FC—We are interrupting the organ solo, as it is a copyright number; in the mean-time we will have a studio Item." After this item, "We will now cross over for further organ solos." After a couple of min-utes' silence: "As the time for the organ

tuesde of gan source. After a couple of min-utes' silence: "As the time for the organ recital is almost exhausted, we will continue from the studio." I then shut down with disgust.

I would like to ask through your paper why "Louise" was cut off on account of it being a copyright piece when about half-an-hour previous I heard it played on the organ from 2KY? In conclusion from 2KY? In conclusion, I wish to state that had this happened last week before I renewed my licence I would have saved 24/. as I am about fed up with the new company. The old company was bad enough, but the new one is worse —Yours, etc., "DISGUSTED."

.

Enfield.

"A Mistake"

Dear Sir .--- I am sending this letter to correct the previous one concerning the American stations that I got since I sent the last letter. I heard this station again, giving the call thus. "KHJ, Los Angeles. California." not "KHK," which is very much alike. The other station is in Hollywood. California, but I have not had the call sign of this station yet, which is working on about 320 metres. and the other one is working on about 330 metres, and I have since had this station about R.3.—Yours, etc..

Wollongong. K. FARQUHAR.

Shooting Trouble

Trouble shooting is made easy with the aid of the WIRELESS WEEKLY Trouble Finding Chart. Presented in the form of a handy 16-page supplement, it will be given away free with each number of WIRELESS WEEKLY next week.

You cannot afford to miss getting this useful little booklet-and it's free! A keen demand for it is expected, and as a necessarily limited number is printed readers will be wise to place their order with their newsagent now.

Our Old Friend, "R.F.M."

Dear Sir,-In reply to A.V.E., Scone (13.9.29), re foreign station he has been receiving nightly. I beg to state that this is RFM. Russia, on 72 metres. I have been re-ceiving this station this last 18 months or p.m. till 10 p.m., Sydney time. However, I sat up to high to discover this mysterious station, and tuned in our old friend, RFM, now changed to a number that I just can't place. He used to announce fairly often his call sign in English, but since the change he very seldom announces his new call sign (number), and held him from 11 o'clock till 11.45 o'clock to-night.

Beaders are urged to express their opinions on matters pertain-ing to broadcasting. If you have some griewance, if you have some constructive criti-elim chance of appression y-yrour safety vaire. The editor assumes no re-sponibility for state-ments made by readers and published on this page. Anobymous lettery are not considered.

A.V.E., Scone, was listening, he talked If a lot, sang a few songs, and finally played instrumental music, which came through very clear on the loud speaker, equal in volume to local "B" class stations, from 2KY down.

This Russian station puts over a lot of twoact plays, mostly a lady and a gentleman taking part. They speak very quickly in their own language. It appears that they have the lady announcing. Other short-wave stations coming in (Holland) exceptionally well are PCJ and WGY. America. On the long-waves New Zealand, Japan-

ese, and American stations are received at fair speaker strength. KNX on 285 metres, the Californian station, is coming in nightly from 6.30 o'clock. Sydney time, excellent phone strength on two valves, and weak on the speaker using three-valves .-- Yours, etc., J. J. GANNON. Woy Woy.

Jokes Aside

Dear Sir .- In regard to Y.A.M., I think him very unfair. Who ever heard of the poor announcer at 2FC eating toast while speaking, and, besides, it is not toast, it sounds an all-day sucker to me! And where else would he put it but in his cheek? The poor man has his hands full. And, as for getting your money's worth—forget it. But. jokes aside, it is not the announcer

who is at fault, but the wonky transmission. I hope (in vain?) that there will be a change for good in the future.-Yours. etc.

"C.M.R." Newtown.

Over the Waves

Dear Sir,-We've heard all about the wonderful reception-from the biggest sets down to the humble little crystals-so now it is the loud-speaker's turn.

Mine is just the old type horn "Amplion." Before the neighbors got sets of their own, I used to put the speaker out the window. and folk within about half a mile radius used to enjoy the music. A good while ago the Malvern District Band put over some items from Sydney. They came through very well, and so out the window went the speaker for the edification of the neighbors.

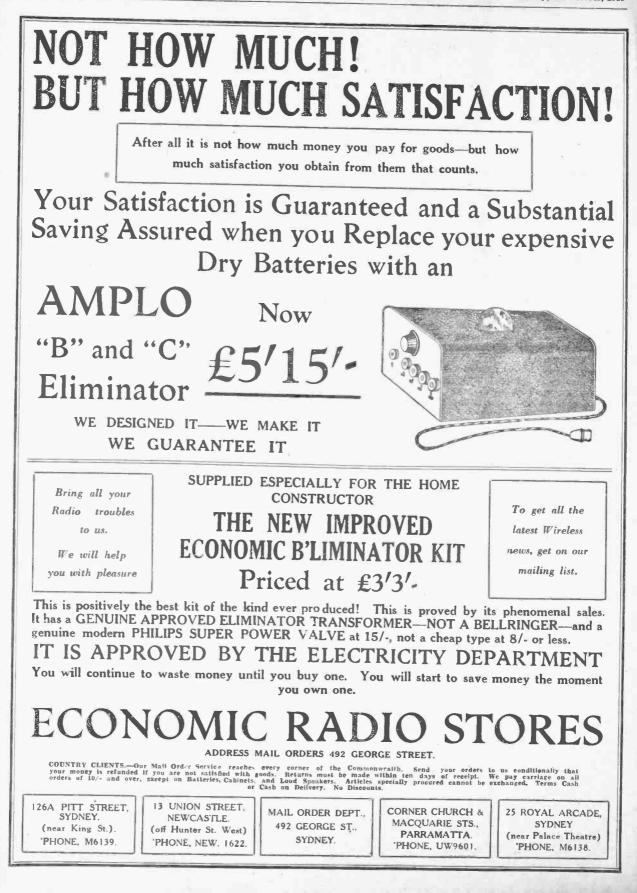
Blest If I didn't read in the paper two days later that they had heard that band in New Zealand.—Yours, etc...

Mandurama.

"UCKLE."

Page Eighteen

Friday, 4th October, 1929



Friday, 4th October, 1929

This week Mr. Bull explains how to adjust the 1930 Super, and gives many hints for single operation.



Next week a story on DX experiences with the Super-het will be published. Hun-dreds of fams will be waiting for this.

p 1930



T is quite difficult to know just how much to say and how much to leave unsaid in the description of a receiver such as this one. As it is, we have not attempted great detail since we believe that the e of enthusiast who will be inclined to any type build the receiver will not require it.

era

For instance, we have omitted the usual picture-plan of the wiring. In the first place we considered that such a plan would be en-tirely unwanted by the set-builder in this particular instance. Then we found by experiment that in any case a picture-plan was such a mess that it could never be of the such a mess that it could never be of the same value as the ordinary circuit, even to the man who has not yet learned to under-stand them. We wish to make it clear, how-ever, that if the description of the construction of the receiver was not presented in sufficient detail in the first of these twc articles we would be pleased to make any additions for which we find a demand.

Aside from the assembly of the receiver proper there is the construction or provision of the power supply. The first requirement is a filament transformer. If a UX-245 power valve is used, a single four volt winding will be sufficient. This will be connected directly to the first six valves while it will supply the power valve through a one ohm. resistor. This resistor should be included in one of the leads to the UX-245 between the filament winding and the point where the centre-tap resistor is connected. In this way the centretap resistor provides a centre-tap of the actual voltage reaching the power valve filament and not of the four volt output of the transformer. During experiments with various types of power supply, a Philips four volt transformer was used in this manner. Other arrangements may be desirable when fila-ment windings are included on the power transformer used also for plate supply

FOR PLATE VOLTAGE

The plate supply requirements are not at all complex. All that is needed is a supply of about 220 or 230 volts at about 45 milli-amperes. The simplification of the audio frequency amplifier in the receiver and the inclusion in the set of all voltage drop resistors make it possible to use merely a transformer, rectifier and a simple filter. Any complete "B" supply unit may be used, providing its ratings are in accordance with the figures given. If such a unit is already available it could wel! be put into service though its voltage divider resistors and filters will not be justifying their existence.

Figure 1. is the wiring diagram of one of the power supply units used with the superheterodyne. It includes a Pilot power trans-

former, choke unit and condenser block. The high voltage windings-270 volts on either side of the centre-tap-feed a U5 rectifier the filament of which is lighted from one of the five volt windings provided on the power transformer. The choke is connected in the conventional manner, and sections of the condenser block are piled across the line on both sides of the choke unit and at its centre point. The distribution of these capacities is indicated by the numbers on the diagram. which correspond with those on the terminals the condenser block. A standard Pilot voltage divider is connected across the output of the eliminator unit, not because it is absolutely necessary but simply to avoid the development of high peak voltages across the filter system when the eliminator is not feeding the receiver. The shunted resistor R1 serves to maintain a drain on the output and so reduces the peak voltage across the output of the rectifier at all times.

FILAMENT POWER

There is no four volt winding on the Pilot power transformer but four volts may be ob-

COMPLETE LIST OF PARTS

Six UY type valve sockets. Pilot. One UX type socket, Emmco. Three 0003 mfd. Formodensers. V1, V2, V4, V5, V6-Five Phillips E442 Pilot

valves. V3-One Philips E415 valve. V7-One Osran P625A valve. Pilot Double drum dial. Cl. C2-Three Pilot .0005 variable con-densers. It to L7-Redicts.

densers. Li to L7-Radiokes Coil Kit (special). De-scribed last week. R.F.C.-One Radiokes radio frequency

R.F.C.—One Radiokes radio induction flow of the resistors (No. 953).
 R.J.—Pive Pilot small 10,000ohm flow resistors.
 R.J. R.J. R.H.—Three Pilot centre tapped flow resistors.
 R.B.—Two Ferranti 25,000ohm flow resistors.
 R.J.—Two Ferranti 10,000ohm flow resistors.

And Ferfalts 10:00001m fixed resistors.
 Resolve Ferranti 10:00001m fixed resistors.
 Resolve Ferranti 10:00001m fixed resistors.
 Resolve Jergohn gridlesk.
 Ril, Riz-Two 50:0000hm Fliot Volumgrads C4-Sixteen Hydra Sprid fixed condensers (500 volt d.c.).
 Cont metal base (Prima Donna Gabinei C0.). 24in. x 14in.
 Six metal shields from same people, 3½in. high. Three-ply panel. 5-16in. thick, 24in. x 3in.
 The following units necessary only if a standard "B" eliminator is not used.
 One Pilot Power Transformer, type 398.
 One Pilot voltage divider resistor.
 One Vid voltage divider resistor.
 One Vid voltage divider resistor.

tained by connecting the two smaller filament windings in series. In our transformer the connections were as indicated by the numbers on the diagram, but in some instances it may be found that this connection causes the output of the two windings to be in opposition. The remedy, of course, will be to reverse one of the windings. One side of this four volt supply is connected with the negative high voltage lead—which goes to the shielding of the set-in order to reduce the hum. A centre-tap is not necessary since the valves supplied by this winding are all of the indirectly heated type. For the supply of the P-624-A the remaining five volt winding is employed. Though rated at five volts the output of this winding at the low load taken by the one valve is sufficient for the purpose. The centre-tap on the winding is not used since this is provided the in the wiring of the receiver proper. Little need be said concerning the actual construction of the power suply unit. In the final assembly this unit probably would be housed inside some sort of a console cabinet and for this reason the simple assembly of the apparatus on a baseboard probably will be all that is required. As in the case of any audio amplifier or plate supply unit we suggest that the wiring be carried out with ordinary rubber covered flexible.

In the description of the receiver, no mention was made of any terminals or battery plug. As a matter of fact, no such connection devices have as yet been fitted to the original receiver since we prefer to solder flexible leads a couple of feet long to the necessary points in the receiver, running them in a bunch to the power supply unit. Naturally the builder of the set may provide any sort of terminals or battery plug which happen to be available. The only point to watch is that the wires supplying the filaments of the six four volt valves is sufficiently heavy to avoid a serious voltage drop. We have made use of a pair of 5 ampere flexible for each of the supply leads.

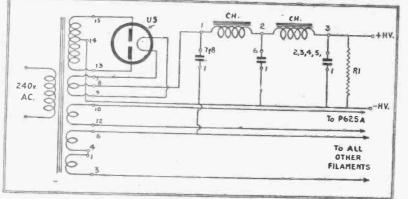
For the work of adjusting the receiver it is as well to mount it, together with the power supply, on a table where lots of elbow room is available.

ADJUSTING BIAS RESISTORS

Before any power is switched on it will be necessary to turn the receiver up on its back edge in order to make certain that all bias resistors are in order. The first valve of the set gets its bias from the resistor marked RI in the main circuit diagram. This is one of the three Pilot centre-tapped resistors speci-fied in the list of parts, but not all of it is

Page Twenty

ADJUSTMENT AND TUNING



The circuit of the power supply system which was used with the Super.

used. The resistor must be connected so that only half of it—450 ohms—is in the circuit.

Both the first and second detector valves obtain their blas from 15,000 ohm resistors The connections of these resistors should therefore be again checked. The two intermediate amplifiers obtain their bias from a common resistor shown as R3. This is one of the Pilot 900 ohm resistors but in this case the two halves of the resistor are connected in parallel in order to give a value of 225 ohms. This value is half that of the bias resistor for the first value since the plate current for two valves is flowing through it. The bias for the power valve is derived from the drop across the resistor marked R4. The value and make of this resistor were not mentioned in the list of parts since we had hoped to get hold of something more suitable before this second article went to press The resister used in our receiver is again one of the Pilot 900 ohms centre-tapped reststors, but this time all of the 900 ohms is in circuit. A slightly higher value would be in order for this resistor according to the characteristics of both the P-625-A and the UX245 but in practice it appears to work quite satisfactorily. Resistor R9, which was not mentioned in the list of parts, is a 2 megohm gridlead of whatever make is available

And now, with the bias arrangements in order, and with all other wiring carefully checked, the power may be switched on. If it is available, a milliameter in the negative high voltage lead would be of distinct value, as would be a high voltage voltmeter. Even without either of these instruments, however there is no reason why the receiver should not be made to operate satisfactorily providing the ratings of the power supply apparratus and all resistors are strictly in accordance with those specified.

THE AERIAL

It is necessary now to provide some sort of an antenna. As may be imagined from the amplification made possible by the receiver, the aerial need not be a very elaborate structure. At the same time, however, it is of considerable importance. It will be found that a piece of wire about two feet long will enable the outfit to bring in any of the Australian or New Zealand stations, but the enormous amplification then required will result in the generation of valve "hiss." A longer aerial avoids this trouble and gives the set a somewhat reasonable input to work on As the result of much experiment we have decided that the desirable aerial is a piece of wire 10 to 12 feet long running either undet the carpet or along the picture rail.

The connection of the shielding to an ordinary "water-pipe" ground will be found of distinct advantage, but failing this it should be connected to the grounded side of the lighting mains through a 1 mfd 1000 volt fixed condenser.

With the aerial connected, the first operation is to adjust the tuning condensers of the first radio frequency stage and detector in order that they may "track" accurately across the broadcast band. To accomplish this, the normal flexible lead to the plate terminal of the first detector (at the top of the valve) is removed. A wire is then run from this plate terminal to the wire which normally connects with the plate of the second detector. This simple change in connections converts the receiver into a simple three valve set with one radio frequency stage. With it a local or powerful station may then be tuned in and the two condensers adjusted. If the coils and the condensers are well matched it will be found that a setting for maximum signals near the top of the band will serve equally well on wavelengths near the bottom of the band. In our receiver the two condensers "track" almost perfectly and we do not anticipate that any trouble will be experienced on this score. With this three valve connection, incidentally, there should be no tendency for the first valve to oscillate at any place on the wave-band. Fur-

ther, the selectivity should be at least good enough to provide lots of space between local stations, and the reproduction from the better transmitters should be crisp and relatively free from distortion. If the oscillator valve is oscillating as it should, it will be possible to tune to a station near the bottom of the band and heterodyne the signal when the oscillator condenser is tuned towards its maximuun setting. If no sound is heard at any setting of the oscillator dial it is fairly certain that the oscillator valve is not functioning properly. Providing that its wiring is in order, about the only possible fault is a reversal of the plate or grid coil connections.

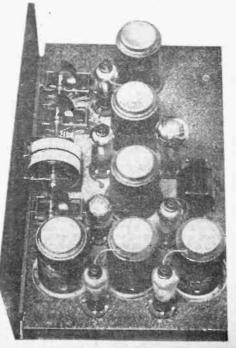
At this stage the set should be converted into a super-heterodyne without any intermediate frequency amplifiers. This is accomplished by taking the lead from the plate of the first detector to the lead which normally runs to the plate of the second intermediate frequency amplifier, returning the normal lead to the plate of the second detector. The plate terminals being at the top of the valves makes such a change merely a matter of a few moments.

By putting a screwdriver through the hole in the side of the shield of the rearmost intermediate transformer the knob of the Formodenser across the secondary of this transformer should now be set about two revo-

lutions below setting the for maximum condenses at the setting for some loud signal, it should be possible to again tune-in signal, it should be possible to again tune-in the signal, super-heterodyne fashion, by manipulation of the oscillator condenser. The intermediate frequency used in this receiver is of the order of 250 kilocycles, and when receiving a signal the oscillator is therefore running at a frequency 250 kilocycles dif-ferent from that of the transmitter. If the ferent from that of the transmitter. If the first detector circuits tune down to 200 meters the oscillator must therefore tune down to about 175 meters, and an entirely different waveband must be covered by it. As a result of this, the two tuning dials cannot be expected to track exactly all across the band. Their readings should at least be similar, however, and this will be so if they are made to run together at about the middle of the band. Minor adjustments on the reading of the oscillator dial are made possible by small changes of the intermediate fre-quency, but if considerable differences exist it is as well to correct them by taking off or adding a few turns to the grid winding of oscillator. The important point to remember is that the oscillator setting should be de-termined and adjusted without the intermediate amplifier v 5 in operation, but with the last of the th. we intermediate trans-formers in circuit. When the oscillator has been adjusted to track with the other dial at its centre position the set-screws on the condenser and dial should then be tightened and not touched again. Nor should any further change be made in the Formodenser of the third intermediate transformer.

INTERMEDIATE TRANSFORMER TUNING.

The next step is to tune in a station and set the volume control so that it is just audible. The plate lead of the first detector should be run to the fiextible lead, which normally goes to the plate of the first intermediate amplifier, the plate lead of the second amplifier being re-connected in the normal manner. The set now is operating with one intermediate amplifier valve and two intermediate transformers, one of which has yet to be tuned. With a screwdriver



WIRELESS WEEKLY

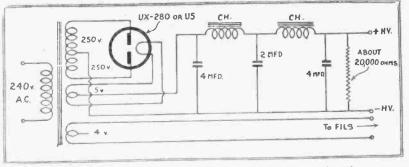
Friday, 4th October, 1929

DISCUSSED IN FULL DETAIL

through the hole in the second transformer shield this tuning may now be accomplished, leaving every other adjustment on the receiver exactly as it was. With the second transformer in tune a decided increase in signal strength should be noted, and the output should respond more than ever to an increase in the setting of the volume control.

The final step is the tuning of the first intermediate transformer. This is accom-plished by leaving the same station tuned in (with the volume control at a low setting) and by placing the first detector plate lead in its normal position, the first intermediate amplifier plate lead also. Then the first intermediate transformer secondary is tuned as in the previous instances. At this stage the signal, if it is from a local station, should be exceedingly strong with anything but a low setting on the volume control, and but a low setting on the volume control, and attention may now well be directed to a process of checking up on signals from greater distances. The tuning should be so sharp on the oscillator dial that local sta-tions will disappear within a few degrees, and no difficulty should be experienced in and no dimiculty should be experienced in getting into the territory where distant sig-nals are to be found. With the volume con-trol at about half setting, the business of searching for signals is accomplished as in any other two-control set. When the two dials are in the correct relationship there will be the rumbling of "background" noises, but immediately they get "out of step" there will be the rumbling of "background" noises, ing for the "background" as the dials are advanced they can readily be kept at the

correct relative settings. We do not propose to enter into further discussion concerning the capabilities of the receiver, but it is possible that an outline of its normal performance characteristics may serve to assist builders of the set in checking on their final adjustments.



Showing the fundamental requirements in a power supply for the super-heterodyne.

2BL.

Our experimental work on the receiver was carried out on the ground floor of a building at Potts Point, where interference from lift motors and electric refrigerators is as serious as the screening effect of neighboring high buildings. With a 10-foot antenna on the floor, the signals from 3LO or 4QG overload the output valve long before the intermediate amplifier gets into its stride. Signals from 2YA or 1YA, under normal conditions, overload the power valve with the volume control turned almost to its maximum setting. In a better location, such as at Double Bay, the volume control setting for the New Zealand stations is approximately that used for the reception of 3LO at Potts Point.

In our own receiver we have reduced the selectivity by detuning the middle intermediate frequency transformer slightly. This gives a somewhat fint-topped frequency characteristic and avoids the cutting of sideband frequencies. With this detuning, the selectivity of the receiver is completely satisfactory. Normally, there are about six de-

Trouble Finding a Maran NOVOY AND The poles CHART The second With every issue of next week's Wireless Weekly this-16page supplement, containing a vast amount of valuable data for radio fans, will be given away. The Wireless Weekly Trouble Finding Chart enables every listener-in to trace and remedy immediately all the little faults which frequently arise in radio All the experience ob-tained in conducting the inconducting the conducting the service pages has gone into this booklet. Every kind of general trouble likely to be met with in radio sets is clas-sified in a quickly attainable way. No radio fan can afford to be without it-and remember. It Ganot be bought. It is given away free with LESES WEEKLY next weck. receivers. A keen demand is expected, and readers are ad-vised to place their order with their newsagent as soon as possible.

We anticipate that there will be some difficulties to be experienced by builders of the receiver, and in such cases we will be pleased to endeavor to be of assistance. At the same time, we know that many will be able to make the receiver perform right from the first moment, just as was our good fortune. We would be particularly glad to hear of the experiences of builders of the receiver—especially from enthusiasts living at locations where the ever-limiting "background" noises are of a low order.

grees of absolute silence between 3LO and

MANY listeners, who are interested in the absorbing study of astronomy will appreciate the talk to be given from 3LO on October 8 in connection with the University Extension Lectures, when Prof. E. J. Hartung, D.Sc., will speak on "The Size of the Stars."

It has long been a matter of conjecture as to the size of the better known stars—whether certain planets are inhabited, and the distance between the stars and the Earth. Through the medium of these lectures **Prof.** Hartung is giving some definite information regarding these matters.

0 0

THE series of talks from 3LO dealing with the pre-school child is being followed with great interest by many mothers who are finding solutions to difficult little problems. For instance, there is always the difficulty of getting a small child to eat its proper food; many children form a habit of picking at their food like little birds, but cannot be persuaded to eat "a good square meal."

This is followed by little snacks, biscuits, etc., "in between times," and thus a habit is formed which is extremely difficult to break. The question "Do you find it difficult to get your child to eat proper food?" will be dealt with by Miss M. Lush from 3AR on October 9.

. . .

PRICE CORRECTION.

IN Manufacturers' Products Pty., Ltd., advertisement, WIRELESS WEEKLY, September 27, Super Stratelyne Condensera were wrongly quoted at 42/6. The correct price is 12/6. Also Bakelite Rheostats were quoted at 3/6. The correct price is 4/6.



Greater Volume and with Reproduction true as the original

Openate 340 A.C.



Price of Unit with 280 Valve €17/10/-

The Jensen Auditorium Speaker Unit illustrated above is the Model DAS-AC, designed for use with radio sets or phonographs employing amplifer tubes up to and including type UX250 or CX350 in push-puil. The perfor-mance is equally extraordinary on either hiele or low owner innus: either high or low power input. WATTE FOR ELLISTRATED POLDER

119-123 PITT STREET, SYDNEY



Mica Moulded and Genuine Mansbridge CONDENSERS



The most dependable Condensers in the World. Known and used everywhere because of their Reliability and Efficiency

All T.C.C. Con-

densers are sub-

jected to a "Per-

od" Test Instead of the mere "Flash" Test fre-

quently used.

00025 MFD

Permanent. Calibrated.

Accurate. Guaranteed. ALL RADIO DEALERS (W-McP.)

WIRELESS WEEKLY

The Simplest Explanation of a Receiver

(Continued from Page 10.)

action." The improvement provided for an additional coll (for the experiment, try 30 turns) known as the reaction, or tickler coll, which was placed on the other end of the secondary (usually inside the coil former) and made free to rotate inside the former, or to be adjustable with respect to the secondary.

As stated before, a current passing through a coil will cause magnetic lines of force to be induced in an adjacent coll. This hap-pens with the reaction coll. The signal, after being rectified, passes out through the plate of the valve, and through the reaction coll. On its way lines of force are thrown out, and these are induced into the secondary coil again, where, once more, they are passed into the valve and consequently greatly amplified. Fig. 15.

This method of regeneration is not very popular to-day. One of the oldest methods, i.e., the Reinartz, is still very popular, however. It will be seen (Fig. 16) that control of regeneration is by an additional condenser, which varies the capacity between the secondary and reaction coils. Several other methods are also used, but they will not concern us greatly here.

Perhaps the hardest point the beginner strikes is that concerning the operation of the telephones or loud speaker.

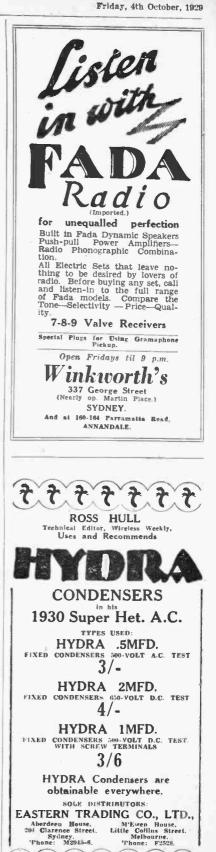
It should be a simple matter to under-stand these if the reader has thoroughly grasped what has been said previously on the subject of magnetic lines of force. When a current of electricity is passed through a coil. magnetic lines of force emanate. The reader can probably understand why these are called "lines of force," but cannot see how they come to be called "magnetic lines The reason is that they tend to of force." attract magnetic substances such as iron and steel. A coil becomes an "electro-magnet," when it has an iron core. If the core were loose, and a good electro-magnet was used (I described some in "Proving Radio") it would be found that the iron would be sucked into the centre of the coil, and held quite tightly until the current was cut off.

If we unscrew the cap of a pair of telephones and remove the thin diaphragm in a sideways motion (don't lift, or you may bend it) we should find that two electro-magnets form the whole of the inside of the telephone (with the exception, of course, of the diaphragm).

Now the signal, which has been rectified and is an electric current, varying in intensity, is passed through the windings of the electro-magnets. When this happens the diaphragm is drawn at varying intensity to the poles of the electro-magnets, and this movement causes sound waves, which are actual reproductions of the sound waves be-ing transmitted from the broadcasting station to which our receiver is tuned.

TOR 2FC on Sunday, October 6, from 8 till 10 p.m., a special musical programme is being arranged by Mr. Horace Keats, con-ductor of the National Broadcasting Or-chestra. The orchestra will be heard in many classic gems, whilst organ solos on the National Broadcasting Organ will be given by Mr. G. Vern Barnett, who will also be

heard in association with the orchestra. Violin solos will be given by Miss Dulcle Blair, the wireless singers under the con-ductorship of Mr. Joseph Post will also render items, and there will be songs by Stanley Clarkson and by a leading Sydney soprano.



そ

=#

WIRELESS WEEKLY

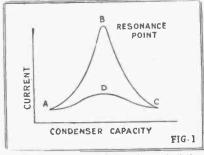
Combining Inductance and Capacity

N the last few issues we have treated inductance (L), and capacity (C). Combining these two we have what is known as an oscillatory ciruit (LC).

The reader should understand that when a condenser is removed from its charging source the condenser may hold its charge for some time, depending mainly upon the efficiency of the dielectric. The condenser can be discharged by connecting the two sets of plates together by a wire. As the condenser is discharged a convection spark can be seen. A current indicating device in series with the condenser and the wire shorting it would show the passage of a considerable amount of electricity. When the spark ceases, it appears that there is only one rush of current, but as a matter of fact there are several such passages of current in a very short time.

OSCILLATING CIRCUITS.

This is known as an oscillatory discharge. If we connect an inductance across the charged condenser, the charge on the positive plate rushes on to the other, which becomes positive and discharges back to the other plate. Inductance assists the maintenance of oscillation. In the case of a shorted condenser some energy is given up in the light, heat, and sound of the spark.



and in the resistance of the wire and of the dielectric (the air gap). This dissipation of energy soon uses up the electricity stored in the condenser, and the oscillations cease.

With a given charge in the condenser the number of oscillations depends directly on the resistance of the paths between the plates. In general there will be several cycles of current, each of smaller amplitude than the preceding one. This dying out of a current is called damping.

If the condenser plates were connected together by a high resistance, the discharge may take place so slowly that no reversal of current will occur.

With an inductance coil connected in series with a charged condenser, very good control of the number of oscillations can be obtained, as well as of their frequency. By adjusting the reactances of the inductance and capacity to suitable values the current may be made to oscillate many times before it dies away.

Here, as elsewhere, the resistance in the circuit or any added resistance materially affects the damping of the oscillatory cir-



cuit. In general the resistance and capacity tend to dampen the current rapidly, while the inductance tends to prolong it.

In order to have low damping, which is usually desired, there must be high value of inductance and low values or resistance and capacity.

The formula for calculating the frequency of an oscillatory current established in a circuit is very complicated, and happily need not be dealt with here. It should, however, be noted that if the resistance in the circuit exceeds a certain proportion to the other factors, the circuit may not oscillate.

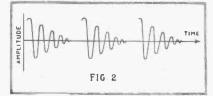
RESONANCE.

The effect of resonance in a series oscillatory circuit and the effect of resistance are shown in Fig. 1.

At A, with a certain condenser setting below resonance, the alternating current through the oscillatory circuit is small. As the capacity setting is increased, the current increases until point B is reached, at which point the inductive and capacitive reactance balance, and the current is limited by the total resistance present in the circuit.

If the capacity in the circuit is increased further the current rapidly decreases, showing that the impedance of the combination is again greater than at resonance. At C the current will have been reduced to about its value at A. Beyond the limits of A and C the current will likewise be small.

With a relatively high resistance in series with the same inductance and capacity, a resonance point will be found with the same value of capacity as before, as indicated at D. The resistance is then so large that it limits the maximum value of the current to a



greater extent than formerly. It was considered that the inductance of the coil was kept constant while the references above were made.

In all radio work tuned circuits are used a great deal. "Tuning" a receiver simply means changing the values of inductance and capacity so that the resonant frequency of the circuit is of the desired value.

There are several ways of bringing about this change. The most popular method is to use a condenser, the capacity of which is variable by means of moving plates. This component, the variable condenser. has been previously discussed. Another method is to tap the inductance, and still another to use a sliding contact over the inductance. Neglecting distributed capacity between turns, it may be said that if we desired to use a coll made for, say, 200 metre reception on 100 metres, we could tap the coil halfway. The coil could also be re-wound, using half the number of turns. The same capacity condenser could be used for tuning.

In general it can be said that we get the loudest signals in a receiver having low resistance circuits. If we have large resistance in a receiving circuit, the tuning is broadened, and its losses are increased.

The spark transmitter, which is now seldom used owing to the interference it causes, creates a highly damped wave.

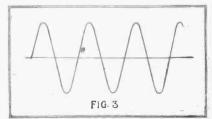
In the first place, some source of potential such as the A.C. mains or an alternator charges the condenser to a high potential. The condenser (C) stores this energy, and when the condenser is full, it breaks down an air gap (sometimes called spark gap) and oscillations take place in the LC (inductance-capacitance) circuit.

We now see that an oscillation depends upon two main factors, i.e., inductance and capacity. The inductance coll has what is known as electrical inertia, and this may be likened to a weight at the end of a spring, where the weight bobs up and down for several minutes. In the same way the current passing through the inductance will oscillate or reverse its direction for some time before the oscillations die away. Mechanical and electrical oscillations are therefore very similar.

The oscillations in such a circuit, however, would soon die away, i.e., be damped out, owing to resistance in the circuit, and other factors discussed previously. "Proving Radio" treated continuous oscillations and damped oscillations in Parts 10, 12, and 15.

Fig. 2 shows a group of damped waves as they would appear in energy in a colicondenser (LC) circuit. Remember that the amplitude is a measure of energy, and that the energy will be falling with each reversal in current.

Continuous oscillations are shown in Fig. 3, where it will be seen that the energy is constant—that the amplitude of each oscillation is the same.



.....

Friday, 4th October, 1929



Champion Radio Valve UX-226

A.C. Amplifier

The Champion UX-226 is designed for use either as a radio or audio frequency amplifier. It employs a heavy filament of the oxide coated type designed for operation on low voltage alternating current. The electrical characteristics are similar to those of the Champion 201-A, except that the Champion UX-226 is not generally suitable for use as a detector.

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.

In order to get a separate electrical connection to the cathode, or emitting surface, an extra prong is necessary in the base.

Champion Radio Valve UX-280

Full Wave Rectifier

The Champion UX-280 is a full wave thermionic Rectifier. This valve is evacuated to a very high degree, and has many advantages over the gaseous conduction type of rectifier.

A very heavy oxide filament is used in the Champion 280, which will stand very severe treatment, and still continue to give unusually high emission.

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

Champion Radio Valve UX-171A

Power Amplifier and General Purpose Valve

Champion X-171A is a Power Amplifier valve designed to give maximum undistorted output to the loud speaker. It should only be used in the last audio stage, with the proper grid and plate voltages applied.

A loud speaker coupling device is essential with the Champion X-171A to keep direct current out of the loud speaker.

If used in the proper way the Champion X-171A will give volume and clearness beyond comparison.

Send For Free Catalogue. International Radio Company Limited, 229 Castlereagh Street, Sydney, N.S.W. FACTORY REPRESENTATIVES



UX-226 Price, 15/-,



UX-280 Price, 30/-.



Friday, 4th October, 1929

WIRELESS WEEKLY

TREND OF MODERN DESIGN

S IGNIFICANT comment on the trends evidenced by the new American receivers is made in a recent issue of "Radio." "The typical new set," says the editor of that journal, "is operated solely from an alternating current supply. It is made up of a rugged chassis thoroughly shielded in a small console of handsome design. Its power plant and speaker are built into the console, and the only wires in sight are the plug-in cable and the aerial and ground connections, and even the latter are lacking in some models.

"The greatest changes in design are those introduced by the a.c. screen-grid tube and the new intermediate power tube. The former gives a sensitivity to two or three radio frequency stages that was not possessed by four or more stages using the older types of tubes. The latter gives all the volume of sound that can be wanted in any home, and this at a much less cost than was possible from the power tubes which required a high plate voltage. Together they have made it possible to produce a better set at a lower price than ever before.

"Much thought has been incorporated in the improvement of the r.f. amplifier circuit. Bandpass filters are frequently used, and other designs have been perfected to give better selectivity without impairment of audio quality. Power detection, with either one or two stages of audio-frequency amplification, seems to be much in favor.

"The most notable change in design and construction appears in the audio-frequency amplifier. The craze for noise has passed into the limbo. The new '45 tubes usually in push-pull, supplies all the volume that is wanted in the average home, and at a great saving in the cost of plate voltage supply. Further economies are made by using the field coil of a dynamic speaker either as a choke or as a resistance for grid bias.

"As to speakers, the dynamic cone is preeminent. The cones have been made larger, especially for auditorium use, and the construction has been strengthened. The magnetic speaker is still employed in some of the cheaper sets. The new condenser speaker is used in the sets which are also made by its makers. It is most significant, however, that a dozen or more set manufacturers have taken out licences for the use of condenser speakers. This may mean that it may become a more formidable competitor, though it is too soon to prophesy.

"Speakers' and phonograph attachments are the main accessories in the new market, being intended for use with sets not so equipped at the factory. Several firms exhibited attachments for automatic and remote tuning, as well as for automatic volume control, these also being meant for use with sets not otherwise provided with them The special power amplifying equipment may likewise be considered as a radio accessory. "While the factory-built set will undoubted

While the factory-onlit set with undoubtediy dominate the market, the custom-set builder will have plenty to do. A number of **new** super-heterodyne kits using a.c. tubes are available, as are also some excellent audio amplifiers for improving "trade-ins" and other sets whose owners desire to retain them. Some of the finer dynamic speaker cabinets will be found to lend themselves admirably for the installation of a complete receiver, including remote automatic tuning control and automatic volume regulation. The private brand chassis is likewise of interest to the set builder.



"Experimental" Capacities

IN testing a newly built receiver containing a stage of high-frequency amplification, it is often necessary to connect the acrial temporarily to a tuned circuit that was designed to tune over the desired range without any such addition. If, for example, a set fails to give the signals expected of it, the first test would probably consist in attaching the aerial to the secondary of the "adiofrequency transformer, coupling the first valve to the detector, and connecting telephones in the plate circuit of this valve to find out whether the local station can be heard at the expected strength for a onevalve receiver. If all seems well at this point the aerial and the telephones are moved, valve by valve, out from the detector, so checking the performance of each valve separately.

If such a scheme of test is proposed—and it is a very informative one—it is annoying, to say the least of it, to find that the addition of the aerial capacity to the grid circuit of the detector has altered the tuning range of that circuit to such an extent that the stations to which it is desired to tune for test purposes cannot be tuned in.

If this discovery is made it is not necessary, as at first sight might appear, to abandon the test, for a condenser of small capacity in series with the aerial will speedily circumvent the difficulty. Probably the test is being made in the evening, no condenser of suitable capacity is at hand, and the shops are shut. But there is still no need for despair, for any two conductors placed near to one another, but not in electrical contact, form a condenser of sorts. A foot of twin flex, for example, may be commandeered, one wire being connected to the set and the other to the aerial, both connections being made at the same end of the flex. The capa-city between the two wires, though not as free from losses as the purist might desire, will at least serve to pass the high-frequency currents through from aerial to set. Although there is no slow-motion dial on this improvised condenser, it is variable. If less capacity is required, one can always cut the flex, or, if in an economical mood, it need be untwisted. only

The suggestion here made is familiar enough to "old hands," says a writer in the "Wireless World," but there must be many experimenters to whom the idea of using a pair of insulated wires twisted together to play the part of an emergency small condenser will come as a novelty.

Next Week: "The WIRELESS WEEKLY Trouble Finding Chart"—16-Page supplement free with every number.

Transformers Cores

PERMEABILITY is a measure of a material's ability to carry magnetic lines of force. An iron core which has a permeability of 400 is able to carry 400 times the number of lines as would be carried by air for the same number of ampere-turns in a coil. The inductance of a primary coil is directly proportional to the permeability of its core.

Permalloy is the trade name of a highly permeable alloy whise composition varies from about 30 per cent. nickel and 70 per cent. iron to 85 per cent. nickel and 15 per cent. iron. The percentage of nickel is indicated by a number which precedes the word: Thus 45 permalloy contains 45 per cent. of nickel and 55 per cent. of iron. For pure Iron or pure nickel the permeability is about 400; for 45 permalloy, about 2000; for 80 permalloy, about 12,000; but for 90 permalloy, about 2300.

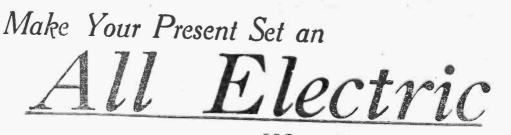
According 'to Arthur E. Thiessen in the General Radio "Experimenter," 45 permalloy is sometimes used for the cores of inter-stage audio transformers because of the high primary inductance which is thus made possible with a small number of turns. But unless special precautions have been taken in the design they cannot be used in plate circuits which draw comparatively large currents, as permalloy cores become saturated at much lower current values than do sillcon steel cores. Furthermore, any mechanical shock may cause a permalloy core to lose its high permeability.

Detector Distortion

For small detector valve output voltages grid-leak and condenser detection has been shown to cause a loss of the

higher frequencies. The input impedance of a detector valve is fairly high even when the grid-leak is brought back to the positive side of the filament, so the higher frequencies are shunted to ground by the grid condenser. Using a i megohm grid-leak and a .0001 or .00005 mfd. grid condenser will lessen this effect. However, the loss in overall signal strength is quite noticeable, and an additional stage of r.f. amplification is generally necessary to make up for it,

This method is not recommended for a receiver whose audio amplifier has a decided peak on the higher frequencies, as the higher plano or violin notes will be over-emphasised. The quality on distant reception is also likely to be poorer, due to increased regeneration in the r.f. amplifier. The best test for the average person is to replace the present detector grid-leak in his receiver with a i magohm size and listen for improvement or decrease in quality on local reception.



With These Accessories

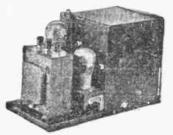


PHILIPS 1017 TRICKLE CHARGER $\pounds 3'10'$.

PHILIPS 3003 B & C ELIMINATOR $\pounds 10'15'$.



-OR-convert it to an alternating current operated set, with a-



PHILIPS POWER PACK

£12′-′-

All Obtainable on Easy Terms if Desired

ALL TYPES OF A C VALVES NOW AVAILABLE

Open Till 9 p.m. Friday HOME RECREATIONS (Australia), LTD. 388 GEORGE STREET (Opp. Beard Watson's), SYDNEY

General Notes on DESIGN and General Methods of CONSTRUCTING MODEL 'PLANES

By NORMAN LYONS

A S many of our readers are desirous of designing their own models, it is the purpose of this article to explain a few of the structural principles, with sug-

gestions for other methods of construction. Before a model can be designed there are four components that must be considered individually and collectively. They are: The supporting surface, control surface, body, and source of power.

The correct method to adopt is to design and build the model exclusive of the power, weigh it, and design the power plant to suit. If, on the other hand, compressed air, electric motors, or other heavy mechanical power is to be used, build the plant first, determine the thrust developed, and vary the dimensions to suit. As rubber is the most commonly used motor power, these notes will deal with that source of power only.

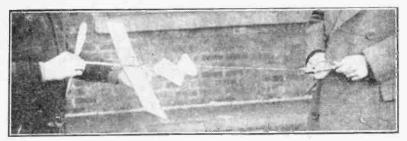
Supporting Surface.-The early types of wings used on models were flat, and, as experiments have shown, were inefficient. The modern wing, being double surfaced. derives its lift not only from the underside, but also from the upper. In fact, the lift is more to be credited to the suction effect from the upper surface. When the shape of a double surfaced wing is considered, it is obvious that, as the wing moves forward, the air is parted at the front and rejoins behind the rear. Therefore, the air that passes the under surface will travel a shorter distance than that which goes over the top. Naturally, in order to arrive at the rear at the same time. the air travelling over the curved upper surface must move faster. The air is thus stretched out, consequently making the air less dense, resulting in a partial vacuum. Thus it will be seen that the wing is not only pushed from the underside, but is sucked up at the top. It must not be taken that this suction is dependent on the greater distance the air travels in going over the top surface, as lift alone does not decide the performance of a wing, it is the lift in relation to resistance (drag).

Wing Design

The whole science of the design is a compromise between lift, resistance, and balance. Experiments with wing shapes will show that some are suitable for speed, otherfor weight carrying, or for a fast climb. For all general purposes, the wing section known as the "Clark Y" is most suitable, because it imparts to an aircraft the two desired properties of speed and lift.

In regard to the rectangular plan shape of a wing, this feature is known as the "aspect ratio," and is the relation between the span (the maximum distance from the to tip of a wing) and the chord (the distance from the entering edge to the trailing edge). An aspect ratio of 7 to 1 is considered good; for example, a wing with a span of 35 inches

WIRELESS WEEKLY



How to wind the motor of a model 'plane, making use of the adapted egg beater.

would have a chord of 5 inches. Within certain limits, the higher the ratio the greater the speed, the limit being about 15 to 1 for models. The low limit would be around 4 to 1.

In regard to balance or stability, the principles underlying the design of a successful flying model aeroplane are quite as complex as those involved in the designing of full-sized machines. The best method of dihedral angle, which slopes upward from the centre. The action imparted by the dihedral is that, when the model is raised on one side by a wind disturbance, the lift immediately becomes greater on the downpressed wing and less on the raised one. The result is a force tending to return the wing to normal. Too much dihedral results in loss of lift and causes rolling; therefore, use it sparingly. A rise of 2 inches at the tips of a 36-inch wing is about right.

Angles of Wings

To produce a longitudinally stable effect the leading 'plane should make a treater angle than the following 'plane. This fore and aft stability is sometimes accomplished by sweepback of the wings. Such a shape closely follows the air stream that is parted by the nose of the model. Longitudinal stability is also maintained by having the wings set at different angles to the air stream. If a model tends to pitch violently, raising the rear edge of a wing by a small block may correct it. Another important feature in pusher models is to have the wings far enough apart. About four times the chord wing is correct. The parts of the the of model should be so grouped that the centre of gravity is not too high. Preferably, it should be even with, or slightly below, the centres of thrust and pressure.

Control Surfaces.—The control surfaces include elevators, stabilisers, rudders, keels, and ailerons, and it is by their use that a model is balanced and controlled. So little

E A S Y — WHEN YOU'RE TOLD HOW

Finding little faults in your receiver which mar reception and correcting them is easy--when you know how. You know how when you have a WIRELESS WEEKLY Trouble Finding Chart beside you. All the symptoms are readily tabulated, and the cause and remedy noted beside each.

A detailed Trouble Chart will be published next week in the form of a 16-page supplement to WIRELESS WEEKLY. This will be given away free with every issue of this journal. Don't forget to order your copy. can be said of them, except that the farther they are placed from the centre the greater will be their leverage. Rudders are more efficient at the back than in the front, and underneath than on top. Generally, the stabiliser and elevators on a tractor should not have a lifting section, as that tends to make the model pitch. The size of the control surfaces should vary approximately with size of main supporting wings.

Fuselage.—Model aircraft fuselages are designed for easy passage through the air, and for strength with lightness. Therefore, all square corners should be rounded and smoothed with sandpaper. All those parts which are exposed to the action of the wind should be streamlined, that is, all exposed parts should have a fish-shaped outline, so as to conform to the air stream.

To reduce head resistance, some models have been made with the rubber enclosed in a hollow motor stick about 3 in square, made from thin strips about $36 \times \frac{3}{4} \times 1-16$ inch balsa, cemented together at the edges and wrapped about every three inches with silk thread, the whole being finally doped.

Power.—Propeller construction has been thoroughly dealt with in previous issues of WIRELESS WEEKLY. As to their shape, thin blades are best for speed, and wide ones for duration. The correct combination of propellers and models is largely a matter of trial, as a propeller that works efficiently on one model may be quite useless on another. Before designing a propeller, it is advisable to glide a completed model and decide upon the type of propeller, after ascertaining the speed and behaviour of the model in the air. If the model tends to fly fast, thin tapered blades are used; if slow, wide blades are appropriate. If a model refuses to fly with its present propellers, they should be reduced in diameter or pitch, with the result that more thrust is obtained and making, perhaps, the difference between success and failure of a model. In flight the model may appear underpowered, in which case adding another strand of rubber often helps.

Speed and Duration Models

Thus we arrive at this conclusion, speed models should have thin, taper-bladed, medium-pitch propellers, wings of high aspect ratio, with a section convex on the top, and slightly so on the bottom. At every exposed point, the frame should be smoothly sandpapered and streamlined, and strong enough to withstand the strain of powerful rubbers, tightly wound, remembering that many strands tightly wound give the speediest revolutions.

Duration models require wide, thick wings, slow-turning height pitch propellers, driven by a few strands of rubber. Models of this type must be built extremely light, so that the slow turning propellers and slow moving wings can lift the weight.

The weight of flying models is always a very important factor when determining their flying ability. Naturally, the less a model weighs, the fewer strands of rubber are required to power it, and the fewer the strands, the more revolutions may oe stored in them. The best outdoor twin pushers weigh about loz.; while flying scale models vary from 3 to 8 oz.

Page Twenty-Eight

WIRELESS WEEKLY

Friday, 4th October, 1929

As Marjorie Prichard sees Norman Lyons, who conducts the Boy Scouts' session to-night.

Hour-demonstration

(a) "Gracious and Kind Art Thou,

(Brahms). (b) Selected. 4.0: From the ball-room of the Orient-sydney Simp-

al-Sydney Simp-son's Syncopaters in

dance music. 4.12: From the studio – Patricia Crosby, popular

songs-(a) "Roses of Yesterday" (Berlin). (b) "Broadway

(b) "Broadway Melody" (Brown). 4.19: Essle Neal, violinist—

(Handel). 4.26: Frank Both-

loy). 4.33: Radio rhythm. 4.45: The Trade

7.45: Celebrity music.

4.45:

music

Lyons

terlude

tra-

tra-

land.

tra

(Chopin).

ling)

Taunton Deane" (Mol-

"Sonata

songs-

Queen

in F

5.45: Weather information. Close down.

THE DINNER HOUR-6.15 to 7.55 p.m.

5.15: The Dinner Music Quartette. 6.45: The A.B.C. Younger Set session-Boy Scouts' Club, conducted by Mr. Norman

7.5: Claude Corbett will speak on general

7.5: Claude Context and Sporting.
7.15: The countryman's market session— wool, wheat, stock, farm produce, fruit, vege-tables, pig, and poultry markets.
7.30: The Dinner Music Quartette.
6: 6: Collability music

TO-NIGHT'S PRESENTATION-8 to 11.30

p.m. Through 2FC service the relay from 3LO 9.15 will attract lovers of band music.

Our programme through 2BL to-night offers well-known song groups, pleasing to many listeners, and Wallace Nelson's address at 9.30, when he commences his series, "Humor of Parllament." will prove a refreshing in-

erlude.
8.0: Gordon Rodda, planist—

(a) "Moto Perpetuo" (Weber).
(b) "Toccata in A Major" (Paradies).
(c) "Sonata in D Major" (Scarlatti).
(d) "Ecossaises" (Beethoven-Busoni).

8.12: Anne Mills, mezzo—

(a) "O Don Fatale," from "Don Carlos" (Verdi).

(Verdi). (b) "Plaisir D'Amour." 8.19: The National Broadcasting Orches-

a. "Fete Florentine" (Mignon).
a. "Fete Florentine" (Mignon).
a. "Isoel" (Ellis).
b. "My Father Has Some Very Fine Sheep" (Hughes).
a. "Isomance" (Rubinstein).
b. "Scotch Afrs" (Volti).
a. "Remance" (Rubinstein).
b. "Scotch Afrs" (Volti).

"Three Bavarlan Dances" (Elgar).
9.10: Gordon Rodda, pianist—

(a) "Troika" (Tschaikowsky).
(b) "Serenade" (Rachmaninoff).
(c) "Waltz in G Flat" (Chopin).
(d) "Scherzo in E Flat from Sonata" (Chopin).

9.22: Anne Mills, mezzo—
(a) "Gray Morn" (Ward and Standish).
(b) "Dear Little Mother O' Mine" (Ster-

9.29: Weather forecast for the man on the

9.31: Wallace Nelson will commence his series. "Humor of Parliament," and will tell of "My Great Agricultural Lecture." 9.47: The National Broadcasting Orches-

(a) "Arlequin" (Chaminade).(b) "Janina" (Drumm).

MV

Local Programmes, Friday, October 4

2FC

Australian Broadeasting Company, I.d., Market St., Sydney (Wavelength, 46) 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 "Sydney M.orning Herald."

7.46 Austiano 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.

.J.30: Announcements. J.32: To-morrow's sporting events, by Os-

car Lind

J.3.3: Korace Weber, at the Grand Organ Furst R. 10

- 1.10: Cables (copyright), A.P.A. and Sun-

- H.B. Cables (copynghr), A.F.A. and Sun-Herald news service.
 11.15: Morning devotion.
 11.30: Austracio musical reproduction.
 11.53: British official wireless press.
 12.0: "Big Ben," Stock Exchange, and metal outoations. quotations.
- (i) Otations. i2.5: Francis Jackson—"Edmund Burke." 2.20: Midday weather forecast and weather sy.:opsis. Special produce market session for the man on the land, supplied by the State Marketing Board. i2.30: Close.

THE LUNCH HOUR-1 p.m. to 2.30 p.m.

- 1.0: Lunch to music with the 2FC Instrumental Quartet
- 2.0: Stock Exchange second call. 2.2: A glance at the afternoon "Sun" and "News.
- 2.7: Popular Education—W. S. Reay 2.27: Announcements.

THE RADIO MATINEE-2.30 p.m. to 4.30 p.m.

- 2.30: The 2FC Instrumental Trio 2.42: Coralie Poolmann, mezzo-
- (a)
- (a) "Serenata."
 (b) "Beneath Thy Window.
- (b) "Beneath Thy Window."
 2.52: Enid Conley, planist—
 (a) "Intermezzo E Flat Minor" (Brahms).
 (b) "Rhapsody G Minor" (Brahms).
 3.0: The 2FC Instrumental Trio.
 3.12: Leo Smith, violinst—

- (a) "telapsoly G minor (Triannis),"
 (b) "telapsoly G minor (Triannis),"
 (c) "Scher zo Tarrantelle" (Wienlawski)
 (d) "Scher zo Tarrantelle" (Wienlawski)
 (e) "Garlie Poolmann, mezzo(f) "One Lone Star."
 (f) "One Lone Star."
 (g) "One Lone Star."
 (h) "One Lone Star."
 (h) "One Lone Star."
 (h) "Intermezzo C Major" (Brahms).
 (h) "Intermezzo C Major" (Brahms).
 (h) "Intermezzo E Flat Major" (Brahms).
 (h) "Intermezzo E Flat Major" (Brahms).
 (h) "Intermezzo E Flat Major" (Brahms).
 (h) "Approximation (Sansate).
 (h) "Zigeuner Weisen" (Sansate).
 (h) "Redgum" will give a talk on gardenneg.

- ing. 4.15: The 2FC Instrumental Trio.
 - 4.28: Stock Exchange, third call 4.30: Close.

EARLY EVENING SESSION-5.45 p.m. to 7.55 p.m. 5.45: Kiddies' "Good-night" stories, told by the "Hello Man," assisted by the Farmyard

Five.

6.45: The Dinner Music Quartet.

7.30: A.B.C. sporting service.

country session. Stock

forecast. Late news

from the "Sun" and "News." Truck book-

Special

resume.

Weather

To-night's

ist-

music

baritone

7.37

Exchange

Markets.

ings

7.58:

programme.

PEN 12/30

Francis Jackson, who will talk on "Edmund Burke" 50-day.

THE EVENING PRESENTATION. Through 2BL service to-night's programme of well-known songs and orchestral groups by the National Broadcasting Orchestra will prove pleasing to many. At 9.30 Wallace Nel-son. In his series, "Humor of Parliament," will tell of "My Great Agricultural Lecture." 2FC's programme features the Melbourne re-lay, at 9.15. and will make a strong appeal to those listeners who appreciate band music on the air. on the air

- 8.0: From the Aeolian Hall—recital by G. Vern Barnett.
- 8.15: From the studio-The Peerless Four.

(a) "Somebody Loves Me" (Medley).
(b) "Passing By" (15th Century).
(c) "Thou Art My Own Love."
832: From the Aeolian Hall—organ recital.
v G. Vern Barnett.
8.47: A talkie short.
8.57: From the studio—The Peerless Four. by G

- vocal

 - 9.7
- 57: From the studio—The Peerless Four al quartette—

 (a) "Girl O' Mine" (Longstaffe).
 (b) "Massa" (Old Negro).
 (c) "O My Lulu" (arr. Cocks).
 7: Hal Stead, novelty pianist—

 (a) "Little Pal" (Hanley).
 (b) "Do Something" (Green and Stept). 9.14: Foreword.

- 9.15: Foreword.
 9.15: Relay from 3LO, Melbourne.
 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 Breadcasting 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.

 - Mails and shirping information.
 Memory melodies.
 This morning's story.
 A musical interlude. 8 45
 - 8.50 9.0
 - 9.30

 - 9.40: British official wireless press. 9.45: New music.
- 10.5: News from the "Sydney Morning Herald."
- Herald." 10.10: Austradio musical reproduction. 10.40: The Australian Broadcasting Com-pany'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. 12.2: Announcements. The Luncheon Hour

- Quartet 1.0: Afternoon news from the "Sun" and "News." 1.5: Studio music.
- Studio music.
 Studio music.
 Studio musical reproduction.
 Austradio musical reproduction.
 Knight Barnett at the Wurlitzer.
 Studio music. dith-Atkinson.

AFTERNOON ENTERTAINMENT-2.30 to

- 2.30: Business efficiency talk—C. R. Hall, "Know Australia First." 2.45: The Magic Carpet series—Major Sandford Morean. "A Voyage on Kelek." 3.0: From the ballroom of the Oriental— Sydney Simpson's Syncopaters in dance music.

- music 3.12: From the Studio-Patricia Crosby.
- (a) "Mother, I Still Have You" (Jolson
- and Silva).) "Hanny Days and Lonely Nights" (b) "Harny Days and Lonely Nights (Rose-Fisher).
 3.19: Melody memories.
 3.22: From the ballroom of the Oriental-Sydney Simpson's Syncopaters in dance
- dance music 3.32: From the Studio-Essie Neal, violin-

(a) "Minuett" (Mozart).
 (b) "Czardas" (Monti).
 3.39: A song of too-day.
 3.42: From the ballroom of the Oriental— Sydney Simpson's Syncopaters in dance music

3.52: From the Studio-Frank Botham.

- 9.57: Clement Q. Williams, baritone-(a) "Down Baslow Way" (Barry).
 - (b) "Open the Door Softly" (Hughes).

- (a) "Valse Bluette" (Drigo).
 (b) "Danse Espagnole" (Granados).
 (c) "Reverle" (Black).
 10.11: The National Broadcasting Orches-
- "Lucia di Lammermoor" (Donizetti) 10.25: Late news from the "Sun" "News" and late weather forecast. 10.30: Close. National Anthem. (Donizetti). and

2UW

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

12.30: Request numbers. 4.0: G.P.O. clock and chimes; music. 1.15: Talk on "Home-craft," by Pandora. 1.40: Music and request numbers. 2.30: Close down. 4.30: Musical programme. EVENING SESSION

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; request numbers. 8.0: Folk songs recital. 9.0: Music and request num-bers. 10.30: Close down.

2GB

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 Miss Helen J. Beegling, 11.30: Music. 11.45: Close down, 2.0: Music. 2.5: Women's radio service, by Mrs. Dorothy Jor-dan. 2.50: Movie Know-all. 3.0: Music. 3.15: Address by Miss Mary Rivett. 3.30: Close down. 5.15: Children's session, by Uncle George, 7.0: Music. 7.45: Feature story. 8.0: Miss Edith Allen Taylor, mezzo-soprano. 8.7: Instrumental Trio. 8.15: Madame Betts-Vincent in an illustrated talk on music. 8.30: Mr. Mario Gustino, baritone. 8.38: Nr. Jack Win and Mr. Heath Burdock, humor. 8.43: Symphony Orchestra. 8.50: Miss Gwen Selva. soprano. 9.0: Weather report. 9.3: Address. 9.15: Miss Edith Allen Taylor, mezzo-soprano. 9.25: Instrumental Trio. 9.30: Mr. Jack Win

INDEX

To Local Programmes

I U LOUII I TOBIUMANCO			
2010, 200, 2111, 000	28 29		
SATURDAY, OCTOBER 5. 2FC, 2BL, 2GB, 2UW, 2KY, 2UE	32		
SUNDAY, OCTOBER 6. 2FC, 2BL, 2GB, 2UW	36		
MONDAY, OCTOBER 7. 2FC, 2BL 2GB, 2UW, 2KY, 2UE	38 39		
TUESDAY, OCTOBER 8. 2FC, 2BL 2GB, 2UW, 2KY, 2UE	42 43		
WEDNESDAY, OCTOBER 9, 2FC, 2BL, 2GB, 2UW, 2KY, 2UE	46		
THURSDAY, OCTOBE® 10. 2FC, 2BL 2GB, 2UW, 2KY, 2UE	50 51		
To Interstate Programmes			
FRIDAY. OCTOBER 4. 3LO, 3AR, 3DB, 4QG, 5CL, 6WF, 7ZL	30		
SATURDAY, OCTOBER 5. 3LO, 3AR, 3DB, 4QG 5CL, 6WF, 7ZL	34		

5CL. 6WF. 7ZL	35
SUNDAY, OCTOBER 6. 3LO, 3AR, 3DB, 4QG, 5CL, 6WF, 7ZL	37
MONDAY, OCTOBER 7. 3LO, 3AR. 3DB. 4QG, 5CL. 6WF 7ZL	40 44
TUESDAY, OCTOBER 8. 3LO, 3AR. 3DB, 4QG, 5CL, 6WF, 7ZL	44
WEDNESDAY, OCTOBER 9. 3LO, 3AR, 3DB, 4QG, 5CL, 6WF, 7ZL	48
THURSDAY, OCTOBER 10. 3LO, 3AR, 3DB, 4QG, 5CL, 6WF, 7ZL	52

and Mr. Heath Burdock, hunter. 9.35; Mr. Mario Gustino, baritone. 9.45; Symphony Orchestra. 9.50; Miss Gwen Selva, soprano. 10.0; Instrumental music. 10.30; Close down. Symphony

2KY

Trades and Labor Council. Goulburn St., Sydney (Wavelength, 280 Metres). MORNING SESSION.

Tune in to the ticking of the clock Popular fox-trots. 10.15: Hawaiian 10.0: Popular 10.3: Hawaijan

steel guitar selections. 10.30: Women's ses-Home hints and information, consion. ducted by Mrs. Gray. 11.0: A few laughs. 11.5: Pianoforte 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 kiddles' 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: Sporting feature, presented by Tooth and Co., Ltd., Kent Brewery; from ringside of M'Hugh's, Leichhardt Stadium, full de-scription of main 15 rounds event. 10.0: Closing announcements.

2UE

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

EARLY MORNING SESSION .--- 7.15 a.m.: Breakfast time hour orchestral music. 8.0: Clock and chimes. 8.1: Vocal and orchestral music. 8.10: Announcements. 8.30: Weather forecast. Close down.

MIDDAY SESSION.—11.30 a.m.: Orches-tral and vocal old time selections. 12.30 p.m.: Announcements. Close down.

AFTERNOON SESSION.—1.0 p.m.: Or-chestral and vocal music. 1.45: Organ re-cital. 2.0: Orchestral music. 2.30: Close Close down.

EVENING SESSION.—7.15 p.m.: Orches-tral dinner music. 7.58: Programme an-nouncements. 8.0: Clock and chimes. 8.11: Overture, "La Travlata" selections. 8.10: Vocal and instrumental items. 10.15: Na-tional Anthem.



Page Thirty

Interstate. Programmes, Friday, October 4

31.0

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

MORNING SESSION. 10.30: Current happenings in sport, by Mel. Morris, 10.43: Musical reproduction. 11.30: Morning sales; Melbouine Gostatory Line signal. 12.1: Musical re-production. 21.15: Nows service; British official wire-ress news. Or Exchange milduly report; Newmar-test sole schemester associated Station Agents' official report. 13.0: Clase down. 1.0: Melbourne Observatory Line's gand. Station Agents' official report. Sole: Kechange information; meteorological disk. South Australia, and Tasmonia: comments on the day's news. 1.30: Musical inter-lude.

EDUCATIONAL SESSION.

2.0: Strange people of strange countries, Mr. H. J. G. Exmonde. 2.15: Musical interlude. 2.20: Gems of English literature—"The Rubsiyat of Omar Khay-yam," Prof. G. H. Cowling, M.A. 2.35: Musical inter-lude. 2.40: A talk in German, Mr. G. E. Orcen, M.A. Dip. Ed. 2.55: Musical interlude. 3.0: Mel-bourne Observatory time signal.

THE RADIO MATINEE.

THE RADIO MATINEE. 3.0: The Studio Light Orchestra-Overture. 'Or-pheus' (Oftenbach, S.6: J. Howard King, bartome-The Carpet' (Sanderson, 'Quiet' (Sanderson, 3.3: Catherine and Louise in songs and loviogues, 32:) Marion Daniels' merzo-contraito- 'The Little Oreen Falcony' (Coatret, 'Lackaday', 'Crampion, 3:2: The Studio Light Orchestra- 'The Rosary' (NewInt, "Serenata", 'Delibes, 'Passepicte', 'Delibes,' Oreene participation, 'Serenata', 'Delibers, Itany happen there's studius' or or of the Little Oreene participation, 'Serenata', 'Delibers, 'Delibers', 'Her phart Harlerley, She Edith Burns, It may happen in Johgens, 3:48: Catherine and Louise in songs of the Johgens, 3:48: Catherine and Louise in songs of the Delibers, 'Keel), 'The Joy of a Resec' (Tarbox), 'A marking, 'Thernan, 'Ceilo-Selec Sends a Little Gift of Res.'', 'Delibers, 'Mighty' Like a Rosc'', 'Nevin, 'A 10: 'Densata Jorgenson violin-Selected, 4:20: Studio Light Origetta-Sender the Children's Consetta. THE CHILDREN'S CORNET.

THE CHILDREN'S CORNER.

5.45: "John, the Piper's Son" takes "Rollicking Rita" and the small boy to the Zoo. "I wanner see a Giraile." 6.0; Musical Interlude. 6.5: Birthday greetings by "John, the Piper's Son," 6.20: For the older boys and girla-Brave deeds by boys and girls, Lt.-Col. Pottinger.

EVENING SESSION.

EVENING SESSION. 6.35: Musical Interlude, 5.40 What's wrong with your radio? Mr. H. Kingsley Love, 6.55: Musical Interlude. 7.0: Melbourne Observatory time sig-nal. 7.1: Countryman's Session. Stock Exchange in-formation. Corn Exchange report, associated Stock and Stotion Agents official report, misociated Stock and Stotion Agents official report, misociated Stock and Stotion Agents official report, misociated Stock and Stotion Agents official report, association port, supplied by the interstate Dairy produce re-mittee; wholesale fruit pitces, supplied by the Whole-sale Fruit Merchants' Association; retail free Whole-sie Fruit Merchants' Association; retail from the Whole-tion: citrus fruit prices, supplied by the Whole-gentral Citrus Association, weather synopsis; for failed Central Citrus Association, weather synopsis; for failed Central Citrus Association, weather synopsis; for failed (et al. 7.25: Gardeniug hunts, function (liteoria), seasonal advice, Mr. E. F. Cook, 7.40; News service, 7.45; To-morrow's stadium event, Ceeti H. J. Williams 8.0; Melbourne Observatory time sig-gal. NIGHT SPSSIDM

NIGHT SESSION.

8.0: Brunswick City Band (conductor, Hugh Niven, Overture, "J'Etais Rol" (Adam).
6.5: The A.B.C. Entertainers present--"A Night at the Bachelors' Club." A blending of music and item.

b.3. Ine A.D.C. Entertual is prime of music and mitth.
B.25: Oresti Manzoni, mandoline..."Intermezzo"
B.25: Oresti Manzoni, "mandoline..."Intermezzo"
from "Cavalleria Rusticena" (Mascagni),
8.29: Norman Brasishaw, tenor..."Madrigel" (Cha-minadei, "Deffodii Gold" (Hodyson),
8.36: Pietro Sarcoli, violin..."Chaconne" (Vitali),
8.49: Ketth Desmond..."Nobody," "When Maud put her new Bathing Costume On."
8.56: Oresti Manzoni, mandoline..."Neapolitan Nights" (Zameznik),
9.0: Victor Harding, bass-barltone...Three Sait Water ballads 'Keeli, Port o' Many Ships." "Trade Winds," "Mother Carey."
9.7: Brunswick City Band..." Ta Reine de Saba" (Oounod).

9. (Ooun 9.18:

9.7: Brunswick City Band—"La Reine de Saba"
(Oounod; Melbourne Quartette Party—"Believe Me if Ali Those Endearing Young Charms" (Brewer).
9.21: Oraham Howatt, entertainer—Monologue, "Earthenware." with vocal accompaniment by the Nelbourne Quartette Party.
9.25: Melbourne Quartette Party.—"Here Comes the Bhowboat" (Pinkard).
9.28: Brunswick City Band—"Turkish Patrol." "Mor-ceau."

ceau," 9.34: Norman Bradshaw, tenor—""Tis the Day" (Leoncavallo), Selected, 9.41: Oresti Manzoni, mandollne—"The Storm" (un-accompanied). 9.45: Keith Desimond—"My Son" by "Devidence"

accompanied).
 accompanied).
 accompanied).
 accompanied).
 accompanied).
 accompanied).
 bit of the second of th

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 484 Metres). MOINING SESSION. 5.15: Musical reproduction. 8.45: Westher data. 9.0: Ohlmes. 9.1: News service. 9.5: Murical Repro-duction. 10.0: Chines. 10.1: Brutian Olitchial Wite-less news. 10.10: Announcements. 10 20: Arnold Coleman at the Wurligter. 10.50: A Message for the day. 11.0: Close down.

Coleman at the Wurlitzer. 10.50: A Message for the day. 11.0: Close down.
 MIDDAY SESSION.
 12.0: Framous Women, Mary Woolstoneroit--Mrs. Ian Maxwell, M.A. 12:35: Fifteen Minutes Syncopation. 12:30: Luncheon music, supplied by the A.B.C. Troubadours. 2.0: Close down.
 AFTERNOON SESSION.
 2.1: Orchestral: Royal Philharmonic Orchestra.
 2.8: Baritone solo, Walter Kingsley. 2.16: Piano-Gli Dech. 2:24: Contraito solo--Dame Clara Butt.
 2.32: Piano recital-Brailowsky. 2.40: Baritane solo.
 Walter Kingsley. 2.48: Violin solo--Lionet Tertis.
 2.56: Choral--Don Cossacks Choir. 3.5: Request numbers. 3.20: A data by a prominent Woman. 3.25: Musical interlude. 3.40: Hone management-Hygene in the Hone, Miss Kathleen Deningfie'd. 3.55: Musical Reproduction. 5.0: Chines. 5.1: Austal Musical Reproduction. 5.0: Chines. 5.1: Science to 4.8. Close down.
 C.S. Dinner, Musical reproduction. 5.30: Weather dwan Static Science is the A.B.C. Tacker Science Science Musical Science is the A.B.C. Tacker Science Science Musical Reproduction. 5.0: Chines. 5.1: Close down.

EVENING SESSION. 6.15. Dinner Music, supplied oy the A.B.C. Trouba-dours. 7.30: What's on the Air To-night? 7.32: Sporting results. 7.35: Latest musical releases. NIGHT SESSION. 8.0: J. and G., the Confidential Two-New popular numbers.

numbers

numbers. 8.15: Australian Problems In Economics: Business Gycles. Prof. D. B. Copland, M.A., D.Bc. 8.30: Community Singing, transmitted from the Town Hall, Ballarat. 10.20: Weather information and "Herald" news. 10.30: God Save the King.

3DB

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

Melbourne (Wavelength, 255 Metres). MORNING SESSION. 11.0: H.M. Grenndler Guards—"Cavalry of the Glouds." 11.30: "La Vogue-"The World's Fashions and Folbles." 11.35: Stewart Gardner (baritone)-"An Old Garden." 12.0: Tascha Seldtl (violin)-"Caprice Viennoise." 12.30: De Groot and Piccadilly Orcliestra—"Eleanor." 1.0: Edgar Coyle (baritone), -"Easter Flowers." 1.30: Royal Albert Rall Or-chestra—"Hungarian Rhapsody No. 2.' 1.45: Close down.

AFTERNOON SESSION.

2.15: New Concert Orchestra- "Jolly Fellows." 2.30 aul Robeson- "Weepin' Mary " 3.0 Radio Hour Paul Robeson-' 4.0: Close down.

Close down.
 EARLY EVENING MESSION.
 5.30: The Haile Orchestra-"Dance of the Sylphes." 6.0: Children's requests. 6.30: Sophie Braslau-"Card Scene"-"Carmen." 7.0: Denza Dance Band-"'I Love You Truly." 7.15: Market reports.
 7.20: Anna Case-"My Pretty Jane." 7.40: Market reports.
 7.40: Coon Sanders' Orchestra-"Who wouldn't be Jealous?"

EVENING SESSION. EVENING SESSION.

9.30: Deiro (plano accordeon)-Overture, "Rome nd Juliet." 10.0: Leslie James (Wurlitzer)-"Just Imagine." 10.30: Rex Palmer (baritone)--"The Ballad Mon

ger." 10.40: News. 10.45: Close.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 355 Metres).

MORNING SESSION sic. 11.5: Social news. 11 15: Lecturette Talk by The "Etiquette Girl." 12.0 noor 11.0: Music. Cookery lose down.

A Cookery Taik by The "Elquette Girl." 12.0 noon-Close down. MIDDAY SESSION 1.0: Market reports and weather information, 1.15. Lunch-hour music. 1.58; Special time signal. 2.0-Close down. AFTERNOON SESSION 3.0: Records. 3.30: Mail train running times. 3.31: A recital by Mr. Geo. Sampson, F.R.C.O., City Or-ganist, 4.15: This afternoon's news. 4.30: Close down. EARLY EVENING SESSION 6.0: Mail train running times; mail information: shipping news. 6.5: Records. 6.25: Coannercial an-nouncements. 6.30: Bedtime stories, conducted by "The Sandman." 7.0: News in brief. 7.5: Sfacor reports. 7.26: Fenvick's stock report. 7.30: Weather information. 7.40: Announcements. 7.43: Standard time signals. 7.45: To-morrow's sporting fixtures re-viewed. viewed.

NIGHT SESSION

NIGHT SESSION 8.0: A programme of Irich songs and music—The Studio Instrumental Quartette (conductor, F. Smith) —Irich Melodies. Double Male Quartette—"God Save Ireland" (Root), George Willamson (tenor)—"Only a Step from Killarney to Heaven" (Le Roy), Double Male Quartette—"The Harp That Once" (Rhys Her-bert). Frances Lane (contraito)—"When Irish Eyes are Smiller" (Hall). Hild Roberts (harpiste)— Selected Irish Melodies. Ernest Harper (baritone)—

"For the Green" (Lohr). Double Maie Quartette--"Believe Me" (Rhys Herbert). James Martin, (tenor), - "The Irish Emigrant" (Lady Dufcrin) The Studio Instrumental Quartette--More Irish Melodies. 9.0. Metropolitan veather forecast; week-edu road information for motorists, officially supplied by the R.A.C.Q. Instrun information

3.3. Metropolitan weather forecast; week-eLd road information for motorists, officially supplied by the R.A.C.Q. 9.15: Fred Crane (baritone)— 'Off to Philadelphia' (Haynes). George Williamson, James Martin, and T. L. Muller-wocal trio, "Jesu Del Vivi" (Verdi) The Studio Instrumental Quartette—Insh Melodies. Hugh Olive (tenor)— 'Molly Brannigan' (Stanton). Tom Mullar-monologue, "O'Grady's Gcat' (Hayes), Double Male Quartette—'The Low-backed Car' (Lobert). C. Rice (tenor)—''Maire My Girl' (Kee-gan). Double Male Quartette—''Come Back to Erin' (Glaribel). J. P. Cronwell (bass)—''Father O'Flyno" (Stanford). C. Rice, F. Crane, and H. Olive-wocal trio, "Cruiskeen Lawn" (Traditional). Frances Late (contralio)—'The Exile's Return" (Needham), Dou-ble Male Quartette—''Oft in the Stilly Night' (Moore).

(Moore). 10.0: News. Weather. 10.15: The Rhythm Rascals, entertainers. 11.0: Close down.

5CL

Central Broadeasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres). MORNING SESSION.

MORNING SESSION. 11.15: Chimes. 11.16: Recordings. 11.45: Kitch Craft and Menn Talk. 12.1: Recordings. 12. News. British official wireless news. 12.40: Reco-logical information. 1.59: Meteorological. 2.0: Cla ATTERNOON SESSION 3.0: Chimes. 3.1: Programme review and s nouncements. 3.4: Studio concert. 3.20: "Aust ipn" will tell an original story entitled "My Co-per Claim" (Part 2). 3.45: Studio concert. 4.10: "ducational talk. 4.25: Stock Exchange. 4.30: Cla down. EVENING SESSION 11.45: Kitchen rdings. 12.15:

811-3.30: "Austra-led "My Cop-icert. 4.10: An Clo

EVENING SESSION

EVENING SESSION 6.0: Chines. 6.1: Birthday greetings. 6.15: Chil-dren's request Dumbers. 6.30: Dinner session. 7.1: Senior Birthday League greetings. Slock Exchange, sporting service, general market reports. 7.20: 'Mo' Manning on 'Football'. 7.33: Mr. Horace Perkins, Mus.Bac., A.M.U.A., a short lecturette on 'The Cen-ternary of J. Blumenthal' (born 1829). Some of his compositions will be sung by Norman Morphett, tocalist. 7.45: Mr. A. Orenfell-Price on ''Pioneers of Australia.''

NIGHT SESSION

8.0: Chimes. 8.10: Onder the auspless of the Adelaids Univer-sity, Elder Conservatorium Concert. In which the following artists will take part: Miss Syvia Whit-ington, Mr. William Silver, Mr. Harold Parsons, Mr. John Horner, Professor Sir Archibald Parsons, Mr. John Horner, Professor Sir Archibald Strong. 9.1: Metzorological. Semaphore tides. 9.3: Elder Conservatorium concert (continued). 10.15: General news. British official wireless news, metcorological Information, 'sporting, review of races at Flemington and Morphetiville, Socrer notes. 10.03: Dance recordings.

6WF

Australian Broadcasting Company, Ltd., Wellington St., Perth (Wavelength, 435 Metres).
 MORNING SESSION.—10.0: Music. 10.15: Women's Interest Talk. 10.30: Organ recital, Jack Laing at the console of the Wurlitzer Organ 11.0: Close Journ.

Interconsole of the Wurlitzer Organ 11.6; Close down. MIDDAY SESSION.—12.30; Music. 12.45; News, service. 12.50; Items of Interest. 12.58; Weather, 1.0; Luncheon music by the National Broadcasting Orchestra. 2.30; Close down. THE RADIO MATINEE.—3.30; Reproduced. 3.46; Talk of Interest to women. 4.0; Music. 4.15; The story of the day. 4.30; Music. 5.0; Close down. EARLY EVENING SESSION.—5.45; Children's "Good-night" Stories, by Uncle Bas and Aunty Max-ine. 6.15; A.B.C. Younger Set Session, "Things Strange but True," 6.30; Dinner music. 130; Wess-ther. 7.31; A.B.C. news. 7.35; Market reports. 7,00; Stock Exchange. 7.42; Review of to-morrow's sport-ing faxtures.

Stock Exclusion 1.42. Review of to-morrow g sport-ing fixtures SESSION.—9.0: Racing Observer. 9.15: Ringside description of boxing contest broadcast from Perth Stadium by Basil Kirke. Centeuary Musical Festival. 11.0: Close.

7ZL

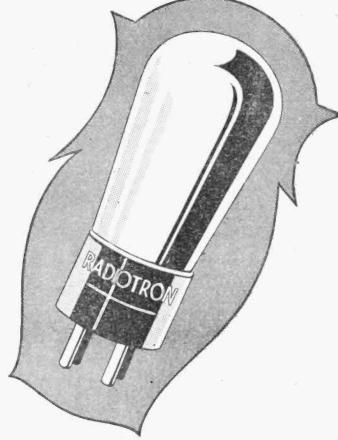
Γ/ΔΔ2
Figure 1.3.
Assance of the second states of the

RADIOTRONS are the Recognised Standard Valves for A.C. Sets

E VERY owner of an A.C. Set should insist on genuine RADIOTRONS and see the name RADIOTRON as well as the type number on the base of every valve.

The leading makers of quality radio accept RADIOTRONS as the standard valves for A.C. operation—their sets are specially designed for RADIOTRON Valves, and they specify them for replacements.

Every Radiotron is tested and individually inspected—41 times—In order to maintain an absolute uniformity of quality and characteristics—to ensure that as long as you replace a Radiotron with a Radiotron you are assured of high quality reception.





RADIOTRON UY227

is a General Purpose Valve, which permits A.C. operation. It acts as Detector, Radio, or first stage Audio Frequency Amplifier.

RADIOTRON UX280

is a full valve Rectifying Valve for use in all-electric Sets operating from Alternating current.

RADIOTRON UX281

is a half wave Rectifying Valve. Full wave rectification is accomplished by using two of these Radiotrons.

RADIOTRON UX226

is an Amplifier Valve, and can be used for Radio or Transformer coupled Audio Frequency Amplification. Not suited for Detection.

RADIOTRON UX171A

is a Power Amplifier Valve, designed to supply large undistorted volume. It is intended for use in the last stage of Audio Frequency Amplification.

RADIOTRONS UX250-UX245.

Super Power Valves for supplying exceptionally large undistorted volume. Use only in last stage of an Audio Frequency Amplifier.









53 King Street, Civic Centre, 521 Dean Street, NEWCASTLE, CANBERRA. ALBURY. Keen Street, LISMORE.



Super ceptio Use o

Page Thirty-Two

WIRELESS WEEKLY

5.0: Complete sporting and racing resume. 5.15: Close.

5.15: Close.
Note: Some of the classic races in the A.J.C. Spring Meeting will be broadcast through both services.
THE DINNER HOUR-6.15 to 7.55 p.m. 6.15: The Dinner Music Quartette.
6.45: The Dinner Music Quartette.
6.45: The A.B.C. Younger Set-The Captain to his Comradios.
7.5: Complete sporting and racing resume.
7.15: The country marks market session-Wool, wheat, stock, farm produce. Iruit.
vegetable, pig and poultry markets.
7.45: The Dinner Music Quartette.
7.45: Celebrity music.
7.55: What's on the air to-night?
TO-NIGHT'S PRESENTATION-

TO-NIGHT'S PRESENTATION-8 to 12 p.m.

The Saturday night programme is always on popular lines, which proves pleasing to the majority of listeners. 2FC offers a con-cert programme by Ye Idlers from the Royal Motor Yacht Club, Toronto, and through 2BL Robert Roberts' Revue will provide bright intertainment

antertainment. 8.0: Robert Roberts' Revue—A medley of

9.30: Weather forecast for the man on the

(b) "Nanette" (Carroll).
9.40: Billee Cresswell, popular vocalist—
(a) "Weary River" (Silvers).
(b) "Where is the Song of Songs for Me?" (Berlin).
9.47: From the Hotel Australia—Cec. Morrison's Dance Band.
10.2: From the Studio, Carlton Fay, pian-

(a) "Meditation" (Sims).
(b) "Hot Ivorles" (Sinatra).
10.9: Billee Cresswell, popular vocalist—

(a) "Louise" (Whiting).
(b) "Love Sings a Song in My Heart"
(Cherniausky).

(b) "Love Sings a Song in My near (Chernlavsky).
10.15: From the Hotel Australia—Cec. Mor-rison's Dance Band.
10.25: From the Studio—Late news from the "Sun" and "News." Late weather fore-cet

cast. 10.30: From the Hotel Australia—Cec. Mor-rison's Dance Band. 12.0: Close. National Anthem.

2GB

Theosophical Broadcasting Station, 28 Bligh St. Sydney (Wavelength, 816 Metres). 3.0: Musical session. 5.15: Children's ses-on, by Uncle George, 7.0: Request hour.

sion, by Uncle George, 7.0: Request hour. 8.0: Musical session from studio. 10.30: Close

2UW

Radio Broadcasting, Ltd., Paling's Building, Ash St., Sydney (Wavelength, 267 Metres).
 5.30 p.m.: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: Musical programme and request numbers. 10.30:

2KY

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

CHILDREN'S SESSION. 6.0: Birthday calls, request numbers, and kiddles' entertainment, Aunt Jemima and

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. 10.0: Closing announcements.

2UE Broadcasting Station 2UE, Everett Street, Maroubra, Sydney (Wavelength, 293 Metres). EARLY MORNING SESSION.-7.15 a.m.: Breakfast time hour orchestral music. 8.0: Clock and chimes. 8.1: Vocal and orchestrai music. 8.30: Weather Forecast. Close

down. EVENING SESSION.—7.15 p.m.: Orches-tral dinner music. 7.58: Programme an-nouncements. 8.0: (Clock and chimes. 8.1: Overture. selections from "Faust." 8.10: Orchestral and vocal music. 10.30: Close

9.32. Carlton Fay, pianist—
9.32. Carlton Fay, pianist—
(a) "Spring Feeling" (Thorne)
(b) "Nanette" (Carroll).
(c) Billee Cresswell, popular v

ist-

cast

down.

programme Close down.

Uncle Bert.

down

down

Local Programmes, Saturday, October 5

2FC

LTC
Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).
EARLY SESSION-7 to 8.15 a.m.
7.0: "Big Ben" and meteorological infor-mation for the man on the land.
7.3: This morning's news from the "Syd-Dey Morning Herald."
7.8: Austradio musical reproduction.
7.45: Mails and shipping.
7.48: What's on to-dag?
7.50: Children's birthday calls.
8.0: Music from the Studio.
8.15: Close.
MORGING SESSION AND AFTERNOON

- MORNING SESSION AND AFTERNOON SESSION-10.30 a.m. to 4.45 p.m.
- 10 30: Announcements.
- 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.
 11.52: Nutrice forcidal wireless present.

- 11.53: British official wireless press. 12.0: "Big Ben." Stock Exchange and metal quotations. 12.5: Studio music. 12.20: Midday weather forecast and wea-ther surposts.

- 12.20: Midday Westier forecast and wes-ther synopsis. 12.30: Studio music. 12.50: From Randwick-Description of the A.J.C. meeting in the running. During intervals dance music from the
- Oriental.
 - 4.35: Late sporting results, 4.45: Close
- Close

- 4.45: Close. EARLY EVENING SESSION-3.45 th 7.55 5.45: Kiddies' "Good-night" stories told by the "Hello Man." assisted by Aunt Willa. 6.46: The Dinner Music Quartet. 7.36: A.B.C. sporting service. 7.37: Special country session. Stock Ex-change resume: markets; weather forecast; late news service from the "Sun" and "News"; truck bookings. 7.58: To-night's programme. THE EVENUC DEPERTMENTION.

THE EVENING PRESENTATION-8 to 11.30

Through 2BL service Robert Roberts' re-vue to-right will provide a sparkling énter-tainment. Ye Idler's Concert programme broadcast through 2FC, featuring many well-known artists, will, we think, prove pleasing to our listeners.

pleasing to our listeners. 8.9: From the Newcastle Branch of the Royal Motor Yacht Club, Toronto—Concert programme arranged by Ye Idlers. Choir—Opening chorus. Solo, and chorus—"Chocolate Major." Syd, Shipway and Company. Humorous song—Seg Sergeant. Choir—(a) "A Bower of Roses." (b) "Shine, Shine, Moon." Song and chorus—"My Dusky Rcse." C. Ross and Combany.

- Ross and coords—"My Dusky Rese. C. Ross and Combany. Recitation—Brunton Gibb. Choir— (a) "Stars of the Summer Night." (b) "Thou Art My Own Love." (c) "Massa's in the Cold Ground"
- 8.55: From the Studio-The country man's weather session-(a) "New South Wales Forecasts." (b) "Inter-State Weather Synopcis."
- (b) "Inter-State weather Synop:3: Announcements.
 9.5: From the Newcastle Branch of the Royal Motor Yacht Club, Toronto. Con-cert programme continued:— Choir—"Comrades in Arms." Solo—"Keeping on Keeping On". R. Pot-ters.
- ter

 - ter. Humorous song-Wally Baynes. Choir-(a) "Pickaninny's Lullaby." (b) "Old Kentucky Home." Guartette-The Four Waifs. Choir-"Sailors' Chorus." Humorous item-Baynes and Sergeant. Recitation-"Nigger Boy's Funeral." Ed. Wright. Solo and chorus-"Penneylyania in Ser
- Wright. Solo and chorus—"Pennsylvania.' Ser-geant, Ross. Shipway, and Company. Choir—"Mulligan's Musketeers." 10.5: From the Oriental—Sydney Simpson's Syncopaters in dance music. 10.15: From the Studio—Announcements. Late official weather forecast.



Mr. G. C. COOPER, Superintendent of Parks, whose popular gardening talk will be broadcast from 2RL at 10.40 today. Listeners should turn to Mr. Cooper's articla on a previous page when tuning in.

10.20: From the Oriental—Sydney Simp-son's Syncopaters in dance music. 11.30; Close,

National Anthem.

2BL

- Australian Broadcasting Company, Ltd., Market St., Sydney (Warelength, 333 Meirres), OPENING SESSION-8.15 to 11.6 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

- 9.30 A musical interlude. British official wireless press.
- 9.40

9.45: New music, 10.5: News from the "Sydney Morning Herald."

- 10.10: Austradio musical reproduction. 10.40: G. Cooper, City Parks Superinten-dent, will give a talk on "Gardening." 11.0: G.P.O. chimes. Close down.

HDDAY SESSION-12 noon to 2.30 p.m. 12.0: G.P.O. chimes. Announcements. 12.2: The Luncheon Hour Quartet. 10. Afternoon news from the "Sun" and

News.

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

AFTERNOON ENTERTAINMENT-2.30 to 5.45

- AFTERNOON ENTERTAINMENT-2.30 to 5.45 2.30: The 2BL Instumental Trio. 2.42: Basil Rye, baritone-(a) "Molly O'Donegal" (Austin). (b) "Cider" (Mullinar). 2.49: Colston Carter, pianoforte noveltles-(a) "Triplets" (Ash and Jentes). (b) "Bing Bing" (Kaufman). (c) "Igloo Stomp" (Wirges). 2.56: The 2BL Instrumental Trio. 3.8: Charles Aston, basso-(a) "The Filoral Dance" (Moss). (b) "The Curfew" (Gould). 3.15: The 2BL Instrumental Trio. 3.30: Basil Rye, baritone-(a) "Jenny's Way" (Wileby). (b) "Home Along" (Sanderson). 3.57: Colston Carter, pianoforte noveltles-(a) "Spring Fever" (Bloom). (b) "Nola" (Arndt). (c) "Capricante" (Wachs). 3.45: The 2BL Instrumental Trio. 4.0: Charles Aston, basso-(a) "Life" (Blumenthal). (b) "Praying for Rain" (Eskerley). (c) "Carolina Moon" (Davis and Barke). 4.50: Austradio musical reproduction.

- 4.30: Austradio musical reproduction.

Page Thirty-Three



PLATE VOLTS

Filament Volta ... 2.0 max. Current 0.15 amp. Plate Volta 100-150 max. Screen Grid Volta 60-90 max. Amplification Factor 170

A Screen Grid Valve for Long Life and Economy

This is a remarkable valve, and is recommended for the R.F. stages of your receiver. It is economical, has a long life, and will give you an amplification of approximately 40 per stage.

With Oaram S 215 Screen Grid R.F. Amplifying Valve we recommend Oaram D.E.L. 210 for those 2-volt users who require a sensitive general purpose valve for stronger signals without distortion. For the Audio Stages of the set, use either Osram D.E.P. 215 or D.E.P. 240, in cases where a super power valve is required.

Ask for them by number, and say OSRAM

Your "B" Batteries last longer when used with "Osram Valves."

Ask your dealer for the Osram Valve Guide, free on request.

Advertisement of British General Electric Co.. Ltd., Magnet House, 104-14 Clarence Street, Sydney. Branches at Melbourne, Adelaide, Perth, Newcastle, and New Zealand cities. Sole Agents at Brisband and Hobyrt.

Interstate Programmes, Saturday, October 5

3LO

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

7.0 to 8.15: See Friday

MORNING SESSION.

MORNING SESSION. During the morning progress reports of the Colac-Melbourne and Warrnambool-Melbourne road races, will be broadcast. 10.30: Current happenings in sport by Eric Welch. 10.45: Musical reproduction. 11.30: Morning sales, Melbourne Stock Exchange; metal prices, 12.0: Melbourne Stock Exchange; metal prices, 12.1: Musical reproduction. 12.15: News service, Bri-tish official wireless news: Corn Exchange midday re-port. Newmarket stock sales; Associated Stock and Station Agents' official report, 12.30: Close down. WIDRAY SEGIAD

MIDDAY SESSION.

MIDDAY SESSION. 12.57: Description of October Hurdle Race, two miles, V.R.C. races at Flemington, by Eric Weich. 1.5: Stock Exchange information: meteorological data: weather forecast for Victoria, New South Wales, South Australia, and Tasmanla; ocean forecast: river reports; rainfail. 1.15: Comments on the day's news. 1.30: Melody broadcast. 1.37: Description of Marlbyrnong Trial Stakes, for coits and geldings. Victoria, V.R.G. races, at Flemington, by Eric Victoria, V.R.G. races, at Flemington, by Eric State J. J. Melody are sensed. Marlbyrnong Strial Stakes. 20: Melbourne Ob-servatory time signal.

AFTERNOON SESSION.

APERADON SESSION. APERNOON SESSION. During the aftenoon, progress reports of the Warr-hambool to Methourne and the Colac to Melbourne by description races and the finishes will be descripted 2.0 the BC Trans. And the finishes will be descripted 2.0 the BC Trans. The selection "Don't be a Fool. You Fool" thy request the plano-"Don't be a Fool. You Fool" thy request 2.12 A.B.C. Troubadours-New dance music. 2.27: Descrip-tion of Stand Handicap. 1's mile, V.R.C. races, at Flemington, by Eric Weich. 2.35: Rita Hitton, songs at the plano-"So's Your Old Lady." Belected. 2.40: Description of football match. 3.0: Melbourne Observatory time signal: sporting results to hand. 5.7: Description of Maribyrnong Trial States for filtes, 4's furiongs. V.R.C. races, at Flemington, by Eric Weich. 3.15: Quarter time football scores. 3.17: Description of Stand Handicap. 1.0: Solver. States filtes, 4's furiongs. V.R.C. races, at Stepple-hall match. 3.6: Description of football match. 3.6: Description of October Stepple-chail match. 3.6: Description of October State Flemington, by Eric Weich 2.35: States for unde from the studio. 4.0: Melbourne of October Stepple-tiane football match. 4.20: Description of October States, two miles and Description of October States, the mington, by Eric Weich 5.20: Description of October States, and is sporting results to hand. 4.5: Description of football match. 4.22: Description of October States, and the studio. 4.0: Melbourne for ball percontion of football match. 4.57: Description of Paradoce Highweight Handleap, six furiongs, V.R.C. races at Flemington, by Eric Weich. 5.20: Closer States, the hand. 5.10: Description of football match. 5.20: Latest sporting results. 5.20: Closer provide states. Solve Latest sporting results. 5.20: Closer Heat Melbourne of football match. 5.20: Closer Heat Melbourne of football ma



Seven different col-ored leads under one water, neld and flame proof cover-lag. No nulter how far your batteries may be from your set VAR-LAC will reach them. Scrap those untildy wires and use VAR-LAC Battery Cable. For Neatness, Convenience and Efficiency. Supplied in any length. If dealer is out of stock, write direct.

1/8 Per Yard. A. BEAL PRITCHETT (Aust.) Ltd. IT PARKER STREET, STONEY.

Electric Motors and Generators

For Battery Charging, Lighting, Pumping Water, etc., all voltages.

Transformer Sheet out to size, 1/6 lb.

Electric Fans, all sizes, 240 volts. D.C. from £2/-/- each, equal new.

F. T. S. O'Donnell, Griffin Co., Ltd., 53 DRUITT ST., SYDNEY:

THE CHILDREN'S CORNER

5.45: "Little Miss Kookaburra" will continue her serial story—"The Guides of Calamity Hill." 6.0; Birthday greeting from "Little Miss Kookaburra" for the olderboys and girls. 6.20: Stamp collecting. Mr. C. R. Franklin.

EVENING SESSION.

6.40: Sporting results. 6.55: Musical interlude. 7.0: Melbourne Observatory time signal. 7.1: Country-man's session. 7.25: Stories of our mining fields-Mount Lyell, Dr. Loftus Hills, D.Sc. 7.40: News. 7.45: Come with us round the world--Cochin China, Mir. H. J. G. Esmonde. 8.0: Melbourne Observatory time signal.

NIGHT SESSION.

8.0: St. Augustine's Band (conductor, Percy Jones) "Demoiselle Chic" (Fletcher). 8.5: "The Harmonisis" Male Quartette—"Two Scot-sh melodies, "Mary of Argyle," "The Land o' the

Leal," 8.12: Willy Wilding, comedian—"Don't Hang the Washing on the Aerial." 8.17: Ernest Wilson, baritone—"The Treo Grena-diers" (Schumanni, "Passing By" (Purcell), 8.25: Pat M'Lean—Child impersonations, 8.32: Harmonists Male Quartette—"A Man and a Maid." "Spin. Spin" (Old Swedish), 8.40: St. Augustine's Band—"Chanson Triste" (Tschalkowsky).

(Tschnikowsky)

elody numbers, 11.30: God Save the King.

3AR

Australian Broadeasting Co., 120A Russell St., Melbourne (Wavelength, 48) Metres), MORNING SESSION.

8.15 to 11.0: See Friday MIDDAY SESSION

MIDDAY SESSION. 12.0: Chimes. 12.1: Syncopated mude. 12.30: Luncheon music. supplied by the Studio Light or-chestra. 2.0: Chimes. Recreative Lecturettas. 2.1: Musical interluide. 2.20: Products of the Jungle-Mir. A. A. Downs. 2.35: Musical interluide. 2.40: Personal Adventures while Exploring-LL-Col. Edred Pottin-ger, D.S.O., F.R.G.S. 2.55: Musical interluide. 3.0: Chimes

THE RADIO MATINEF

Chimes
 THE RADIO MATTRE.
 3.1: A.B.C. Troubadours—"Coquette" (Berlin), request number: 3.5: Thomas M Pherson, Jautione—"Uncle Rome" (Hourch, "Blow, Thou Winter,")
 Wind (Sargent), 3.12: Peter M'Carthy, banjo-Selected, 3.16: Marion Daniels, sojunano—"I Look into Your Garden" (Huydn Wood), "Defiddil Goia" (Hodgson), 3.23: A.B.C. Troubadours—Latest popular hits. 3.28: Allan Mitchell, tencr—"Inter Nos" (MacFadyen), "Mandalay" (Hedgeock). 3.35: A. D. quhart, E. Rochlin, and Rob Brookshaw, violin, fute, and plano trio–Selected. 3.40: "The House Across the Way," produced by Catherine Nell. Characters: Kitty the Girl, Catherine Nell. Characters: Kitty the Girl, Catherine Nell. Characters: Kitty the Girl, Catherine Nell. Characters: Williams. Scene: The unoccupied house of Kitty's friend. 3.55: A. D.C. Troubadours—" aving for Rain" (Eckersley), "To-day's a Sunny Day for Me" (Hackforth). 4.0: Beth Corret, contraito—" Sapplo", Parewell" (Gounod), "Waila Pol" (Alfred Hill), 4.7: A. Urquhart, violin–Selected. 4.12: Thomes Mac, "Guiders," Algost Alex, "Alfred Hill, 4.7: A. Urquhart, violane, Scene, "The Hadio Truibus thawait," "Merey Farm." 4.24: The Radio Truibus the salit, "persian Song of Spring" (MEurney), "Don't You Mind It, Honey T, Romert, A. 39: Harry Bennett, viophone–Selected. 4.39: Beth Correl, contraito—"To Music" (Schubert), "The Hindoo Song" (Bemer, 4.54: She Hondors, Jess, and story, 4.56: ABC. Troubadours—Request, unmbers, 5.50: Weather data. 5.35: Musical reproduction. 6.45: Choice down **EVENING SESSION** 61: Dinner music, supplied by the Studio Light Orchestar. 7.30: What's on the air to-night. 7.32;

6.15: Dinner music, 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.

8.0: National Broadcasting Orchestra-Selection of "Wilfred Sanderson's Songs." 8.10: Violet Jackson, soprano--"From the Land of the Sky Blue Waters" (Cadman), "The Early Morn-

The cay but want and Victor Brooks, entertainers, 8.17: Elise Stewart and Victor Brooks, entertainers, "Tim Bringing a Red, Red Rose" (Donaldson), "Could I? I Certainly Could" (Ager), "That's What I Call Sweet Music" (Wendling), "Cosy Nook" (Brady)

(Brady). 8.30: Claude Carter will entertain. 8.37: Norman's Royal Hawaiians—"Southern Moon" (Norman), "By the Waters of Hawail". (arr. by Norman), "On the Beach Hula" (Karlinid), "Beaulidu Hawail" (Earl).

8.45: The Jewish New Year. 1. Hatiltvoh (Jewish Nafional Anthem)—National Broadcasting Orchestra. 2. Song, "Mine Zisser Malach" (Shpiro). "Shoft Mine Kind" (Shpiro)—Jovan Massonoff, tenor. 3. Organ sole: "Dybuk" (Rosenfeld), "Dos Redele." from "Bar-Kochba" (Goldfaden)—Alfred Bouize. 4. Cello sole: "Der Torem Von Peet" (Rosemaf), "Agliato e non fuoco"—Tasma Tiernan. 5. Duet "Bar-Kochba" (Goldfaden)—Alfred Bouize. 4. Cello sole: "Der (Mischa Elman)—Edouard Lamberton". "Shife," (Mischa Elman)—Edouard Lamberton." Shife, "Oniota Companie of the Shife and S

is sketch. 10.47: National Broadensting Orchestra-Selection om the musical comedy "Tumble In" (Frint). 11.0: Rex Dance Band. 12.0: God Save the King. 120

3DB

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

AFTERNOON SESSION.

AFTERNOON SESSION. 2.0: Snadler and his Orchestra—"Adorec. 2.30: Percy Heming—"Salaam." 3.0: Gatty Selars (or-gan)—"Glpsy Caravan." 3.30: Lucreza Bott—"Can-nais-tu." 4.0: Columbia Symphony Orchestra—"The Flatterer." 4.30: Morton Downey—"Rosemary." 5.0: How Do You Do Company—"How do you do." 5.30: Close down. Note: During the afternoon pro-gress reports and comments on all sporting events will be given.

EARLY EVENING SESSION.

6.0: The Philmore Band—"Golden Friendships" Requests. 6.30: All sporting results. 6.45: Margue-rite Dalvarez—"Sequedile" ("Carmen"). 7.0: H.M. Grenadier Guards—"Humoreske." 7.15: Market re-ports. 7.20: Art Gillham—"I'm Missing the Kissing." 7.30: Jack Hylton and his Orchestra—"When the White Elder."

EVENING SESSION.

8.0: The Victorian Professional Orcnestra Co ansmitted from the Auditorium-M Cleilan Concert 8.0: The Victorian Professional Orenestra Concert, transmitted from the Auditorium-M'Cleilan and Company's Sponsored Session. 9.0: J. H. Sharwood's Sponsored Programme. Joe Watson and the Green Mill Band. 10.0: W. H. Squire ('ceilo)--- The Prize Song.⁽¹⁾ 10.30: De Groot and Terrnee Casey-- Cavrina." 10.40: News. 10.55: God Save the King.

4QG

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

EARLY MORNING SESSION.

7.43 to 8.30; See Friday,

AFTERNOON SESSION.

3.0: A programme of electrically reproduced rec-ords, etc. During the afternoon descriptions of the A.J.C. Metropolitan and A.J.C. Derby will be broad-cast by 2FC on short waves. These descriptions will be broadcast by 4QG on the ordinary wavelength. The relays have been arranged by 4QG for the benefit of Queensland listeners. The times will de-pend upon the starting times of the races.

EARLY EVENING SESSION.

6.10: Bi-weekly news service for distant listeners. 6.30: Bedtime stories. 7.0: To-day's races in 'detail 7.20: General sporting notes. 7.30: Jailing notes, by Mr. Fred Smith.

NIGHT SESSION

10: The Aloha Trio-Hawailan nusic. 5: Monument Harrow-Another Argument. 15: Vida Chown-banjo mandolin solos-"Honolu-Cakewalk" (Osman), "The Iron Division' (Kte-8.5: 8.15: ferl

8.20: Ben Cloirec (tenor)-"Just a Rose in Old Kil-

*2:20: Ben Cloirec (tenor)-"Just a Rose in Old Kil-larney" (Swain). 8:25: Foster and Dawson, entertainers. Gympie Musical Festival: Portion of the Gympie Musical Festival will be relayed from Gympie. The pro-gramme will include: Chief cloiral items, recitations, baritone solo finais, soprano solo champion, theor solo champion, contraito solo champion, male choirs. 8:35: From Gympie-Musical Festival. 10:30: From 'the Studio-News. Weather. At suitable time during the evening the final of the main trophy race will be described from Davies, Park Speedway.

Page Thirty-Five



5CL

Central Broadeasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres). AFTEBNOON SESSION

12.0: Chimes. 12.1: Selections for Flemington races by "Silvius." 12.3: Probable starters and selections for races at Morphettville by "Silvius." 12.5: General news, etc. 12.45: Recordings. 1.15: Morphettville; riders and positions for Camden Hurdle Race, two miles and 358 yards. 1.20: Musical inter-iude. 1.30: Morphettville: Running description of lude. Camden Hurdle Race by Mr. Arnold Treloar. 1.55: Morphettville: Riders and positions for Brighton Handicap, one mile and a furions. 2.0: Flemington race result. 2.10: Morphettville: Running description of Brighton Handicap. 2.35: Morphettville: Riders and positions for Morphettville Plate, five furlongs. and positions for Morphetiville Fiste, now furindige. 2.50: Morphetiville: Running description of Morpheti-ville Plate. 2.55: Flemington race result. 3.15: Mor-phetiville: Riders and positions for Gieneig Handi-cap, one mile and a quarter. 3.80: Morphetiville: Running description of Gieneig Handicap. 3.55: Morphetiville: Riders and positions for South Aus-tables. Deriver, and a half wile of C. Territor. tralian Derby, one and a half mile. 4.0: Fleming-ton race result. 4.10: Morphettville: Running description of South Australian Derby, 4.35; Mor-phettville: Riders and positions for Weigall Handi-cap, six furiongs. 4.50; Morphettville: Rumning description of Weigall Handicap, 4.55; Resume of race results; dividend for Weigall Handicap. 5.0; Close down.

EVENING SESSION

EVENING SESSION 6.0: Resumé of race results. 6.2: Birthday greet-ings. 6.15: Children's request numbers. 6.30: Din-ner session. 7.1: Senior Birthday League greetings; Stock Exchange. 7.10: Rev. O. E. Hals, B.A., on "The Sense of Supersitions." 7.24: Mr. G. Riley on "Items of Interest." 7.40: SCL's sporting service, including Morphetiville and Flemington race re-sults, country sporting, Soccer scores, hockey, cyc-ting, lacrosse, and other sporting results; results of Country Football Carnival.

NIGHT SESSION

3.10: Hindmarsh Municipal Band (conducted by J. Pofrife)-March: Intermezzo, "White Lilles" (numci: "x-trot, "The Wedding of the Painted Doll" (Brown)

phore 9.2: 9.3:

Albumory and Arrows and

9.20: Jean Finlay, planiste—"Bcherzo in B Minor" (Chopin).
9.27: Don and Rex.
9.34: Hindmarsh Municipal Band—Selection, "The Porter of Harve" (Casoni).
8.44: Vocal number.
9.51: One-act play, entitled "A Marriage Will Not Take Place," in which Beryl Alford and Frank Johnstone will take part.
10.6: Hindmarsh Municipal Band (conducted by J. Raddiffe)—A. Ellis (cornetist), "A little Orey Home in the West" (Lohr); march, "With Sword and Lance" (Clarke).
10.6: SCL's sporting service, including Morphett-10.16: SCL's sporting service.

10.16: SCL's sporting service, including Morphett-ville and Flemington race results, country sporting, Soccer scores, hockey, cycling, lacrossc, and other sporting result.

Soccer scores, hock sporting results. 10.30: Recordings. 11.0: Close.

6WF

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

Por morning session schedules see Friday. THE RADIO MATINEE.—During the afternoon re-sults and sporting information will be broadcast im-mediately received. 3.30: Town Hall chimes. 3.31: Reproduced music. 4.36: Sporting rosults and pro-gress information. 4.0: Town Hall chimes. 41: Re-produced music. 4.56: Features of tc-night's pres-entation. 5.0: Close down.

EARLY EVENING SESSION .- See Friday.

EVENING SESSION .- Royal Show Grounds Sports Meeting

7ZL

Tasmanian Broadcasters Pty., Bursary Bulldings, Elizabeth St., Hobart (Wavelength, 516 Metres).

Elizabeth St., Hobsrt (Wavelength. 516 Metres). 11.30: Records. 11.34: Weather. 11.35: Records. 11.55: Tasmanian Stations' 9 a.m. weather report. 12.1: Shipping. Mail notices, Housswives' Guide. 12.8: Records. 12.30: News service. Announce-ments. 12.40: Records. 1.5: British Official Wireless news. Railway auction sales. 1.10: Records. 1.30. Close down. 2.45: Transmission from the North Ho-bart Oval: Football match. Southern League v. Col-lingwood, described by Sid Jones. 4.50. All sport-ing results. 7.10: Recorded music. 7.30: News ses-sion. 7.40: Belle St. Lawrence will containe her 'ravel taiks. 7.50; J. M. Counsel will speak on "European Affairs" 8.1: Records. 8.15; A request of popular records. 9.30: British Official Wireless news. 9.35: Request programme continued. 10.20: Close dywn. down.

FREE with every MAGNAVOX MAGNETIC SPEAKER UNIT

a beautiful STAND, suitable to hold this Unit. This STAND will also hold Eliminator, Battery, Etc.

We are clearing OUR **ENTIRE STOCK of these** Units at the ridiculously low price of



1 3.7

THIS IS THE SECOND WEEK OF THIS SNAP

Don't delay, purchase one now-this offer will not last long.

See and hear them at

United Distributors Ltd., 151 CASTLEREAGH ST., SYDNEY

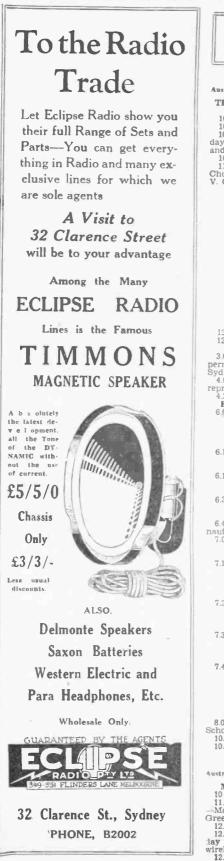
Makers of "Udisco" Radio Apparatus.

AND A REAL OF THE AND A DESCRIPTION OF THE ADDRESS OF THE ADDRESS

Page Thirty-Six

WIRELESS WEEKLY

Friday, 4th October, 1929



Local Programmes, Sun., Oct. 6 2FC Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres). THE CHURCH HOUR-10.0 a.m. to 12.30 p.m. Announcements. 10.0 -Studio music 10.5: Studio music. 10.30: This morning's news from the "Sunday News," "Sunday Times," and "Truth." and British Official Wireless Press. 10.45: Musical items. 11.0: From the Strathfield Presbyterian Church: Morning Service, conducted by Rev. V. C. Bell. dame Evelyn Grieg. 5.10: C. N. Bacycrtz will continue his series of talks on "Greek Philosophy." 5.30: Musical programme under the direc-tion of Madame Evelyn Grieg. 6.0: For children in hospital—Session con-ducted by Uncle Steve, assisted by Aunt Growie C. Bell-Organ Voluntaries. Goodie. Invocation. Hymn. Scripture. Solo, "Arm, Arm, Ye Brave." Alderman Melville. Hymn Scripture Hymn nal). Preacher: The Archbishop of Sydney. 830: From the Studio-Our programme to-night features, a recital of Russian music by Senia Chostiakoff, late of the Don Cossack Choir, in association with the String Quin-tette directed by Alexander Sverjensky. String Quintette (leader, Alexander Sver-lensky). nal) Pravet Intimations and Offertory. Anthem Children's Address. Hymn Lord's Prayer. Sermon, Rev. V. C. Bell. Hymn. Benediction. iensky)jensky)— "Andante Cantablle" (Tschaikowski). 8.37: Senia Chostiakoff— (a) "Legende" (Tschaikowsky). (b) "Russian Romance" (Kornlioff). (c) "Evening Bell" (Jaroff). (d) "Slumber Song" (Gretchaninoff). 12.15: From the Studio: Studio music. 12.30: Close. AFTERNOON CONCERT-3 to 4.30. 3.0: From Taronga Zoological Park—By permission of the Trustees, a description of Sydney's Wonder Zoo. 4.0: From the Studio. Austradio musical reproduction. 8.49 (Dvorak) (b) 2nd Mover.ent, "Theme and Variations" (Dvorak) 9.7: Contralto solo, Mona Dautscher (a) "Ave Maria" (Schubert). (b) "Sunday" (Brahms). 9.14: String Quintette 1st Movement, "Un Poco Andante, Allegro Molto ed Agitato" (Grieg). 9.24: Senia Chostiakoff (a) "Ariosto," from "Pagilacci" (Leoncavallo). (Dvorak) Close 4 30 EVENING PROGRAMME-6 to 10.30. EVENING PROGRAMME-6 to 10.3 6.0: The Monaco Quartette-(a) "Katza-The Dancer" (Gilbert). (b) "The Jungle Song" (Hiscocks). (c) "At Dawning" (Cadman). (d) "By My Fireside" (Rice). 6.12: Miss Le Brun Brown, soprano-(a) "A Woman's Last Word" (Banto (b) "In a Year" (Bantock). 6.19: The Monaco Quartetta-(Bantock). (b) "In a Year (Bantock). 6.19: The Monaco Quartette— (a) "Love Lilly" (Thompson). (b) "You in a Gondola" (Clark) 6.31: Peter Sutherland, basso— (a) "The Lord is My Light" (Allitsen). (b) "Down Here" (Brahe). (b) "Down Here" (Brahe). (b) 9.31: 9.31: Late weather forecast for the man on the land. 9.33: String Quintette— 2nd Movement, "Romance." 9.38: Contraito solo, Mona Deutscher— (a) "Queen Mary's Song" (Elgar). (b) "Poet's Last Lay" (Grieg). 9.45: Senia Chostiakoff— (a) "I Pitch My Lonely Caravan at Night" (Coates). (b) "Volga Boatmen's Song" (folk song). 10.0: Close. National Anthem. 6.40: Sir Kelth Smith will speak on Aero-6.40: SH Kenn Smith Andrew Construction 7.0: The Monaco Quartette— (a) "In a Persian Market" (Ketelby). (b) Selected. 7.15: Peter Sutherland, basso-(a) "It's Jolly Tohont" (Steindare Bennett) (b) "Poor Man's Garden" (Kennedy Russell) 7.22 2CBB Theseophical Breadcasting, Station, 29 Bliph St. So: Address by Miss Mary Rivett. 9.30: Address by Mr. Victor E. Cromer. 100; Music from Studio. 10.15: Organ music from St. Alban's Church, Regent Street, Sydney. 10.30: Morning service from St. Alban's Church. 12 noon: Music from studio. 12.30: Close down. 3.0: Musical session. 5.15: Chil-dren's session by Uncle George. 7.0: Sacred concert from St. Alban's Church, Regent Street, Sydney. 7.30: Lecture from Adyar House. 8.15: Concert from Adyar House by opurtesy of Messrs. Suttons, Ltd.; Miss Ada Brook, planist. 8.23: Miss Gladys Aubin, soprano. 8.30: Mr. Gregory Valentine, violin-ist. 815: Mr. Cecil Houghton, tenor. 8.45: Miss Beatrice Kendrick, contraito. 8.52: Miss Ada Brook, planist. 9.01 Weather report () West Gladys Aubin, soprano. 9.8: Mr. Gregory Valentine, violinist. 9.16: Mr. Cecil Houghton, tenor. 9.23: Miss Beatrice Ken-drick, contraito. 9.30: Address by Miss Mary BUW vallo) "Wondering Why" (Clark) (b) "Wondering Why" (Clark). 7.37: Miss Le Brun Brown, soprano (a) "The Festal Hymn of Judith" (Bantock), Organ Accompaniment. (b) "Twilight It Is" (Wightman) 7.44: Maynard Wilkinson. Organ solos (a) "Evensong" (Martin). (b) "Liebesiled" (Kreisler). (c) "Largo" from "New World Symphony" (Dvorak). (d) "Serenata" (Toselli). (e) "Love Song" (Nevin). 80: Ted Henkel and his Controlbans-Free (b) 8.0: Ted Henkel and his Capitolians-Free Scholl at the Wurlitzer. 10.0: Meditation music. 10.30: Close. National Anthem 2BL Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres). MIDDAY SESSION-10.55 to 3 p.m. 10.55: Announcements. 11.0: From the Stanmore Methodist Church 2UW Radio Breadcasting, Ltd., Pallog's Building, Ash St., Sydney (Wavelength, 207 Metres), 10.30 a.m.: Music and request numbers. I p.m.: Close down. 5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0! Musical programme, 10.30! Close down.

-Morning service, conducted by Rev. James

12.15: From the Studio-Musical Items. 12.30: News from the "Sunday News," "Sun-tay Times," and "Truth," and British official

wireless press. 12.45: Studio presentation of a specially-

arranged programme of music. 2.15: "Cheer-up" session, conducted Uncle Frank by

Uncle Frank, 2.30: Austradio musical reproduction. 3.0: Close, LATE AFTERNOON-4.30 to 6 p.m. 4.30: A celebrity recital arranged by Ma-dame Evelyn Grieg.

Goodle.
6.50: Organ music.
7.0: From St. James's Church of England—
110th anniversary of the laying of the foundation-stone of the church—
Psalms 114, 115.
Anthem, 'How Lovely is Thy Dwelling Place' (Brahms).
Hymns 508, 489, 533, 503 (English Hym-

- (a) Ist Movement, "Allegro Moderato"

-) "Artosto, from control and the state of th

2GB

Interstate Programmes, Sun., Oct. 6

3LO

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

MORNING SESSION. 10.0: McBourne Observatory time signal. 10.1: Musical reproductions 10.20: Express train infor-mation: British official wireless news: items of in-terest. 10.30: Bells of 5%. Paul's Cathedrals 10.45: Recital of saered music. 11.0: Morning service from Collins Street Baptist Church, Melbourne. Sermon: "The incentation." Pressher, Rev. W. D. Jackson, B.A. Choir, direction Madame Ella Kingston; an-them, "Behold the Lamb of God"; quartette, "Ood So Loved the World." (Note: Service ends at 12 noon to make way for Communion service, 12.0: Close down. AFTERMONT

Close down. AFTERNOON SESSION. 3.0: Pleasant Sunday Afternoon from Wesley Church Central Mission, Lonsdale Street, Mel-bourne 4.30: Close down. THE CHILDREN'S CORNER. 6.0: "Brother Bill's' talk this week is about "The Queen of Hearts." Birthday greetings by "Billy Funzy." Community singing for the children, con-ducted by "The Mouth Organ Man."

ducted by "The Mouth Organ Man." EVENING SESSION. 7.0: The Riga Trio-"Trio In B Major, Op. 8" (Brahms), Allegro con brio, Scherzo. 7.15: J. How-lett Ross-"The Indokadion of Triumph," a drama-tic story from the Bible. 7.30: Vassali Inster, piano -"Valse Caprice" (Rubenstein), "Humoreske" (Rach-maninoff). 7.40: Zisserman, "cellist-"Bailade" (Cliere), "Chante Triste" (Arensky). 7.48: The Riga Trio-"Trio in B Major, Op. 8" (Brahms), Adagio. Allegro. Trio-" Allegro.

NIGHT SESSION. Stan. Porter and his orchestra, and company of vocal and instrumental artists.

3AR

Australian Broadcasting Co., 120A Rusself St., Melbourne (Wavelength, 484 Metres). MORNING SESSION

11.0: Divine Service, from Wesley Church, Mel-bourne, Sermon: Rev. J. H. Cain. MIDDAY SESSION

12.30: A studio programme of specially selected reproduced music. 2.0: Frank Lanterman at the Wurlitzer. 3.0: Close down.

AFTERNOON SESSION

AFTERNOON SESSION 4.30: Ballet music from "The Fire Bird" (Strav-insky). Played by the Orchestra Symphonique (of Paris). Conducted by Izor Stravinsky. 5.2: "Bird Songs at Eventide." "Good Night, Said the Cuckoo" —Master Trevor Schofteld, the wonderful boy so-prano. 5.10: The Week's Good Cause. The Homeo-pathic Hospital Jubliee. Dr. Janet Cooper. 5.25: "Memories of Mendelssohn," J. H. Squire's Celeste Octette. 5.33: "Sitting and Thinking." "You Along o' Me"-Maioolm M'Eachern, Dass. 5.41: Plano recital—"Blue Danube" (Strauss), "Carmen Pot Pourri, No. I" (Bizel), "Coronation March," from "The Prophet" (Meyebeer), "I Travatore" (Verdi), "March Militaire" (Schubert), "Mikador Flunting Song," from "Rohh Hood" (De Koven), 550 Male Voice Choir. 6.28: A specially-selected programme of request numbers. 6.46: What's on the air to-night? 6.47: St. Paul's Cathedral Bells. EVENING SESSION

EVENING SESSION

7.0: Divine Service, from the Unitarian Christian Church, East Melbourne. 77th Church Anniversary. Sermon: Rev. William Bottomley. Subject, "Religion and Truth." Anthem: "Sun of My Soul" (Turner). Solos: "He Shall Feed His Flock" (Handel). Miss Truda Russell. "Open the Gates of the Temple" (Knapp). Mr. R. Nicholson.

NIGHT SESSION

8.30: Transmission from Sydney. Relayed by 2BL. An unusual programme, featuring Russian music, with the Alexander Sverjensky Ensemble, and Senia Chostiakoff.

9.58: Weather. 10.0: God Save the King.

3DB

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

Merano" prozocastmy station, Plinders Street. Meranov Wavelength, 955 Metres). AFTERNOON SESSION. 3.0: Societé des Concerts-Overturs, "Marriage of Pisaro" (Moari). De Reske Singers-"On Winss of Song" (Mendstohnh, "vidoritor" (Methows of Song" (Mendstohnh, "vidoritor"). Gethowson, Quentin Maclean (organ)-"Puneral March of a Marionette" (Gounod). John Harrison (tenor)--"Clend Me Your Ald" (Gounod). John Harrison tienor)--"Clend Me Your Ald" (Gounod). John Harrison tienor)--"Clend Me Your Ald" (Gounod). John Harrison tienor)-- "Clend Me Your Ald" (Gounod). John Harrison tienor)-- "The State September" (Hope-Temple). "O Lavely Night" (Landon-Ronald). Jascha Heifets (violin)-- "Minuet" (Porpora, Kreisler). "Valse Biu-ette" (Drigo-Auer). Singers--"Gloria" (Byrd). "Magnificat" (Byrd). St. Louis Symphony Orchestre"--"Trovatore" (Verdi). Barold Bauer (planaforte)--"Etude In D Flat" (Lisst), "In the Night" (Schu-mann). Milan Symphony Orchestra--"The Secret Marriage." 4.30: Close down.

6.30: Requests. 6.9: Radio concert. Eddle Pitch and the mighty Regent Wurldzer, with Jack O'Hagan 10.0: God Save the King.

4QG

Queensland Government Radio Service, Brisbane (Wavelength, 385 Medres). MORNING SESSION. 11.0: The complete morning service will be re-layed from St. Slephon's Roman Gatholie Cathedral. 12.0 (noon): Close.

AFTERNOON SESSION. 3.15: The concert by the Brisbane Citizen's Bano will be relayed from the Botanic Gardens. 4.30: Close.

will be relayed from the Botanic Gardens. 4.30: close.
 EARLY EVENING SESSION.
 6.0: A session for Little Listeners. 6.45: From the City Tabernacle Choir-Conductor, Mr. Sydney May. "Hark, Hark, My Soul" (Jenkins). Devotional exercises. Mr. A. H. Richer (Chairmag, Baptist Home Mission Committee). Rev. B. Hewison (Superinhendent, Baptist Home Missions) will describe some "Bright Bush Bethels." Anthem by the City Tabernacle Choir, conductor Mr. Sydney May. "Hyper the Trinity" (Tschalkowsky). Mr. A. H. Richer conveys a cheery greeting.
 NIGHT EXESSION.
 7.30: The complete evening Service will be relayed from St. Stephen's Roman Oatholic Cathedral. At the conclusion of the church service ine concert by the Brisbane Multipal Concert Band will be relayed from Wickham Park.
 9.30: Close down.

5CL

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

MORNING RESERION. 10.45: Carillon of bells from the Adelaide Town Hall 11.0: G.P.O. dhimes. 11.1: Service from Pirle Street Methodist Church; minister, Rev. J. G. Jen-kins; organist, Mr. Harold Parsons. 12.10: Prom SCL Studio-British Official Wireless news. 12.15: Close door

AFTERNOON SESSION. 3.0: Chimes. 3.1: A Pleasant Sunday Afternoon Service from Gleneig Congregational Church. 4.0: G.P.O. chimes. Close down.

EVENING SESSION. EVENING SESSION. 6.0: Chimes. 6.1: Children's happy moments. 6.15: "The Bird Lady" and "The Sunshine Songsters" will entertain the children. 6.45: Church Cholr Bumbers. 7.0: Chimes. 7.1: Service from St. Peter's Cathedral. Minister, Rev. Pinnis; organist, Mr. John Dunn.

unisser, rev. Finnis; organist, Mr. John Dunn. NIGHT SESSION. 8.30: Mrs. A. C. Williams' Mandolin Band—"Li acio" (Arditti), "One Fleeting Hour" (Lee). 8.40: Mary Edson, soprano-"Wilth You" (Nutting). 8.44: Jean Finlay, pianiste-"Prelude," "Harlequin" Schutt). Bacio

(Schutt). 8.54: Mary Edson, soprano-"With Verdure Ciad (Haydn)

(Haydn).
9.2 Mrs. Williams' Mandolin Band--'Cubinience''
(Pirometti), "Chanson Triste" (Tschaktowsky).
9.12: Mary Edson, soprano-'Come Unto Him.''
9.16: Mrs. A. C. Williams, mandoliniste-''The Lost Cherd'' (Sull'van), "Novar'' (Heath).
9.24: Mary Edson, soprano-''O Divine Redeemer''
(Gound)

(Gounod). 9.29: Jean Finlay, pinniste-"La Source" (Lesche-

9.29: Jean Filmar, primar, utxy.
9.34: Mrs. A. C. Williams' Mandolin Band—Spanish waitz, "Mitision" (Iberto Obregon), "Midnight Special March" (Lincoln),
9.40: Mr. P. H. Nicholls will speak on "Colonel William Light." 9.55: News session. 10.0: Close

6WF

Australian Broadcasting Company, Ltd., Weilington St., Perth (Wavelength, 435 Metres).

MORNING SESSION.—10.40: Sporting resume. 50: Sunday News Service. 11.0: Church Service. . Mary's Cathedral. 12.30: Reproduced music. 1.0:

10.30; Sunday News Service. 11.0; Church Service. St. Mary's Cathedral. 12.30; Reproduced music. 1.0; Close down. AFTERNOON SESSION.—Combined concert by the Ladles' Odeon Society, the Metropolitan Gleeman; and the Metropolitan Orchestral Society, broadcast from Queen's Hall. EVENING SESSION.—6.30; Children's Session. 7.0 Orchestral music (reproduced). 7.30; Church Ser-vice. St. Andrew's Church. 3.46; Special Musicale arranged by Bert. Howell, broadcast from Ambassa-dor's Theatre, including items by the Orchestra and Wurlitzer organ. 10.30; Close down. "God Save the King." King

7ZL

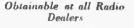
Tasmanian Broadcasters Pty. Bursary Buildings. Elizabeth St., Hobart (Wavelength, 516 Metres). 11 a.m.: Morning service from Holy Trinity Church, Hobart, 12.15: Close down, 3.30: A con-cert programme arranged by the Derwent Concert Band, 4.30: Close down, 6.15: Children's chorus singing, conductor Trevor M. Morris, 6.45: Bertha Southey Brammal, 7.0; Evening service from Mem-orial Congregational Church, Hobart, 8.28: From the studio, a programme of sacred and classical music, arranged by James Coursel, 9.45: British official wireless news. 9.50: Close down.



materials. Ingenious riveling and binding fastens parts securely and binding fastens parts securely orable surface. Of scientific de-ting and surface. Of scientific de-ting always perfect electrical con-tact always.

Type "G.S.," with grid leak clips or atlaching direct to socket terminal

Standard, Type "S," with sol-dering lug and binding strap in the piece.



Amalgamated Wireless A/asia, Ltd.,

> 47 York Street, Sydney

SPECIFY ! Varick St., New York

Page Thirty-Eight

WIRELESS WEEKLY

Friday, 4th October, 1929

Local Programmes, Monday, October 7

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 informa-tion 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
- 10.30: Announcements
- 10.32: A.B.C. Racing Observer. 10.45: Horace Weber at the Grand Organ. 11.0: Household Helps: Cooking by Miss

- It Forum." 12.20: Midday weather forecast and wea-ther synopsis. Special produce market ses-sion for the man on the land, supplied by the State Marketing Board. THE RADIO MATINEE

- THE RADIO MATINEE 12:30: Studio music. 12:50: From Randwick: Description of the races in the running. 4:35: From the Studio: Late sporting re-
- sults.

4.45: Close

- EARLY EVENING SESSION-5.45 to 7.55. 5.45: Kiddles' "Good-night" Storles. told by he "Hello Man." assisted by Aunt Eily. the

- 6.45: The Dinner Music Quartette. 7.30: A.B.C. Sporting Service. 7.37: Special Country Session. Stock Ex-change Resume. Markets. Weather forecast. Late news from "The Sun." Truck bookings. 7.58: To-night's programme.
- THE EVENTING PRESENTATION-8 to 11.30 Monday is generally a Classic Programme through 2FC Service, but as to-night is a holiday night our entertainment is on popu-
- lar
- (a) "In Wunderschonen Monat
 (b) "Wenn Ich in Dein Angen
 (c) "In Wunderschonen Monat
 (c) "Wenn Ich in Dein Angen
 (c) "Dress Gilberts, entertainers-Mai" Seh"
- (a) "Popples" (Godfrey).
 (b) "I Wish She'd Come Along Now" (Scott, Damerell, and Hargreaves).
 (c) "Poem—Smiting the Rock" (Austra-lian)
- llan)
- 8.17: The National Broadcasting Orchestra "Three Light Pieces" (Fletcher). 8.27: Scott Alexander will present the thril-linely weird comedy by Codrington Ball, en-
- titled-

- "The Ghost in the Pantry." Scene: A Room in a haunted house at midnight.
- 8.37: Eileen Starr. soprano-with Orchestral
 - Accombaniment Farewell appearance prior to her departure for London- (a) "Was It a Dream?" (Coslow).
 (b) "A Title Elect of Cloudbacts" (Fin.
 - (b) "A Little Fleet of Cloudboats" (Fin-
 - den) 8 4 4
 - den). 14 The White Coons— (b) "The Lily of Laguna" (Stuart). By request.
 - 8.54 :
 - 9.5

 - 97:

 - 9.14:
 - (a) Sone, "Feathers Brown Brown" (Rule and Holt).
 (b) Sketch. "Paint and Politics."
 (c) Song, "Laugh, Laugh, Laugh" (Sher-
 - man)

- 9.24: The White Coons, in impressions of Eugene Stratton-(a)
 - "Just a Rose in Old Killarney" (b)

- tral
- (b) "Just a rose in order (Swin).
 (c) "The Man with the Single Hair."
 9.34: Scott Alexander in a Radio Play.
 9.44: Eleen Starr, soprano-with Orches-al Accompaniment(a) "I Love to Hear You Singing" (a) "I Lo (Wood).

 - (b) "Happy Song" (Del Riego).
 (b) The National Broadcasting Orchestra (a) "Domance" (D'Ambrosio).
 (b) "Two Hungarian Dances, Nos 7 and a "Grahme).
- 3" (Brahms), 10.0: F. H. Raward will tell of the "Streets

- 10.0: F. H. Kawara will tell of the Success of London."
 10.15: Announcements. Late Official Weather Forecast.
 10.20: From the Hotel Australia: Ccc. Mor-rison's Dance Band.
 11.30: Close. National Anthem

2BL

- 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. 8.50: Memory melodies. 9.0: This morning's story. 9.30: A musical interlude. 9.40: British official wireless press. 9.45: News from the "Daily 'felegraph Pic-

- 9.45: New music. 10.5: News from the "Daily Telegraph Pic-torial."
- torial."
 10.10: Austradio musical reproduction.
 10.40: The Australian Broadcasting Company's Women's Association.
 11.0: G.P.O. chimes. Close down.
 MIDDAY SESSION-12 noon to 2.30 p.m.
 12.0: G.P.O. chimes.
 12.2: Announcements. The Luncheon Hour Output

- Quartet. 1.0: News from the "Sun." 1.5: Studio music. interest
- 1.15: Women's in M'Millan, "Mothercraft interest talk-Matron
- 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. Efficiency Talk—Brunton
- 2.30: Business Efficiency Talk—Brunto Gibb. "Random Remarks." 2.45: The Magic Carpet series—C. Pric Conigrave, "Mountaineering in the Stirlings. 3.0' From the ballroom of the Oriental-Price

Scott Alexander, popular radio actor, who has produced hundreds of sketches and plays over the air, will present a weird ghost comedy to-night.

.32: From the studio-Sim Solomon, violinist-(a) "Rosamunde" (Heuberger-Kreisler).
(b) "Menuet" (Porpora).
3.39: A song of to-day.
3.42: From the ballroom of the Oriental— ydney Simpson's Syncopaters in dance usice

music

Sydney

Sydney music

Boys'

music.

Sydney music

Sydney Simpson's Syncopaters in dance

(a) "The Blacksmith."
(b) "Bells of the Sea."

3.19: Melody memories. 3.22: From the ballroom of the Oriental-ydney Simpson's Syncopaters in dance

- From the studio-Minette Kanny 3.53: 3.33. From the ballroom of the Oriental— 4.0: From the ballroom of the Oriental— Sydney Simpson's Syncopaters in dance
- - 4.12: From the studio-Will Clark, basso-

Music. 4.45: From the studio—Radio Rhythm. 5.0: Complete sporting resume. 5.15: Close. Note: The classic races in the A.J.C. Spring meeting will be broadcast through both 2FC and 2BL.

THE DINNER HOUR-6.15 tq 7.55 p.m. 6.15: The Dinner Music Quartette, 6.45: The A.B.C. Younger Set session-oys' Aero Club, conducted by Mr. Norman

p.m.

p.m. Sporting enthusiasts are looking forward to our feature to-night, in the description of the wrestling contest from the Stadium by the A.B.C. sporting expert. 2FC offers a programme on popular lines, with songs. comedy numbers, and short radio sketches. 8.0: The Frisco Novelty Duo-(a) "The Bee Song" (Wendling). (b) "Carolina Moon" (Burke). (c) "On My Ukelele" (Parish). 8.7: Bert Gilbert commences hls "Hoorcoft Series."

his "Hopcroft Series. 8.22: Ward Leopold and his

shine" (Jarvis)

(a) "Dawn Brings the Sun-

(b) "Temple Bells" (Woodforde-Finden)

Spanish Guitar-

"Kashmiri Song" (Woodforde-Fin-(c) den).

8.30: From the Stadium-description of the wrestling contest

10.0: From the studio-The Frisco Novelty Duo

- (a) "In the Woodshed She Said She Would" (Tucker).
 (b) "Ten Little Miles From Town" (Kahn).

- (c) "O Sole, O Me" (Hertz).
 10.7: Ward Leopold, baritone—

 (a) "You Were Meant for Me" (Brown).
 (b) "The World is Waiting for the Sun-rise."

10.17: Announcements.

10.25: Late news from the "Sun." Late weather forecast, 10.30: Close. National Anthem.

2GB

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

Thesesphical Broadcasting Station, 29 Bligh 84. Sydney (Wivelength, 316 Metres).
10.0: Music. 10.10: Happiness Talk, by A. E. Bennett. 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling, 11.30: Address by Miss Mary Rivett. 11.45: Close down. 20: Music. 25: Women's Radio Service, by Mrs. Dorothy Jordan. 2.50: Movie Know All. 30: Music. 315: Close down. 5.15: Children's session, by Uncle George. 70: Music. 7.45: Feature story. 8.0: Miss Maesmore Morris, contraito. 8.7: Symphony Orchestra. 8.15: Mr. Barend Harris, barltone. 8.22: Instrumental Trio. 8.30: Mr. Jack Win and Mr. Heath Burdock, humor. 8.35: Miss Iverna Kyle, coprano. 8.45: Address. 9.0: Weather report. 9.1: Symphony Orchestra. 9.10: Miss Maesmore Morris, contraito. 9.20: Mr. Heath Burdock, Shake-speare recital. 9.30: Mr. Barend Harris, baritone. 9.40: Instrumental Trio. 9.50: Miss Iverna Kyle, 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: G.P.O. clock and chimes; music. 1.15: Talk on "Home-craft," by Pandora. 1.40: Music and request numbers. 2.30: Close down. 4.30: Musical programme.

EVENING SESSION.

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; request numbers. 7.45: Radio talk by Mr. E. Homfray. 8.0: Violin and 'cello recital. 9.0: G.P.O. clock and chimes. Comments on Foreign Affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down. Prentice. 9.10: M 10.30: Close down.

2KY

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

MORNING SESSION.

MORNING SESSION. 10.0: Tune in to the ticking of the clock. 10.3: Popular fox-trois. 10.15: Hawaiian steel guitar selections. 10.30: Women's session, home hints and information, conducted by Mrs. Gray. 11.0: A few laughs. 11.5: Plano-forte selections. 11.15: Calls and announce-ments. 11.20: Musical interlude. 11.30: Labor's Federal radio campaign. 11.40: Re-quest numbers. 11.55: Where to go to-night. 12.0: Closing announcements.

CHILDREN'S SESSION.

6.0: Birthday calls, request numbers, and kiddles' entertainment, Aunt Jemima and Uncle Bert.

EVENING SESSION.

7.0: Musical interlude. 7.15: Dance music. 7.45: Labor's Federal radio campaign. 8.0: Overture. 8.8: Tenor solos, Mr. A. Hillman. 8.15: Dancé music. 8.30: Request numbers. 8.45: Soprano solos, Miss Wright. 9.0: Nov-elty interlude. 9.10: Selection of latest Parlo-phone, Columbia, Regal, Brunswick, and Golden Tongue records. 10.0: Closing announcements.

2UE

Broadcasting Station 3UE, Everett Street, Maroubra, Sydney (Wavelongth, 293 Metres).

EARLY MORNING SESSION.-7.15 a.m.: Breakfast time hour orchestral music. 8.30; Weather report. Close down.

ror that lights the way YOU will be proud to own one of these handy "Ever-Ready" Lamps or The dainty Torches. models for the lady's handbag, the larger ones of fine finish for general use, the handsome, sturdy torches, the strong, practical cycle lamps, the indispensable handlampseach represents the finest workmanship and design that skill and thought in manufacture can give. No matter what your need, there is an "Ever-Ready" for every emergency. British - made and acknowledged supreme. Obtainable from all electrical and radio houses. Wonderful range of models priced from 2/9.

WHOLESALE DISTRIBUTORS: THE EVER-READY CO. (Gt. Britain) LTD., 163 Pitt Street, Sydney

DE.



Page Forty

Interstate Programmes, Monday, October 7

3LO

Australian Brondonsting Co., 120A Russell St., Melbourne (Wavelength, 371 Metres). EARLY MORNING SESSION. 7.0 to 8.15: Sec Priday.

MORNING SESSION.

10.30: Current happenings in sport, by Mel. Mor-ris. 10.45: Musical reproduction. 11.30: Morning sales, Melbourne Btock Exchange; metal prices. 12.0: Time signal. 12.1: Musical reproduction. 12.15: News service: Corn Exchange midday report: New-midth, subck sales Associated Stock and Station Agents' official report.

MEDAY SESSION. 1.0: Time signal: Stock Exchange: meteorological data: weather forecast for Victoria, New South Wales. South Australia, and Tasmania; ocean fore-cast: river reports: rainfail data. 1.30: Trenamis-sion from Constitutional Club lunciton.

sion from Constitutional Club luncheon. EDUCATIONAL SESSION. 2.0: Boys and girls of other days, Miss D. Bab-ington. 2.15: Musical Interlude. 2.30: Science in everyday life, Dr. Loftus Hills, D.Sc. 2.35: Musical interlude. 2.40: Our Australian writers, Henry Ken-dail, Mr. Percival Serie. 2.55: Musical Interlude.

 interlude. 2.40: Our Australian writers, Henry Kendull, Mr. Percival Serie. 2.55: Musical interlude.
 THE RADIO MATINEE.
 3.0: A.B.C. Troubadours-Popular meiodics. 3.6.
 Carl Simons, baritone—''Melisande in the Wood'' (Goetz). ''Lighterman Tom'' (Squire). 3.17: Less Sims-Trumpet solo. 3.21: Hazel Hosking, soprano—''The Old Refrain'' (Kreisler). 'The Star'' (Rogers).
 Victory Brass Band—''Melodie d'Amour'' (by request). 3.34: Iris Shaw—Character study, ''Monday morning.'' 3.40: Harry Bennett—Xylophone solo. 3.44: Carl Simons, baritone—''In Old Madrid'' (Troubadours-Latest hits. 3.57: Hazel Hosking, soprano—''Sincerity'' (Clarke), 'The Charm of Spring'' (Conligsby-Clarke), 4.4: Victory Brass Band—Selections from musical comedy. 4.10: Iris Shaw, dramatic regulari.4.30: Acceptances and barrier positions for the Jong acces on Wednesday, October 9, 1920. 4.35: Close down. During the afternoon results of the Richmond pony races will be broadcast as they come to hand.
 THE CHILDREN'S CORNER. to hand.

to hand. **THE CHILDREN'S CORNER.** 5.45: "Billy Bunny" will tell an old story in a new way. Then we'll have the birthday greetings, and naybe a little music. "Nick and Nack" are here again with their funny instruments. "Nick" is going to tell you more about how to make music out of a clear box, and some bits and pleces. Get your pen-cils and paper ready, children.

EVENING SESSION. EVENING SESSION. 6.40: Public school activities, E. C. H. Taylor. 6.55: Musical interlude. 7.0: Melbourne Observatory time signal. 7.1: Countryman's session. 7.25: Recent dis-covertes and inventions. Mr. R. H. Wilmott. 7.40: News service. 7.45: The world's kaleidoscope, Prof. K. H. Balley, M.A. B.C.L. 8.0: Melbourne Obser-vatory time signal.

Valory lime signal. NIGHT SESSION. 8.1: Collingwood Cluzens' Band (conducter, P. C. Johnston)--Novelty opening, "Wy Valley." 8.6: Violet Jackson, soprano--"The Nightingale and the Rose." with violin obbligato (Thompson). 8.10: Waiter Melde, mandoline, and Charles Back-sitom, Spanlsh guitar--"Vlenna March" (Schram-mell, "Glow Worm Gavotte" (Lincke). 8.16: Claude Cartter, entertainer. 8.22: John Howard, baritone--"Deep Night," with orchestral accompaniment.

orchestral

ral accompaniment. National Broadcasting Orchestra—"Melody in 8.25: National (Rubenstein) P

The A.B.C. Troubadours—"Melody in F" (csn-j) (Rubenstein). 8.30 Covated)

a) (Rubenstein).
A.B.C. Pierrots, in "The Harbor Lights."
Victor Baxter, tenor—"Gastillian Lament" 8.33 8.45 (D_{i}) Riego

Dei Riego). 848: Walter Melde, mandoline, and Charles Back-trom. Spanish guitar—'Le Petit Pierrot March' Ternileux), "Santa Lucia," Italian folk song. 8.54: Claude Carter, entertainer. 9.8: The Siudio String Octette (with piano) will lay a special arrangement of "The Wedding of the sinted Doil."Royard Mariana the String (Cremies

13: John Howard, baritone—"Bonnie Dundee."
16: Collingwood Citizens' Band—"All Scotch."
21: Jack Kerr, Scottish comedian—"Scot Unre"

Mixture. Mixture." 9.28: A short visit to the various show, presenting: Vaudeville, circus, musical connedy, drama, grand opera, selection from "II Trovatore," accompanied by the National Broadcasting Orchestra. 10.15: Meteorological information: British official wireless news: tigms of interest. 10.25: "The Rex" Dance Band. 11.30: God Save the King.

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wavelength, 481 Metros).

MORNING SESSION 8.15 to 11.0: See

8.15 to 14.0: See Friday. MIDDAY SESSION 12.0: Chimes. 12.1: Food and cookery. Miss Kath-leen Beningfield. 12.15: Fifteen Minutes' Syncopa-tion. 12.30: Luncheon nusic. supplied by the Studio Light Orchestra. 2.0: Chimes.

AFTERNOON SESSION 3.1: Victory Brass Band-Deputy Conductor, W

Honey. "The Black Prime." "March of the Manni-kins." 2.6: Barltone solo-March Williams, 2.16: Plano recital, Rudolf Frimi. 2.26: Comedias, Utio-leic Ite. 2.34: Victory Brass Band, "The Sanctuary of the Heart." 2.46: Comedienne, Sophie Tucker, 2.48: Syncopation, Paul Whiteman's Orchestra. 2.56: Barltone solo, Haroid Williams. 3.4: Request numbers, 3.20: Your clothes, Miss M. Nicholson, 3.35: Musical Louid M. 3.40: Your Garden. "Top Dressing and Louid M. 3.40: Your Garden. "Top Dressing in Louid M. Marther, Barltone Solo, Taroid M. Salor, Solo Herlude. 4.0: Travelling H. Bahm. 3.55: Musical Interlude. 4.0: Travelling in Paders' Demonstration Session. 4.15: Musical reproduction. 5.30: Weather data. 5.45: Close down. EVENING SESSION

6.15: Dinner music, supplied by the Studio Light Orchestra. 7.32: Sporting results. Acceptances and Barrier positions for the Gelong races, on Wednes-day, 9th October. 7.35: Latest musical releases. 8.0: Ghimes.

NIGHT SESSION 8.1: Recent books of note-Prof. G. H. Cowling,

8.1: Recent gooss of hot-re. d. M.A. 8.15: Half-hour concert by the Heidelberg Musical Society. Conductor, Frederick Earp. Planist: Louise Dean. Ghoir: "Hallelujah" (Mount of Olive) (Beet-hoven). Solo: "The Linden Tree" (Schubert). Choir: "Luliaby" (Brahms), The Maiden" (Brahms); "Pare-well" (Brahms). Ladles' Choir: "The Swallow Leaves Her Nest" (Hölst). Choir: "Meek as Tou Livest" (Beethoven). Song: "Angels Guard Thee" (Godard). Wilson M'Gibbon. Choir: "Chorale" Irom Cantata, 147 (Eneh). Uson M' 7 (Bach) 8.45: Do

147 (Bach).
147 (Bach).
8.45: Dorlan Trio-Trio, "Minuette" (Beethoven).
"Song of the Mountains" (Greig), "Rondo" (Mozart).
8.55: Dawn Harding, mezzo-"Solveig's Song" (Greig).
"The Old Song" (Greig). "Wood Wander-ings" (Greig).
9.2: Heien Hamerton, violin--"Les Graces Natureles" (Couperin). "Praeludium un Allegro" (Puglani-Verticat)

(Couperin), "Praeludium un Allegro" (Puglani-Kreisier). 9.10: "The Bronsons"--Pitteen minutes of Comedy and Song. 9.25: Victor Stephenson, plano-"Hark, Hark, the Lark" (Schubert-Listz). 9.35: Dawn Harding, mezzo-"Thoughts" (How-ard Pischer), "Daddy and Babsy" (Levey), "When I'm a Grown-up Lady" (Howard Pischer). 9.48: Victory Brass Band--March, "Ebanico." 9.56: Wictory Brass Band-Wife, "Micro, Murphy 00, 10: Weather information and Herald news. 10.10: Victory Brass Band-Minuet" (Boccherint). 10.25: Victory Brass Band-Singer (Boccherint). 10.26: Victory Brass Band-Singer (Boccherint). 10.26: Victory Brass Band-Songs of the Past," 10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (Wavelength, 253 Metres).

Melbourne (Wavelength, 255 Metres). MORNING SESSION. 11.0: Second Argyle and Sutherland Highland Band "Clock is Playing." 11.30: La Vogue-"The World's Pashions and Poibles." 11.35: Margherita Saier (so-prano)--"Or son sola: (Dlavola-Auber). 12.09 Jesse Crawford (organ)--"When Summer is Gone." 12.30: Market reports-John M'Namar and Co., Pty., Ltd. 12.32: John Coates--"It was a Lover." 10: New Light Symphony Orchestra--"Spanifh Serenade." 1.30: Singing Berenaders--"Indian Butterfiv" 1.45. Close down.

AFTERNOON SESSION. 2.15: Royal Serbian Tambourita Orchestra---''Kos-sova Waltz.'' 2.30: The Happiness Roys--''Where did you get that Name?'' 3.0: Radio Hour. 4.0 Close down.

EARLY EVENING SESSION.

EARLY EVENING SESSION. 5.30: Troubadours—"'S Wonderful" 6.0: Child dren's requests. 6.30: Rose Tribe—"Old Planiation. 7.0: Ronnie Munro and Barry Mills fplano dueti-"Blue Skies." 7.15: Market reports. 7.20: Reginal Whitehead (bass).—"The Taveru Song." 7.30: Mar ket reports. 7.40: Gladys Moncrieff.—"Sa'ling th Sea of Romance." Reginald the

EVENING SESSION. 8.0: Sponsored Session. 8.30: J. F. Mitchell's Sponsored Session 9.0: Sponsored Session. 9.30: H.M. Grenadler Guards Band-"New Sulli-10 Q: Imple Letter Volt 10.0: Irmler Ladies' Quartette-"In this Hour of

10.30: Frank Westfield's Orchestra -- "The Temple Softe Rell

10.40: News. 10.45: God Save the King.

4QG

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

Wavelength, and mercer, For day session schedules, see Friday. During the afternoon descriptions of the A.J.C. Metropolitan and A.J.C. Derby will be broadcast by 2FC on short waves. These descriptions will be rebroadcast by 4QG on the ordinary wavelength. The relays have been arranged by 4QG for the benefit of Queensland listeners. The times will depend upon the starting times of the races times of the races

NIGHT SESSION.

8.0: Douglas Drouye and his Trio-Peaturing the Electric Vibra Harp. 8.10: Joyce Foreman (elocutionist) - "The High-

(a) Martine S. S. The Anglo Male Quartette—"Picconinny Kid (Parks), 8,10: J. W. Burgemeister (cornetist)-"Because (d'Bardelot).

(a hardelot). 8.15; A Thought for To-night (Will H. Lister)-

8.20: Phyllis Dauth (soprano)-"At the Well"

8.30: rhyms Dauth (sopisuo) - ht at the (Hageman). 8.25: Joyce Poreman (elocutionist). The Birth of the Opal' (Ella Wheeler Wilcox). 8.30: Douglas Droupn and his Trio-Melody Makers. 8.40: The Angio Male Quartette-"The City Choir" (Faster)

8.44: Claude Walker-Ten minutes with Henry Law-

son. 8.54: J. W. Burgemeister (cornetist)- "Love's Sere-

b. W. Butgenetser, terretation, J. Tynophila, Method Rowski, J. Transpiller, Warther Forecast, J. Tynophilar, Conductor, J. Tynophilar, Conses, "Me Trans", "My Blackhirds are Bluebirds Now," "Kaller, Duo at Two lo Four," "Ramona," "Me and the Man Iu the Moon"
9.9. Dick Pike (bass)—Selected.
9.4: Douglas Drouyn and his Trio—More Melody.
9.20: The Anglo Male Quartette—'Ole Uncle Ned".

9.20: The Anglo Male Quartette--Ole Uncle Ned" (Parks).
9.25: The Mouth Organ Band--"Aloha Oe," "Silver Threads Among the Gold."
9.35: The Anglo Male Quartette--"Don't You Gry, Ma Honey" (Parks), "The Quest" (Purcy).
9.45: The Mouth Organ Band--Imitation of the Bagpless--"I'd Climb the Highest Mountain," "Jin-gle Bells."

Phyllis Dauth (soprano)-"Joy Waltz" 9.50 9.50: Phyllis Dauth (sopranor- oc (Strauss), 9.54: Records. 10.0: News. 10.15: The Radio Rascals-entertainers. 11.0: Close down.

5CL

Central Broadcasters, Ltd., 111 Hindmarsh Square, Adeialde (Wavelength, 409 Metres). MORNING SESSION,

11.15 to 2.0: See Friday. AFTERNOON SESSION 3.0 to 4.30: See Friday. EVENING SESSION.

5.45 to 7.35: See Friday. NIGHT SESSION.

8.0: Chimes. 8.1: Walter Barratt and his Maison Masters of Melody--'' Can't Give You Anything But Love,'' 'Tim Bringing a Red. Red Rose'' (Donaldson), "Mak-ing Whoopee' (Donaldson), "It Goes Like This.'' 8.13: Hilda Hammond, soprano-"The False Pro-het?' phet phet." &.17: Walter Barratt and his Malson Masters of Melody--"The Savoy Irish Medley" (Somers), "If You Want the Rainbow," "Carolina Moon" (Davis), "I Loved You Them" (M'Donald). &.30: SCL Vocal Championship/

9.0: Chimes. 9.1: Meteorological information, including Sema-

9.1. Interesting that interesting the second second

"Weary Hiver" (Diarke), "ten Livie and Astron. Jown" (Kahn). 9.13: Hilda Hammond. soprano—"When My Ship Comes Sailing Home" (Dorel). 9.17: Walter Barratt and his Maison Masters of Melod,—"I Kiss Your Hand, Madam" (Erwin), "I Do" (Ash), "Homey" (Swan), "My Mother's Eyes" (Hearth

Do" (Ash), Toway, (Baer). 9.29: Vocal numbers-Selected. 9.33: Walter Barratt and his Maison Masters of Melody--"Rigoletto Riggies," a rhythmic classic on the celebrated Quartet from "Rigoletto", "Blue Hawail" (Baer), "The Toymaker's Dream" (Gol-Hawail" (Baer), "The Toymaker's Dream" (Gol-

Hawall" (Baer), "The Toymaker's Dream" (Golden).
9.43: Hilda 'Hammand, soprano-"Rest the Sad Heart' (Terese Del Riego).
9.47: Walter Barratt and his Maison Masters of Melody-Ron Le Cornu, xylophonist-Selected, "The Wedding of the Painted Doll" (Brown), "The Sun is at My Window" (Lewis).
10.0: Vocal number.
10.4: Walter Barratt and his Malson Masters of Melody-"That's what puts the Sweet in 'Home Sweet Nome'' (Leuring), "Bon Soir Cherie'' (M'Hugh), selected.
10.11: Hilda Hammond, soprano-"I Hear Ybu Cailing Me'' (Marshall).
10.30: Walter Barratt and his Maison Masters of Melody.

6WF

Australian Broadcasting Company, Ltd., Wellington St., Perth (Waeelength, 435 Metres), MIDDAY SESSION.-12.30: Chimes, 12.31: Repro-duced music. 12.45: News. 12.58: Weather, 1.0: Chimes. 1.1: Luncheon music. 2.0: Close down. THE RADIO MATINEE.-3.0: Official opening of the Royal Agricultural Show by his Excellency Sir William Campion. 3.45: Talk of interest to Women: "The National Council of Women." A Description of ring evenies and exhibits broadcast from the Royal Agricultural Show during the afternoon. 5.0: Close down.

News, 1.35. Market reports, 1.42. Sporting, 1.51. Features. EVENING SESSION.—8.0: Waikiki Duo, 8,10. Gra-ham and Manning, entertailners; first appearance through 6WF. 8.20: Waikiki Duo, 8.30: Graham and Manning, 8.40: Items from the Centenary Musical Festival broadcast from the Assembly Hall, Pier Street, Perth. 10.0: Temple Court Dance Band, con-ducted by Merv. Lyons. 11.0: Close down.

(Continued on page 44.)

Melody. 11.0: Close down.

415

NOV

With a "Four-Fifteen" or "Six-Fifteen" you will hear man y stations that you have never heard before. What has seemed like a void is now filled with voices as the dial of your radio creeps slowly round the scale.

> SUPER - SENSITIVITY—that is the secret of these distancegetting detectors, one for fourvolt and one for six-volt sets.

> Today the price of the A415 or A615 is 13/6—no more than the ordinary type.

AND

VES

9R.50

(Ador. of Phillips Lamps (Australaria) Lid. (Radio Dept.) Head Office and Shotorooms, corner Clarence and Margares Streets, Sydney, N.S.W.)

A615

THERE IS ONLY ONE VALVE THAT CAN REPLACE A PHILIPS-ANOTHER PHILIPS

Page Forty-Two

WIRELESS WEEKLY

Local Programmes, Tuesday, October 8

2FC

Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres), EARLY SESSION-7 to 8.15 a.m.

7.6: "Big Ben" and meteorological infor-mation for the man on the land. 7.5. This morning's news from the "Daily Telegrapt. Pictorial." 7.5: Austradio musical reproduction. 7.45: Mails and shipping.

- 7.45: Walls and shipping. 7.45: Whal's on to-day? 7.30: 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: Herace Weber at the grand organ. 11.0: Household Helps—Hints to house-
- 11.0: Household Helps—Hints to house-wives 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.
 11.55: British official wheless press.
 12.0; "Big Ben." Stock Exchange and metal quotations.
- quotationa
- 12.5: Illust r Thorman Illustrated music lecturctte by Wal-1.61
- ter Thorman. 12.20: Midday weather forecast and wea-ther synopsis. Special produce market ses-sion for the man on the land, supplied by the Star Marketing Board. 12.30 Close.
 - THE LUNCH HOUR-1 p.m. to 2.30 p.m.
- 1.0: Lunch to music with the 2FC Instrumental Quartet

- 2.0. Stock Exchange, second call. 2.2. Aglance at the afternoon "Sun" 2.7. Popular Education—Miss Rose Antill Warren de 2.21: Announcements.
- THE RADIO MATINEE-2.30 to 4.30 p.m.

2.30: The 2FC Instrumental Trio. 2.40: A talk on the Health Week cam-

- paign
- paign 2.50° The 2FC Instrumental Trio. 30: Education session, under the puspices of the Department of Public Instruction. E. Brakewell, supervisor of the School of Agri-culture will speak on "Developments" in Agricultural Science during the Past Twenty
- Years. 'ears.''
 'als.'' Mr. F. Trebarne, Supervisor of Music, ill speak on "Bach.''
 'Josephine Lee, soprano-(a) 'Two Roses' (Tilberte).
 'b) "Kiss Me Akain" (Herbert).
 '3.7' Cedric Howard Ashton, 'cellist-a) "Larghetto" (Mozari).
 'b) "Bourree" (Bach).
 '44 Horace Kents planistwill

- (a) "Larghetto (Wokart)"
 (b) "Bourree" (Bach).
 344 Horace Kents, planist-(a) "Bell Ringine" (Grieg).
 (b) "Norweelan March" (Grieg)
 (c) The 2FC Instrumental Trio
 (c) Insendine Lee, soprano--

- 4.7
- (1) (10) PC Instrumental 1110
 Josephine Lee, soprano(3) "But Why?" (Knight-Logan)
 (b) "Out of the Shadows" (Blaufuss),
 (c) "Aria" (Tenaglia),
 (b) "Berceuse" (Jarnefeit),
 (c) "The Shadows" (Construmental Tripental Construmental Cons

- 4.14: 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: Kiddles' "Good-night" stories.

told Willa, assisted by Cousins Gwen Aune bv

- by Aun: Willa, assisted by cousins Gwen and Clarice, 6.45: The Dinner Music Quartette, 7.30: A.B.C. sporting service, 7.37: Special country session. Stock Ex-change resume: markets; weather forecast; late news from the "Sun"; truck bookings. 7.59: To-night's programme.

THE EVENING PRESENTATION-8 to 11.30 p.m.

State-wide Radio Dance Night. Here is state-wide Radio Dance Nght. Here is an opportunity to arrange a hone dance to radio listeners. Listeners to whom dance music does not appeal will turn to 2BL for the classic programme arranged by the Strathfield Music Club.

- 8.0: From the Hotel Australia—The Australian Broadcasting Dance Orchestra. 8.12: From the Studio—Charles Lawrence.

 - (a) "Love, Come from your Hiding Place" (Newman).
 (b) "The Serial Story" (Lawrence).
 19: The Australian Broadcasting Dance
 - 8.19:
- Orchestra
 - (3) "What a Girl, What a Night" (Sanders).
- (b) "My Dream Sweetheart" (Hall).
 (c) 'Broadway Melody" (Brown).
 8.33: The Australian Broadcasting Dance Orchestra 8.50
 - 30: Jack Kinson, popular ballads—
 (a) "When Bright Eyes Glance" (Redge-
 - cock) (b) "The Monarch of the Woods"
 - (Cherry). 8.55
- 57: The country man's weather session—
 (a) "New South Wales Forecasts."
 (b) "Inter-State Weather Synopsis."
 9: The Australian Broadcasting Dance
- 9.9 Dance

9.0: The Australian Orchestra. 9.13: Dismal Desmond, comedian— 9.13: Dismal Desmond, comedian— A "Dame" impersonation (MSS.). 9.13: The Australian Broadcasting Dance

DISMAL DESMOND. back on grammes tothe pro-to-night

- personation.

- 9.31: Rae Foster, popular vocalist— "The Sun is at My Window" (Young), (b) "I Don't Care" (Dowell).
 9.52: The Australian Broadcasting Dance Orchestra.

(a) "Indian Love Call" (Friml).
(b) "Kiss Me Again" (Herbert).
(c) "A Room with a View" (Coward).
9.57: The Australian Broadcasting Dance inclusion. Orchestra.

- (a) "Jown in the Deep" (Hatton).
 (b) "A Chip of the Old Block" (Squire).
 (b) "A Chip of the Old Block" (Squire).
- ther forecast. 10.20: The Australian Broadcasting Dance
- Orchestra. 11.30: Close. National Anthem.

2BL

1

- Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 353 Metres). OPENING SESSION-8.15 to 11 a.m.
 - 8.15 a.m.: G.P.O. chimes and announce-
- ments.
- 8.25: 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. 10.2: News from the "Labor Daily." 10.5: News from the "Daily Telegraph Pic-

1.5: Studio music. 1.15: Women's inte

ton Burke:

Fain).

music

Gu iey. 7.5: T

ment.

nor

dies)-

Studio music.

3.52: A dance number. 4.0: Coralie Poolmann, mezzo-

4.7: A musical interlude. 4.27: Edith Cowley, entertainer—

torial."
10.10: Austradic 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.

1.5: Studio music.
1.15: Women's Interest talk—Annie Hughes "Personalities whom I have known."
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: Business efficiency talk—Fred Arling-

"Ireland a Nation of Contradictions." 2.45: The Magic Carpet series, Tom Gurr-"With the Pilgrims to Mecca." 3.0: Radio rhythm. 3.12: Lorna King, pianist-

3.0: Radio rhythm.
3.12: Lorna King, pianist—

(a) "Tinkle Toes" (Rich).
(b) "Chanson" (Frimi).

3.19: Coralie Poolmann, mezzo—

(a) "A Spring Morning."
(b) "I Need Your Love."
3.26: Lorna King, planist—

(a) "Sunbeams" (Wirges).
(b) "Do Something" (Stept).

3.33: Songs of the moment.
3.45: Edith Cowley, entertainer—

(a) "Washing Day."
(b) "You'd Be Surprised" (Berlin).
(c) "She's a Good Girl" (Murray and Fain).

(a) "The Man Who Brings the Sunshine."
 (b) "A Necklet of Love."

(a) "Peach Pie."
(b) "Do Something" (Green and Stept).
(c) "I've Got a Woman Crazy For Me" (Whiting and Moret). 4.34: Radio rhythm. 4.45: The Trade Hour-Demonstration

5.45: Weather information. . Close down.

THE DINNER HOUR-6.15 to 7.55 p.m. 6.15: The Dinner Music Quartette. 6.45: The A.B.C. Younger Set session—Girl Guides' Club, conducted by Miss Gwen Var-

7.5. Studio music.
The country man's market session—Wool, wheat, stock, farm produce, fruit, vege-tables, pig and poultry markets.
7.30: The Dinner Music Quartette.
7.45: Celebrity music.
7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION-

8 to 10.30 p.m. 2BL'S Classic Night, in sharp contrast to the dance programme broadcast through 2FC. The transmission from the Strathfield

Music Club to-night will attract many lis-teners who prefer a classic type of entertain-

80: From the Strathfield Music Club— President's introduction—G. H. Turper. 85: Vocal Quartette (Daisy Mangan, Elea-or Stanton, Frank Forrest, Raymond Destribution, Frank Forrest, Raymond

(a) "When I Was a Little Boy" (No-

vello),
(b) "The Fly and the Bee" (Novello).
(c) "Tom, the Piper's Son" (Foster).
8.11: Bass solo, Rowell Bryden—

(a) "Long Ago In Alcala" (Messager).

8.15: Contratto solos, Eleanor Stanton—

(a) "Serenade" (Brahms).
(b) "The Vain Plea" (Brahms).

8.20: Soprano solos, Daisy Mangan (paroies)—

(a) "Curly Locks" (Hughes).
(b) "Little Bo-Peep" (Hughes).
(c) "Old King Cole" (Hughes).

12.0: G.P.O. chimes. Announcements. 12.2: The Lunchoen Hour Quartet. 1.0: Afternoon news from the "Sun."

torial

- 8.28: An anonymous anthem-"The Wicked Flee When No Man Pur- Charles Lawrence.
- sueth" (H.T.) 8.32: Pianoforte solos, Edna Burke-
- (a) "Sing a Song of Sixpence" (Glvens).
 (b) "Bird Song" (Palmgren).

- (b) "Bird Song" (Paingren).
 (c) "Scherzo" (Bowen).
 8.39: Bass solo, Raymond Beatty—
 A negro spiritual, "Daniel and the Lions."
 8.44: Soprano solo, Edith Martin—
 "My Mother Bids Me Bind My Hair"
 (Horden)

- "My Mother Bids Me Bind My Hair" (Haydn).
 9.49: Choral interlude—

 (a) "I Live Not Where I Love" (Shaw).
 (b) "Drink to Me Only" (Old English).
 (c) "My Bonny Lass" (Morley).

 8.56: Soprano solo, Daisy Mangan—

 Vocal Variations (in the style of Handel, Schubert, Donizetti) (Spaeth).
 9.0: Bass solo, Raymond Beatty—

 "Two Ulster Dittles" (arr. Hughes).
 9.5: Chorus—
 "Here's a Health Unto His Majesty" (Old

- 9.5: Chorus—
 "Here's a Health Unto His Majesty" (Old English).
 9.7: Trio and chorus (Edith Martin, Eleaour Stanton, Raymond Beatty)—
 "The Chough and Crow" (Bishop).
 9.11: Tenor solo, W. J. Pringle—
 "My Lovely Cella" (Old English).
 9.15: Duet, Edith Martin and Frank Forest—

- rest— "An English Spring" (Caryll). 920: Planoforte solo, Edna Burke– "Ballade in G Minor" (Augener).

 - 27: Madrigals (a) "Awake
- 9.27: Madrigais—
 (a) "Awake, Sweet Lass" (Dowland).
 (b) "Haddon Hall" (Sullivan).
 9.32: Bass solo, Raymond Beatty—
 "The Jolly Tinker" (Old English).
 9.36: Solo and quartette (Winlfred Foster, Eleanor Stanton, W J. Pringle, Rowell Bryden)—

- "Flowers in the Valley" (Old English).
 9.41: Tenor solo, Frank Forrest.
 "A Villanelle" (Head).
 9.44.—Part songs...
 (a) "Familiar Melodies" (arr. Branscombe)
- (b) "The Watchman" (Taylor).
 10.0: From the Studio—George Black commences his series, "In My Anecdotage."

10.15: Just a little time for nonsense by

- 10.25: Late official weather forecast. Late news from the "Sun."
- 10.30: Close. National Anthem.

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 Miss Helen J. Beegling. 11.30: 11.45: Close down: 2.0: Music. 2.5: Music. 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. 7.30: Service talk by Sutton's Radio Doctor. 7.45: Feature story. 8.0: Miss Heather Kinnaird, contralto. 8.7: Violin solos. 8.15: Mr. Lesile Herford, baritone. 8.22: Symphony Orchestra. 8.30: Mr. Jack Win and Mr. Heath Burdock (humor). 8.35: Miss Gladys Verona, soprano. 8.45: Miss Ada Brook, planist. 8.50: Miss Heather Kinnaird, contralto. 9.0: Weather report. 9.3: Address. 9.15: Violin solos. 9.25: Mr. Leslie Herford, baritone. 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. Jordan. 2.50: Movie Know All. 3.0: Music.

2UW

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

12.30: Request numbers. 1.0: G.P.O. clock and chimes; music. 1.15: Talk on "Home-craft," by Pandora. 1.40: Music and request numbers. 2.30: Close down. 4.30: Musical programme.

EVENING SESSION

5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock" and chimes; request numbers. 8.0: A Car-nival of Animals. 9.0: G.P.O. clock and chimes; comments on Foreign Affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.

2KY

2KY Trades and Labor Council, Goulhurn St., Sydney (Warelength, 280 Metres). MORNING SESSION. 10.0: Tune in to the ticking of the clock. 103: Popular fox-trots. 10.15: News items. 10.30: Women's session, home hints and in-formation, conducted by Mrs. Gray. 11.0: A few laughs. 11.5: Planoforte selections. 11.15: Calls and announcements. 11.20: Musical numbers. 11.30: Request numbers. 11.40: Labor's Federal radio campaign. 11.55: Where to go to-night. 12.0: Closing an-nouncements. CHILDREN'S SESSION.

CHILDREN'S SESSION. 6.0: Birthday calls, request numbers, and kiddles' entertainment, Aunt Jemima and Uncle Bert.

Uncle Bert. EVENING SESSION. 7.0: Musical Interlude. 7.15: Sporting fea-ture; turf topics; how they should run to-morrow, Mr. Geo. A. Davies. 7.45: Request numbers. 8.0: Orchestral selections. 8.10: Women's information service, Mrs. Gray. 8.25: Baritone solos, Mr. Higgins. 8.33: Planoforte solos, Mr. Hancock. 8.40: Music and request numbers from the studio. Sporting feature, presented by Tooth and Co., Ltd., Kent Brew-ery. From the ringside of MrHugh's Leich-nardt Stadium, results of early events and full description of main 15 rounds event. 9.0: Dance music from the studio. 10.0: Closing announcements. announcements.

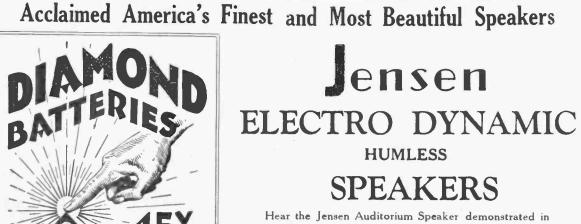
2UE

Broadcasting Station 2UF. Everett Street. Maroubra. Sydney (Wavelength, 293 Metres). EARLY MORNING SESSION.-7.15 a.m.: Breakfast time hour orchestral music. 8.0. Clock and chimes. 8.30: Weather forecast. Close down.

MIDDAY SESSION.-11.30 a.m.: Orches-al music. 12.30: Close down.

tral music. 12.30: Close down. AFTERNOON SESSION.—1 p.m.: Musical selections. 1.45: Organ solos. 2.0: Music. selections. 1.45: 2.30: Close down.

EVENING SESSION.—7.15 p.m.: Orches-tral dinner music. 7.58: Programme an-nouncements. 8.0: Clock and chimes. 8.1. Overture, "Orpheus in Hades." 8.10: Orches-Overture, "Orpheus in Hades." 8.10: Or tral and vocal music. 10.15: Close down.



our Showrooms. As proof of their popularity already Sierra and Ventura shipments are sold out.

ONLY A LIMITED NUMBER AVAILABLE ALSO

THORDASON Push-Pull AMPLIFIERS and Parts in Stock.

AGENTS for DIAMOND Dry Cells, Batteries.

all Dealers

Phone: B3872-Kembla Building, MARGARET ST., SYDNEY

REG. ROSE &

Friday, 4th October, 1929

Interstate Programmes, Tuesday, October 8

3LO

Australian Broadcasting Co., 199A Russell St. Alebourne (Wavelength, 371 Metres).

EARLY MORNING SESSION 7.0 to 8 15: See First

MORNING SESSION

10.30 to 12.30: See Monday

MIDDAY SESSION

Melbourne Observatory time signal, etc. (See y). 1.30: Melody broadcast. Mondayi

EDUCATIONAL SESSION

2.0: Stories from the Operas, with musical illustra-tions, Mias D. Bubington. 2.20: Romance of the Slave Coast-Mir A. A. Downs. 2.35: Musical inter-lude. 2.40: A talk in French. AI Th. Rouel. B.A 2.55: Musical interlude.

THE RADIO MATINEE.

THEADIO MATINEE.
3.1. Melbourne Observatory time signal. 3.1: Studio Light Orchestra. Overture, "Semiramide' Rossinhi, 3.8: R. Nicholo Verture, Verture, Verture, Verture, Verture, Verture, Nicholo Verture, Verture, "Semiramide' Rossinhi, 3.2: The Studio Light Orchestra Song, "A Perfect Day" (Jacoba-Bondt, Vaise Espagnole, "Mercedes' (Miro 3.3: R. Nicholoso, Barlone, "Requiem (Edith Harrhy, "Listenin' Haydin Woodi, 3.3: J. Geary, trumpet—"My Ain Foll" (Lemoni, 3.4: A playlet, Produced by Winfred Noverley Scene from "Seven Little Australians of the Barlow Chopin, 4.0: Difference The Foreword, Winfred Sevenade, "Chopin Little Australians, "Lemoni, 2.4: Nicholoso, Misse, "Naving, Benerade," (Chopin, "Rossien, "Keine, Micholoso, Verter, "Morte, Chopin, 4.0: Difference, The Poreword, Winfred Sevenade, "Chopin, 1.4: Nicholoso, Miraka, "Bose, "Nevin, harp and violin, "Rossien, "Nevin, harp and violin, "Rossien," Coling and A.2: Studio Light Orchestra-Selection from "Sunng' Kerin, 4.3: Oclose down, During the Sunda Light Orchestra-Belection from Sunng' Kerin, 4.3: Oclose down, During the Sunda Light Orchestra-Belection from Sunng' Kerin, 4.3: Oclose down, During the Sunda Light Condex as they come to hand.

THE CHILDREN'S HOUR.

5 45 "Bobble Bluegum

EVENING SESSION

6.45 Careers for our boys and girls-Now to be-come an airman. Mr. Earle Cooper 7 0: Melbourne Observatory time signal. 7.1 Countrymac, 7.25: For the man on the land-Health of the Vine. Mr. P. de Castella. 7.40 News service. 145. Uni-versity Extension Series-The Size of the Stars-Prof. S. J. Hartung. D.Sc. 8.0 Melbourne Observa-tory time signal.

NIGHT SESSION

NIGHT SESSION 8.0 Sixty minutes round a bush camp fire. A true representation of the daily happenings in the Never Never land. Real bush yarns, real Australian songs and choruses-round the camp.fire, where the mouth-organ is real music, and where the hand of triendship is held out to all. Characters portrayed, by J. Alexander Browne Leslie Williams. Mr. J. Harcourt Balley. Mr. Hugh Huxham. Mr. T. Bernard Lamble, John Taylor, Fred Howartson, and the Gee-iong Mouth-organ Band. 9.10: National Broadgasting Orchestra-Song, "Marcheta" (Schritzinger). March. "Carnwalesque" (Frini). Choral music. Transinision from Austra-lin Church. Russell Street. 9.16: Melbourne Philharmonie Boclety (Conductor. Professor Bernard Heinze). Planiste: Miks Isabel Aumst. "Hail, Bright Abode," from "Tanahauser" (Mod. "Clona" from "Welth Mass" (Moart). "All We, Like Shop. He We Gone Astray." (Amarth. "Calles," (Mandelsonn). "Elipah" (Mendelsonn).

"All We, Like Sheep, Have Gone Astray." from "The Messiah" (Handei). "Lord Our Creator," from "Elijah" (Mendelssohn). 9.45: National Broadcasting Orchestra---"Valse Allegro" (Tschaikowksy). 9.50: Moliy Mackay, soprano-- "Tell Me, Oh Blue, Blue Sky" (Gianlini, "My Mother" (Marsden). "The Star" (La Forge). 9.58: The Bronsons will entertain. 10.12: National Broadcasting Orchestra-Selection. The Pirates of Penzance" (Sullyan). 10.20: Meteorological Information. British official Wireless news from Rugby. Itemsof Interest. 10.30: "The Rer" Dance Band. 11.30: God Save the King.

3AR

Australian Broadeasting Co., 120A Russell St., Melbourne (Wavelength, 484 Metres). MORNING SESSION

8.15 to 11.0: See Friday

MIDDAY SESSION

12.0: Chimes. 12.1: Beautifying the Home, Miss Luch Ahon. 12.15: Fifteen minutes' syncopation. 12.30: Luncheon music supplied by the A.B.C. Trou-badours. 2.0: Chimes.

AFTERNOON SESSION

The Artistic Reproduction of Absent Artists.⁶ 2.1: Band music, Brunswick Millitary Band. 2.6: Entertainer, Ed. Smalle. 2.16: Violin, Michael Pl-asto. 2.24: Tenor solo, Frank Nunn. 2.32: Piano re-cital, Adam Oarroll. 2.38: Baritone solo, Gulseppo Danise. 2.46: Band music, Brunswick Millitary Band, 2.54: Commedianne. Esther Walker. 3.2: Request numbers

Mainly for Women

3.20: The Baby—What Toys to give the Baby, Sis-ter Anne Putell, 3.35: Musical interlude, 3.40: Use-ful Grafts at Home-Fibre Hats. Mrs. Henrietta Walker, 3.35: Musical interlude, 4.0: The Latest Fashions-Madame La Mode, 4.15: Musical repro-duction, 5.0: O.P.O. Chimes, 5.1: "Austradio" musi-cal reproduction, 5.30: Weather data, 5.45: Close down

EVENING SESSION

6.15: Dinner music, supplied by the A.B.C. Trou-0.15. Entropy transfer to the second se

8.1: Romantic Historical Storles-Mr. J. R. Lyall, B./

B.A. 8.15: A special reproduction of "The Messiah" (Handel), by Sir Thomas Beecham and Orchestra. Arists-B.B.C. Choir: Hurbert Eisdell, tenor: Harold Williams, baritone; Muriel Brunskill, con-traito; Dora Labette, soprano.

News Session

10.25: Weather information and "Herald" news. 10.30: God Save the King.

3DB

The "Heraid" Broadcasting Station, Flinders Street, Melbourne (Wavelength, 255 Metres),

MORNING SESSION.

11.0: Thelma Ready's Band, transmitten : om the Auditorium. 12.0: Community Singing, transmitted from the Auditorium. Conductor. Mr. G. J. Mackay Accompanist. MF. Reg. Brown. 1.45: Clore down.

AFTERNOON SESSION.

2.15: San Francisco Symphony Orchestra--'Wed-ding March'' (from 'Midsummer Night's Dream'). 2.30: Layton and Johnstone-'Japansy.'' 3.0: Radio Hour. 4.0: Close down.

EARLY EVENING SESSION.

EARLI EVENIAL SESTION. 5.30: Berlin State Opera House Orchestra-"Pre-"lude, Act 1, 'Lohengrin'' (Wagner). 6.0: Children's requests. 6.30: Nina Bourne (plano)-"Marche Gro-tesque: '. 7.0: Morton Downey-"Little Irish Rose." 7.15: Market reports. 7.20: Terence Casey (organ)-"Longing: 7.30: Market reports. 7.40: Franchim and Dettborn-"Hawalian Sunset."

EVENING SESSION.

.0: Sponsored programmes. .30: Lottle Lehmann (soprano)—"Porgi Amor 8.0:

(Mozart) 10.0: F 10.30: 2011). 0: Paul Whiteman and Orchestra—"Gypsy." 30: Derek Oldham—"Kathleen Mavourneen."

40: News. 45: God Save the King.

. 4QG

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

NIGHT SESSION.

For day session schedules de Friday. 8.0: Mixed Octette (Conductor, Mr. Sydney May). Part Song, "Correct" (Caryll and Monckton). 8.5: G. Deans (banjolst)--"Take Your Pick" (Man

delli Jill Manners (soprano) -"Indian Love Call

١F

tFrimi).
8.14: The Melodians Trio (puano, violin, and ban-jo)-March, "Main Street" (Weidt).
8.18: W. L. Burch (bass)-- When Song is Sweet (Sans Souch).
8.23: Nance Hicks (soprano) and Vêra Par'er (col.-traito)--vocal duct, 'O, Lovely Peace" (Handel).
8.28: Olive Sheehy (planiste)-- "Butterfly" (Laval-leet).

lee). 8.33: Ja

lee). 8.33: Jack Land (tenor)—"A Parëweli" (Liddle). 8.38: Mixed Octette—Part Songs—"Tell Me, Pretty Malden" (Stuart). "Viking's Eyes" (Faulna). 8.45: Melodians Trio—One Step-."Sunshine" (Cobb)

John Steele (tenor)-"Onaway, Awake, Be-8.50

Mil John Steele (tellat) - Onavie, hereit Derd' (Cowen), erste (Harpitse) --- "Minstrel's Adleu' (Thomas), "Etude" (Lorenzi),
 S.: Metropolitan weather forecast,
 S.: Metropolitan for To-night (Will H. Lister)--- "Once to Live",
 No. Mixed Octette-Part Song---"O, Happy Eyes

(Elgar) 9.15: Jill Manners (soprano) and Jack Lano --vocal duet, "The Sleepy Ganal" (Rubens). G Deans (banjoist)---"Stars are Shining" 9.20 mshi

.: W. .: W. Burch (bass)-"The Mountains @ т. 9.24

Statew, L. Burch (bas)... "The Mountains or Mourne". (Collison).
Mourne". (Collison).
Mixed Octette...Part.Song. 'The Lavs with the Delicate Att" (Arne).
Son: Mixed Octette...Part.Song. 'The Lavs with the Meart' (Mayers).
Son: Instrumental Trio...Fox Trot. 'Where the Shy Little Violets Grow.'' (Schubert).
Son: Att Jack Land (tenor)....'Screnade". (Schubert).
Son: Jack Atkinson (barltone)...'Ma Mie Rosette (Lacome).

acome). (Lacome):
10.0: C. Deans (banjoist)--"Nigger Minstrels"
(Grinshaw).
10.5: Nance Hicks (soprano)--"In the Purple Glow" (Clarke).
10.10: The Melodians Trio-Fox Trot, "A Precious Little Thing Called Love."
10.15: News, weather information. Close down.

5CL

Central Broadeasters, Ltd., 114 Hindmarsh Square, Adelaide (Wavelength, 409 Metres), MORNING SESSION, 11.15 to 2.0: See Priday.

11.15 to 2.0: See Friday. AFTERNOON SESSION. 3.0 to 4.30: See Friday. EVENING SESSION.

5.45 to 7.35: See Friday. NIGHT SESSION.

8.10: A Spec

8.10: A Special Programme has been arranged. 9.0: Chimes.

Meteorological information, including Sema-

phore tides.

6WF

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

EARLY MORNING SESSION.-7.30: Chimes; Mcte-roloxical. 7.35: Music. 7.55: Mails and shipping. 5: Market reports. 8.10: Musical reproduction. 8.22 ables. 8.27: Features of to-day's programme. 8.30: 8.5: M Cables. Close

Charles M. Peolitis, et al., multical replocations, et al., Close down, Milescal Peolitis, et al., Milescal Peolitis, et al., Milescal Peolitis, Peolit

7ZL

Tasmanian Broadcasters Pty. Bursary Buildings, Elizabeth St., Hobart (Wavelength, 516 Metres).

Tammanlam Broadcasters Pty. Bursary Buildings. Elizabeth St., Hobart (Wavelength, 516 Metres). 11.30 a.m.: Recital 11.34: Midlands weather fore-cast. 11.35: Recital 11.55: Tasmanlam stations '9 a.m. weather report 12.1: Shipping, amil notices housewives' guide. 12.8: Recital. 12.30: News ser-vice: announcements. 12.40: Nectial. 1.5: British official wireless news: railway auction sales. 1.10. Recital. 1.30: Close down. 3.1: Recital. 3.5: British official wireless news: railway auction sales. 1.10. "Homecraft." 4.0: Recital. 4.10. Super-ther. 3.5: Sonora. 3.45: Miss Joor Sugar-Java's sugar Industry." 4.3: DClo" and "The Story Lady." 7.10: Recorded the Public Health Department will spin and the Public Health Department will spin ack on "Literary lapses and library lists." 610: C.P.O. clock chines the hour. 8.1: Sonora re-blace Blace Ensemble 8.27: Lewis James. 4.2: Frank-iyn Bauce-Tybels." 8.30: Dance numbers. 8.42: Frank-iyn Bauce-Tybels." 8.30: Dance numbers. 8.12: Ranke-"Sone day You'll be Sorry! 9.15: Dance numbers. 9.27: Ruth Etting-"Til get by." 9.30: News session 9.40: Dance numbers. 8.52: Slumber music. 10.0: G.P.O. clock chimes the hour. 10.1: Close down.

7ZL Monday, October 7

(Continued from page 40.)

(Cantinued from page 40.) Tamanism Broadcasters, try., Bursary, Buildnes, 1.30 ann.: Record rectal. 11.34: Midlands wea-from stations 9 a.m. weather report. 12.1: Ship-ing information: mail notices, housevire's guide-try of the stations of the statistic of the statistic of the page 1.40: Record rectal. 1.5: British of the statistic of the try of rectal. 12.30: News service: announce-ments. 12.40: Record rectal. 1.5: British of the try of rectal. 3.4: Weather. 3.5: Record rectal. 1.5: British of the statistic of the statistic of the bard of rectal. 3.4: Weather. 3.5: Record rectal. 1.5: A.10: Record de music. 7.30: News service: try of the statistic of the statistic of the statistic of the bard. 7.40: Drader of Merits weating apparel. 4.30: Close down. 6.15: Children's hour with "Drade David." 7.10: Recorded music. 7.30: News services the service of the auspices of the Tammanian University the service of main." (continuation). 7: 8: 0.70; the service of main." (continuation). 7: 8: 0.70; the service of the fourt. Menorial Congregational Stramanission of a source of the statistic of the statistic of the statistic the service of the fourt. Menorial Congregational Stramanission of the outer of the statistic of the statis

Page Forty-Five

)US FICATION — and complete stability—

H.F. Amplification with the Mullard Screened Grid Valve is the most outstanding advance in modern receiver design and performance. It gives you a degree of amplification never before associated with high frequency circuits. It gives complete stability so that an external neutralising device is unnecessary. It makes your receiver really sensitive, selective and easy to operate.

Put new life into your receiver with the Mullard Screened Grid Valve. Get those far-distant stations with ease and certainty. Take advantage of this great radio achievement.

Ask your dealer for Booklet describing Mullard Valves and Speakers, or write: A. Beal Pritchett (Aust.), Ltd., 17 Parker St., Sydney, or 150 Queen St., Melbourne.

MULLARD SCREENED GRID VALVES P.M. 12

Fil. volts 2. Fil. current .15 amps P.M. 14 Fil. volts 4. Fil. current .075 amps With English or American Bass



MULLARD SPEAKERS SPEAK VOLUME OF QUALITY

Page Forty-Six

WIRELESS WEEKLY

2GB Theosophical Broadcastling Station, 29 Bligh St., Sydney (Wavelength, 316 Metres). 100: Music. 10.10: Happiness Taik, by A. E. Bennett, 10.20: Music. 10.30: Women's session, by Miss Helen J. Beegling, 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 3.30: Close down. 5.15: Children's session, by Uncle George, 7.0: Music. 7.45: Feature story, 8.0: Miss Edna Lister, contraito. 8.7: Symphony Orchestra, 8.15: Mr. J. Lou Wal-ters, basso. 8.22: 'Cello solos. 8.30: Mr. Jack Win and Mr. Heath Burdock (humor). 8.35: Miss Elsie Peerless, soprano. 8.43: Symphony Orchestra, 8.50: Miss Edna Lister, contraito. 9.5: Wether report. 9.3: Address. 9.15: Cello solos. 9.25: Mr. J. Lou Walters, basso. 9.35: Mr. Jack Win and Mr. Heath Burdock (humor). 9.40: Symphony Orchestra. 9.50: Miss Elsie Peerless, soprano. 10.0: Distrutered States (Miss Edna Lister, Contraito, 9.40: Symphony Orchestra. 9.50: Miss Elsie Peerless, soprano. 10.0: Distrutered States (Miss Edna Lister, Contraito, 9.50): Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, Contraito, 9.50): Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, 10.0): Miss Elsie Peerless, Soprano. 10.0: Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, 10.0): Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, 10.0): Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, 10.0): Miss Elsie Peerless, Soprano. 10.0: Miss Elsie Peerless, Soprano. 10.0: Distrutered States (Miss Edna Lister, 10.0): M

2UW Radie Broadcasting, Ltd., Paling's Building. Ash St., Sydney (Wavelength, 267 Metres).

MIDDAY SESSION

12.30: Request numbers. 1.0: G.P.O. clock and chimes; music. 1.15: Talk on "Home-craft," by Pandora. 1.40: Music and request numbers. 2.30: Close down. 4.30 Musical

EVENING SESSION 5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; request numbers. 8.0: Chamber Music Recital. 9.0: G.P.O. clock and chimes; comments on Foreign Affairs. by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.20: Close down

2KY

Trades and Labor Council, Goulburn St., Sydney

(Wavelength, 280 Metres).

MORNING SESSION.

MORNING SESSION. 10.0: Tune in to the ticking of the clock. 10.3: Popular fox-trots. 10.15: Hawaiian steel gultar selections. 10.30: Women's session. home hints and information, conducted by Mrs. Gray. 11.0: A few laughs. 11.5: Piano-forte selections. 11.15: Calls and announce-ments. 11.20: Musical interlude. 11.30: Labor's Federal radio campaign. 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

EVENING SESSION.

EVENING SESSION. 7.0: Musical interlude, 7.15: Sporting fea-ture, complete review of to-day's racing, Mr. Geo. A. Davies. 7.40: Health feature, Northey du Maurier. 8.0: Hawaiian steel guifar selec-tions. 8.15: Al. Rosenberg, novelty planist. 8.30: Banjo solos. Master Harry Weir. 8.36: Al. Rosenberg at the plano. 9.10: Sporting feature, presented by Tooth and Co., Ltd., Kent Brewery; from Sydney Stadium, full description of main 15 rounds event. 9.50: Musile from the studio. 10.0: Closing an-nouncements.

2UE

Broadcasting Station 2UE, Everett Street, Maroubra.

EVENING SESSION .--- 7.15 p.m.: Orches-

tral dinner music. 7.58: Programme an-nouncements. 8.0: Clock and chimes. 8.1: Overture, "Light Cavalry." 8.11: Orchestral and vocal concert. 10.15: Close down.

PRICE CORRECTION

In Manufacturers' Products Pty., Ltd., ad-vertisement, "Wireless Weekly," September 27, Super Stratelyne condensers were wrongly quoted at 42/6. The correct price is 12/6.

Sydney (Wavelength, 293 Metres). Orchestral and vocal items. 8.0: Clock and chimes. 8.30: Weather forecast. Close

programme. EVENING SESSION

Prentice, 9.10: M 10.30: Close down.

Uncle Bert.

down.

2GB

Local Programmes, Wednesday, October 9

2FC

- Australian Broadcasting Company, Ltd., Market St., Sydney (Wavelength, 451 Metres).
- Sydney (Wavelength, 451 Metres). EARLY SESSION-7 a.m. (o 8.15 a.m. 7.0: "Big Ben" and meteorological informa-tion 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. MOREVING SESSION 10.20 m to 50

MORNING SESSION-10.30 a.m. to 12.30 p.m. 10.30: Announcements.

- 10.32: General sporting talk by Oscar Lind 10.45: Horace Weber at the Grand Organ. 11.0: Household Helps--Cooking, by Miss
- 11.0: Hou Ruth Furst.
- 11.10: Cables-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: Michael Sawtell—"A Dav in a Buf-
- falo Camp." 12:20: Midday weather forecast and weather
- 12.20 Milduay weather for easily and weather synopsis. Special produce market session for the man or the land, supplied by the State Marketing Board. 12.30: Studio music.

THE RADIO MATINEE.

- 12.50: From Randwick-description of the A.J.C. meeting in the running. During intervals between races a musical
- programme will be given from the studio. 4.35: From the studio-late sporting re-
- sults. 4.45: Close

EARLY EVENING SESSION-5.45 p.m. to

- EARLY EVENING SESSION-5.45 p.m. to 5.45: Kiddies' "O d-night" stories, told by Uncle Ted and "Sandy." 6.45: The Dinner Music Quartette, 7.30: A.B.C. sporting service, 7.37: Special country session. Stock Ex-charge resume, markets, Weather forecast Late news from the "Sun." Truck bookings 7.55: To pinthe programme
- 7.55: To-night's programme. THE EVENING PRESENTATION-8 p.m.
- to 11.30 p.m. to 11.30 p.m. The A.B.C. players open the first instal-ment of their serial, the "Jazz Spider." This intriguing radio nlay has been ergerly anti-cloated by many listeners. 2BL offers a com-plete musical programme arranged by the Reval Apollo Club. 8.0; An hour from the first
- 8.0: An hour from the State Theatre. 9.0: From the studio-the countryman's

9.0: From the studio-the countrymans weather session(a) "New South Wales Forecasts."
(b) "Inter-State Weather Synopsis."
9.2: The A.B.C. Players in the first instalment of their serial, the "Jazz Spider."
Specially written for broadcasting by Mr.

- James Donnelly. 9.22: Laurence Godfrey Smith. pianoforte recital-
- (a) "Preludes" (Chopin)
 (b) "Mazurka" (Chopin)
 (c) "Berceuse" (Chopin)
 (d) "Schotticche" (Chopin)
 (e) "Impromptu" (Chopin)
 (f) "Schotticche" (Chopin)
 (g) "When Sunse" Bids the Dav Goodbye" (Piantadosi)
 (b) "Til Alwavs Be in Love With You" (Creen)
 10.7: From the Potel Australia—Cec. Morand
- (Green) 10.7: From the Hotel Australia—Cec. Mor-rison's Dance Band. 10.15: From the Studio—announcements Late official weather forecert 10.20: From the Hotel Australia—Cec. Mor-rison's Dance Band. 11.30: Close "National Anthem."

2BL

- Australian Broadcarting Company, Ltd., Market St., Sydney (Wavelongth, 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.
- 10.5: News from the "Daily Telegraph Pic-

- 10.10: Austradio musical reproduction. 10.40: The Australian Broadcasting Com-pany'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: The Luncheon Hour Quartet.

- 1.0: Afternoon news from the "Sun." 1.5: Studio music. 1.15: Women's Interest Talk-Goodie Stildo music.
 Stildo music.
 Austradio musical reproduction.
 Xo: Austradio musical reproduction.
 Knight Barnett at the Wurlitzer.
 Studio music. Reeve.
- AFTERNOON ENTERTAINMENT-2.30 to

5.45 p.m.

- 2.30: Business Efficiency Talk-Dr. Harold orrie. "Gregory Blaxland." Norrie. 2.45:
- teller. 3.0:
 - 3.12:
 - (a)
- chergory Biaxiano.
 ds: The Magic Carpet series—The "Story-r." "Random Tales."
 0: A musical interlude.
 12: Dorothy Benbow, contralto—
 (a) "A Summer Night" (Thomas).
 (b) "The Little Blue Bay" (Del Riego). 3 19:
 - 3.22:
 - 3 32:
 - 3.42:
 - (b) "The Little Blue Bay" (Del Riego 19: Dance music.
 2: Florence Luber, planiste—
 (a) "Scarf Dance" (Chaminade).
 (b) "Arabeske" (Schumann).
 3? Melody memories.
 42: Kathleen Horne, soprano—
 (a) "A Night Idvl" (Loughborough).
 (b) "Star Eyes" (Speakes).
 50: Radio rhythm.
 (c) Dorothy Benbow, contralto—
 (a) "My Ship" (Del Riego).
 (b) "Chinese Flower" (Bowers).
 (c) "Melisande in the Wood" (Goetz).
 - 3 50

The

music

tables.

on

reproduction.

- 4.0
- (a) "My Ship" (Del Riego).
 (b) "Chinese Flower" (Bowers).
 (c) "Melisande in the Wood" (Goetz).
 4.7: Florence Luber, planiste—

 (a) "No. 6 Valse Suite" (Taylor).
 (b) "June" (Cowen).
 (c) "No. 5 Valse Suite" (Taylor).

 4.14: A song of the monent.
 4.20: A talk on Health Week.
 4.20: Kathleen Horne, soprano—

 (a) "My Wonderful Garden" (Bigelow).
 (b) "I Had a Flower" (Kellie).

4.37 Dence music. 4.45 The Trade Hour-demonstration

5.45 Weather information. Close down.

THE DINNER HOUR-6.15 to 7.55 p.m.

6.15: The Dinner Music Quartette. 6.45: The A.B.C. Younger Set session-Boys' Radio Club. conducted by Mr. Norman Lvons. 7 5. A talk on Bridge, by Graham Kent

TO-NIGHT'S PRESENTATION-8 to 10.30

p.m.

In contrast to the play which 2FC features to-night, the concert programme arranged by the Royal Apollo Club, which will be broadcast from the Conservatorium by 2BL. will provide a pleasing alternative for those listeners who do not like the spoken word on the air.

1 the air. 8.0: From the Conservatorium of Music-

8.0: From the Conservatorium of Music--Concert programme, arranged by the Royal Apollo Clúb.
9.0: Announcements. Weather forecast for the man on the land. A musical item.
9.10: From the Conservatorium of Music --second half of concert programme arranged by the Royal Apollo Club.

by the Royal Apollo Club. 10.10: From the studio—Austradio musical

10.25: Late official weather forecast. Late news from the "Sun." 10.30: Close. National Anthem.

thes nie, and poultry markets. 7.35 The Dinner Music Quartette 7.45 Celebrity music. 7.58 What's on the air to-night?

20: The countryman's market session-

WE WILL BE PLEASED TO MAIL THIS NEW BOOKLEY TO YOU

PHILIPS Radio have now answered hundreds of requests for details on the construction of an "out of the ordinary" short-wave set by producing this eight page booklet "How to build the PCI-4."

If you wish to construct this four-tube screengrid receiver mail the coupon to your nearest Philips office and you will receive a copy by return post.

Philips Lamps (A'asia) Ltd.,
G.P.O Box 1799, Melbourne.
G.P.O. Box 2703C, Sydney.
G.P.O. Box H 1337, Adelaide.
Perry House, Elizabeth Street,
Brisbane.

9845

To PHILIPS

Wro BUILD

Please mail me a copy of your free bookles --"How to build the PCJ-4"

* * *** * * * * *** * * * * * * * * * ***

Interstate Programmes, Wednesday, October 9

3LO

Amitralian Broadcasting Co., 120A Russelt St., Melbourne (Wavelength, 371 Metres). CARLY MORNING SESSION

7.0 to 8.15: See Friday

MORNING SESSION

10.30 to 12.30; See Monday

MIDDAY SESSION

Melbourne Observatory time signal, etc. 1.30 mission from the Rotary Club luncheon. Transmission EDUCATIONAL SESSION

Transmission from the Rotary time signat, etc. 1.30: Transmission from the Rotary Club luncheon. EUCATIONAL SERVICE 2.0: Pure speech, Miss Alice Smith. 2.13: Description of Connewarre Hurdle Race, 2 miles—Geelong Races, by Eric Welch. 2.20: Ramoles in the bush— Mit. Cluaries Duley. 2.35: Musteal interlude. 2.43: Connewarre Hurdle Race, 2 miles—Geelong Races, by Eric Welch. 2.20: Ramoles in the bush— Mit. Cluaries Duley. 2.35: Musteal interlude. 2.43: Creelong Races, or Trial Hundleap. 5 turlongs— Greelong Races, Data Control (1998) 3.5: A.C.B. Troubadours—Latest, Hits. 3.13: De-scription of Grovedal Handicap, ore mile—Geelong Races, by Eric Welch. 3.20: Ted Nelson—Songs and noveiles at the plano. 3.26: A comedy Stetch, pro-tineed by Duleie Hall, "Mary and John." Mary, Duleie Hield John Claude Carler, 3.38: A Drouhart, violin— Crubendeelong Races, by Eric Welch. 3.56: Ida Wright, contraito—"Thiodern melodies. 3.56: Ida Wright, contraito—"Thiodern melodies. 3.56: Ida Wright, contraito—"Thiodern melodies. 3.56: Ida Wright, contraito—"Thiodern Michelle" (100) A.B.C. Trouba-Geelong Races, by Eric Welch. 4.25: Lorayne Wright, soprano—"Villenee", 101 August. "My Shine". Barren. 4.8: Ted Neine, 4.25: Lorayne Wright, soprano—"Villenee", 101 August. "Thereot" "Teadale: 4.32: A.B.C. Troubadours—Be inder a 4.6: Ida and Lorayne Wricht, contrainto and Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rilli as the Night." "Night of Stars and Nigh. "Rill

Interim Construction of the second sec

concert. 9.20: 9.20: Railways Military Band (conductor, A Belchert.

Fank Perrin, entertainer--"Topicalities, Oresti Manzoni--"Berceuse de Jocelyn" 9.25 (B

Godardi iodardi, 9 36: J. Foster, baritone—"On the Beach at Otahl" Harrison1, "Kashmiri Sone" (Woodforde-Finden) 9 43: Rallwavs Military Band 9 55: Frank Perrin, entertainer—"Cheerlo." 9.57: Oresti Manzoni, mandolin—"Mandolin Med-9' uarr Manzoni, mandolin—"Mandolin Med-9' uars Manzoni, baritone—"To-morrow" Keel). Selected. Harrison

10.1: Joseph (Keel). Selected.

(Rech.) Selected. 10 8: Relikavs Military Band. 10 18: Relikh official wireless news: meteorological information: items of interest. 10, 38: "The Pex" Dance Band 11.30: Ood Sare the King.

3AR

Australian Broadcasting Co., 120A Bussell St., Melbourne (Wawciength, 48) Metres).

MORNING SESSION

NORNING SENSION 8:15 to 11.0: See Friday MIDDAY SESSION 12.0: Chimes 12.1: Food and Cookery-American Delicacies and Cooking Methods, Dr. Cecile Grell New York). 12.15: Organ recital from the Mel-bourne Town Hall, Dr. W. G. Price. 12:46: Lunoheon music 1.45: Speeches from the Lord Mayor's In-terretal Luncheon

Bourne Town Hall, Dr. W. G. Price. 12,46; Lunobeon inusite 1.45; Speeches from the Lord Mayor's In- sugural Luncheon.
 AFTERNOON SESSION 2.45; Musical reproduction. 3.0; Request numbers 3.0; The Pre-School Child—Do you find it difficuit to get your child to eat proper food? Miss M. Lush; 3.35; Musical interlude, 3.40 Do you collect or Choose Pictures?—Miss Stephanie Taylor. 3.55 Musical interlude. 4.0; Home Life in Other Coun- tries: Spain—Miss D. Babington. Traders' Demonstration Session.
 4.15; Musical reproduction. 5.30; G.P.O. Chimes. 5.1; Musical reproduction. 5.30; Weather data. 5.45; Cluse down. EVENING SESSION

Cluse down. EVENING SESSION 6.15: Dinner music supplied by the Studio Light Orchestra. 7.32: Sporting results. 7.35: Latest musical releases. 80: 0.20 Chimes.

urcnestra. 7.32: Sporting results. 7.35: Latest musical releases. 8:0.6.P.O. Objmes. NIGHT SESSION 3.1: Why we Behave as Human Beings: Memory and Personality-Prof. J. A. Gunn, M.A., B.Sc., Ph.D. 8.15: "The Wanderers" in song and story. 8.45: Austin Anderson, entertainer-Musical mono-logue, "Christianas Beils" (Leslie Harris). 8.52: One Act Play, "The Waiter"-Produced by

Claude Carter, Characters: He, Claude Carter; She, Dorothy Leslie, 9.8: Millicent Osmond, soprano---'The Swan'' (Grieg), "Elves and Fairies" (Densmore), 9.15: National Broadcasting Orchestia--Romance and Two Dances, from "The Conqueror" (German), 9.22: Norman Christensen, Lenor--'tle Donna e Mobile" (Donizetti), "Salaam'' (Lung). 9.29: Guildford Bishop, Violin--Two songs arranged for the Violin (Ball), "Mother Machree," "Smillin' Through".

Through

for the Vioin (Bail), "Mother Machree, "Sminin Through".
9.34 Millicent Osmond, soprano-"Windy Nights" (Stanford), "In the Woods" (Austin).
9.41 Austin Anderson, entertainer-Two character studies: "Silly Ass." "The Bailroom."
9.48 National Broadcasting Orchestra-"Syncopa-tion" (Kreisler), "Stavonic Dance" (Dvorak).
9.53 The Bronsons-In Comedy and Song.
10.5 Woather information and "Herald" news.
10.5: Norman Christensen, tenor-"Invictus" (Ruhnh, "A Regret" (Nutting).
10.22: National Broadcasting Orchestra-Selection from "June Love" (Frimi).
10.30: God Save the King.

3DB

The "Herald" Broadcasting Station, Flinders Street, Melbourne (Wavelength, 255 Metres), MORNING SESSION,

The "Herald" Broancasting Stalion, Finder's street, MORNING SESSION.
 11.0: Pred Rich and his Orthrstra.-"Wedding Bells," 11.30: La Vogue-"The World's Fushions and Probles." 11.30: La Vogue-"The World's Fushions and Probles." 11.30: La Vogue-"The World's Fushions and Probles." 11.30: La Vogue-"The World's Fushions and Control of the World's Fushions and Probles." 11.30: La Vogue-"The World's Fushions and Orther 12.20: Mirit Rennedy ("John McMonara and Orther 12.20: Mirit Rennedy Control of the Sonder-"Dundein March." 11.5: Pioneer Tourist Coaches Sponsored Programme. AFTERNOON SESSION.
 2.15: Savoy Orpheans-"Lido Lady, Sclections.
 2.30: Mr. Dorothy Bikk.-"Homeratist." 2.45: Caro-lina Club Orchestra-"Spell of the Blues." 3.0: At-water Kent Radio Hour-sponsored by A O Healing Ltd., and E. T. Muir. 4.0: Close down.
 EARLY EVENING SESSION.
 4.45: Choral Evensone, transmitted from Si-Paul's Cathedral. 5:0: Yvoane Curti (violin)-"Cardas" (Mont) 6:0: Children's requerts. 6:20: Market reports. 7:40: Eddles' Hawallan Orchestra-"Down In Waikkl."
 EVENING SESSION.
 8.0: Sponsored acession.
 9.0 H Williamson and Robert Howe- "Three Lived a King."
 9.00 Musical Artists' Quartette--"Hark, Hark, th

King Musical Artists' Quartette- Hark, Hark, the 9.30

10.0° Keith Falkner-"Trade Winds." 10.30° J. H. Squire Celeste Octet-"Evening Lui laby." 10.40 News. 10.45 Ond Save the Kinc

40G

Queensland Government Radio Service, Brisbane (Warelench, 385 Meires), (Por day sessions schofulos nee Priday.) NIGHT SESSION.

NIGHT SESSION. 8.0: The Studio Drive Orchestra-Dance numbers. 8.10: The Alchn Tribe-Hawalian musice numbers. 8.20: The Studio Darce Orchestra-Dance numbers. 8.30: Winlfred #salam (contrilio)-"Curolina Moon." "The Song I Love." 4.40: The Studio Dance Orchestra-Dance numbers. 8.50: Vida Chown (banjo-mandoliniste)--"On the Mill Dam" Bebb). "Best of the Drum" (Grimshaw). "The Savigo American Medler" (Somers), "It Goes Life Tivs. That Funny Melody." 9.0: Metropolitan weather forceast. Movements of Hothboure recomers.

lighthouse

9.0 Metropolium weather forecast. Movements of orthouse "tearmers. 9.5 The Studio Dance Orchestra.—Dance music. 9.15: Arthur Aldridge (tenort).—Popular numbers. 9.35: A thousht for to suight (will H. Lister)... And The Aldridge to suight (will H. Lister)... And The Aldridge to a suight of the suight of the 9.60: The Studio Dance Orchestra.—Dance music. 10.0: News supplied by the metropolitan dailies /eather information. 10.15: Harry Orunden and Mark Solomon. enter-timers.

10.15: Harry Grunden and (soprano)—"Let All My tainers, 10.30: Mrs. Roht. Bell (soprano)—"Let All My Life be Music" (Spress), "Song of the Soul" (Briel) 10.40: The Studio Dance Orchestra—Dance music. 11.0: Close down.

5CL

5CL2 Central Broadcasters, Lida, 114, Hindmarsh Square, Bernard Broadcasters, Lida, 114, Hindmarsh Square, EGHT HOURS DAY, BERNOON SEESION 1.00 Chimes, 12.1: Special late selections for Geelong Races, 12.3: Probable starters and selec-tions for races at Morphettville, 12.15: British Offi-cial Wireless news, S.A. railway, Information, an-tions for Forestville Hurdle Race, two mild and do and yards, 12.40: Musical Interfue, 12.50: Morphett-ville-Running description of Forestville Hurdle Race, 12.55: Recordings, 1.0: Morphettville-Riders and positions for Hayburst Handleap, one mile and a furiong, 1.20: Recordings, 1.30: Morphettville-Running description of Hayburst Handleap, 1.35: Recordings, 1.55: Morphettville-Riders and posi-tions for Fympton Handleap, one mile, 2.0: Ceelong race result, 2.10: Morphettville-Runaing description (20: Ceelong race result)

tion of Plympton Handleap. 2.15: Recordings. 2.35: Morphetiville-Riders and positions for Galway Stakes, Bive furiongs. 2.40: Recordings. 2.50: Mor-phetiville-Running description of Galway Stakes. 3.0: Geolong race result. 3.15: Morphetiville-Rid-ers and positions for Unley Park Steeplechase, about two and a half miles. 3.30: Morphetiville-Rid-ers and positions for Spring Handl-cap. One mile and a half. 4.0: Geelong race result. And the start and a positions for Spring Handl-cap. One mile and a half. 4.0: Geelong race result for Sturt Handleap, six turiongs. 4.50: Morphetiville-for Sturt Handleap, six turiongs. 4.50: Morphetiv From Studio: Dividend on Sturt Handleap. 455: From Studio: Close down. EVENING SESSION. 6.0 to 7.55: See Friday.

6.0 to 7.55: See Friday. NIGHT SESSION.

NIGHT SESSION. 8.0: Chimes. 8.10: Waltz-"Over the Waves." 8.17: Old Time Songs by the Lyric Quartel-Awake, Pretty Kate" (Macy), "Old Kentucky Iome" (Parks).

- "Awake, rrew, and home" (Parks). 8.24: Schottische-"Sylvie and Swanee." 8.31: Jack Burgers and Netta Rodney-"Love's Old Sweet Song" (Molioy). 8.35: Marcella-"Back Home in Tennessee." 8.44: Vocal numbers-Selected. 8.48: Lancers-"Varlety." 9.0: Chimes.

Morphettville

- 8.48: Lancers-"Variets."
 9.0: Chimes.
 9.1: Meteorological information, including Sema-phore tides.
 9.2: Overseas grain report.
 9.3: Come on, everybody; join in the choruses with us. Old Time Songs. by the Lyric Male Quartette--"Sweet Genevieve" (Parks), "O'l Carlina" (Cookel.
 9.10: Broom Dance-Selected waltzes.
 9.15: Jack Burgess, barltone--"Let Me Call You Sweetheart."
 - 9.15: Jack Burgeas, wertheart.
 9.18: Alberts.—"Old Melodies."
 9.33: Jack Burgess and Netta Rodney—"Daisy."
 9.37: Military Two-Step—"Policeman's Holiday.
 9.44: Vocal number-Belected.
 9.50: Barn Dance—"Baby Tank Tunes."
 9.55: Netta Rodney, soubrette—"Two Little C
 Ring."

10.50: Waltz-"Home, Sweet Home." 10.52: Waltz-"Home, Sweet Home." 11.0: Close down.

wo Little Girls

9.55: Netta Ronney, source and a source and

Selected, 10.48: Jack Burgess, baritone-"Walking Home with

6WF

<section-header><section-header><text><text><text><text><text><text>

7ZL

722.2 Tasanalan Broadensters Ptr. Bursary Bulldings. Elizabeth St., Hobart (Wavelength, 516 Metres). 11.30 a.m.: Selections. 11.34: Midlands weather forecast. 11.35: Selections. 11.36: Tasmalan sta-tions' 9 a.m. weather report. 12.1; Shipping: mall notices: housewive's guide. 12.8: Selections. 12.30: News service: British official wireless news. 1100-Selections. 1.5; Rallwa, 1.20: Transmission from down. 30: G.P.O. clock chimes the hoart. 2.0: Close down. 30: G.P.O. clock chimes the hoart. 3.1; Selections. 3.4: Weather. 3.5: Selections. 4.15: Readings. 4.30: Close down. 6.16: Children's cor-ner, with Bertha Southey Brammall. 7.10: Recorded music. 7.30: News session. 7.40: Belle St. Lawrence will continue her travel talks. 7.50: V. C. Webb will speak on "The history of petroleum." 8.1: Selec-tions. 8.15: A Columbia recital, including latest releases. 9.30: News session. 9.45: Record recital. 10.1: Close down.

tiville race results. Old Time Dance Night continued. Lancers-



Page Fifty

WIRELESS WEEKLY

Mr. H. W. VARNA, presenting "The Ghost of Jerry Bundler," from 2BL to-night.

4.37: Austradio musical reproduction. 4.45: The Trade Hour—Demonstration

5.45: Weather information. Close down.

THE DINNER HOUR-6.15 to 7.55 p.m. 6.15: The Dinner Music Quartette. 6.45: The A.B.C. Younger Set session-Girls' Radio Club, conducted by Miss Gwen Varley

7.35 Studio music.
7.15: The countryman's market session—wool, wheat, stock, farm produce, fruit, vegetables, pig, and poultry markets.
7.30: The Dinner Music Quartette.
7.45: Celebrity music.
7.55: What's on the air to-night?

TO-NIGHT'S PRESENTATION-8 to 10.30

p.m.

p.m. On Thursday night 2PC's programme offers not merely one contrast, but 20 minute sec-tions of entirely different entertainments. 2BL's Thursday night feature is a play, which, it is endeavored, commences regularly at 9 0'clock. For to-night H. W. Varna has pre-pared "The Ghost of Jerry Bundler" (Rock and Jacobs)

8.0: An hour from the Capitol Theatre. 9.0: From the studio—H. W. Varna and Company in a studio play, "The Ghost of Jerry Bundler", (Rock and Jacobs).

Oharacters: Hurst H. W. Varna Somers H. J. Saller Malcolm Tom Edols Penfold William Hume Dr. Leek Foster Dean

Dr. Leek Foster Dean George (waiter) Keith Sheather Scene: Smoking-room of an old English

9.30: Weather Forecast for the man on the

and.
9.32: The Wireless Singers.
9.42: Carlton Fay, pianist--(a) "Summer Noon" (Loughborough).
(b) "Valse Aerienne" (Leibetz).
(c) "Song of the Orient" (Chaminade).
9.50: Dulcie Blair, violinist--(a) "Andante from Symphonic Espagnole" (Lalo).
(b) "La Predicave" (Comparin Kaminade).

(b) "La Precieuse" (Couperin-Kreisler), 9,57: The Wireless Singers.

4.20: Doris Lascelles, monologues

music

7.5: Studio music.

and Jacobs).

country inn.

land.

Local Programmes, Thursday, October 10

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 infor-mation for the man on the land 7.3: This morning's news from the "Daily Telegraph Pictorial." 78: Austradio muchael aspendentian
- 7.8: Austradio musical reproduction 7.45: Mails and shipping. 7.45: 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: Horace Weber at the Grand Organ. 11.0: Household Helps: Domestic Notes, by Miss Ruth Furst. 11.10: Cables—"Sun"-"Herald" and A.P.A.
- 11.10: Cabl. News Service

- News Service. 11.15: Morning Devotion. 11.30: Austradio musical reproduction. 11.30: Austradio musical reproduction. 12.00: "Big Ben." Stock Exchange and metal quotations. 12.5: "With the Poets." by Eleanor Ross. 12.20: Midday weather forecast and wea-ther synopsis. Special produce market ses-sion for the man on the land. supplied by the State Marketing Board. 12.30: Close.
 - THE LUNCH HOUR-1 to 2.30.
- 1.0: Lunch to music with the 2FC Instru-

- 1.0: Lunch to music with the 2FC Instrumental Quartet.
 2.0: Stock Exchange, second call.
 2.2: A Glance at the afternoon "Sun."
 2.7: To-day's acceptatices, by the A.B.C.
 Racing Observer.
 2.17: Popular Education: "Spoken English." by C. N. Baeyertz.

- ish." by C. N. Baeyertz.
 THE RADIO MATINFE—2.30 to 4.30.
 2.30: The 2FC Instrumetal Trio.
 2.42: John Benjamin, baritone—

 (a) "Serenata" (Toselii).
 (b) "Duna" (M'Gill).
 (c) "A Vucheila" (Tosti).

 2.49: Cyril Leak, pianist—

 (a) "Apres L'Ondee" (Perse).
 (b) "Prelude" (Leak).
 (c) "Trolsieme Valse" (Perriere)
 2.57: The 2FC Instrumental Trio
 3.9: Florence Bentley, mezzo—

 (a) "Kashmiri Song" (Woodforde-Finden). 3.9: Fiorence Denkey, "Wordforde-Finden),
 (a) "Kashmiri Song" (Wordforde-Finden),
 (b) "The Star" (Rogers),
 3.16: The 2PC Instrumental Trio,
 3.30: John Benjamin, bardone—
 (a) "Sylvia" (Speaks)
 (b) "The Cloths of Heaven" (Duninii)
 (c) "The Lilac Tree" (Gartian),
 3.37: Cvril Leak, planist—
 (a) "Devotion" (Schuman-Lirzt)
 (b) "Prelude No. 22" (Chophn),
 (c) "Valse in E Minor" (Chophn),
 (c) "Valse in E Minor" (Chophn),
 (c) "The Curtain Falls" (D'Hardelot),
 (d) "The Curtain Falls" (D'Hardelot),
 (d) "An Afternoon Story,
 (d): An Afternoon Story,
 (d): EVENING SESSION—5.45 to 7.55.

- EARLY EVENING SESSION-5.45 to 7.55. 5.45: Kiddies' "Good-night" Stories told b "Good-night" Stories told by
- Auntie Goodie. 6.45: The Dinner Music Quartette 7.30: A.B.C. Sporting Service 7.37: Special Country Session. Sto
- Stock Ex-
- change. Resume markets. Weather torecast. Late news from "The Sun." Truck bookings. 7.58: To-night's programme.
- 7.58: To-night's programme.
 THE EVENING PRESENTATION-8 to 11.30 Thursday is Contrast Night through 2FC— we have classic music, a touch of drama, 20 minutes of vaudeville—in short trabled offer-ings to suit all tastes. 2BL to-night features H. W. Varna's play, "The Ghost of Jerry Bundler" (Rock and Jacobs). The spoken word on the air still holds attraction for many listeners.
 8.0: Senia Chostiakoff. Russian tenor— late of the Don Cossacks Choir— (a) "Elegie" (Massenet).
 (In French, with 'Cello Obbligato).

- (b) "The Red Sarafan" (Russian Folk
- (Trio Accompaniment.) (Trio Accompaniment.) c) "Monotonously Rings the Bell"

- (Jaroff).
 (With Organ).
 (d) "Song of the Volga Boatmen" (Russian Folk Song).
 (Trio Accompaniment.)
 (e) "Questa o Quella per me pari sono." from Opera "Rigoletto" (Verdi).
 (Trio Accompaniment.)
 8.20: Cameos of Our City, by C. R. Hall.
 8.40: Lynn Smith and Heather Jones, in a Snappy Revue.
 9.0: The Country Man's Weather Session—

 (a) New South Wales Forecasts.
 (b) Inter-State Weather Synopsis.
 9.2: The 2FC Instrumental Trio
 9.2: The 2FC Instrumental Trio
- Something Different. 9.42: The Kookaburras' Saxophone Quar-tette, with popular vocal numbers by Nea tette, with popular vocal numbers by real Hallett—

 (a) "Sweet and Low" (Barnby).
 (b) "The Village Blacksmith" (Weiss).
 (c) Songa-"Roses of Yesterday" (Berlin) "Deep Night" (Henderson).
 (d) "Broadway Melody" (Freed).
 (e) "Good-night" (Pinsut).
 (f) Songs-"Sleepy Valley" (Hanley).
 "The Song is Ended" (Berlin).
 10.2: From the Hotel Australia: Cec. Morrison's Dance Band.
 11.30: Close. National Anthem.

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.

10.10: Austradio musical reproduction, 10.40: The Australian Broadcasting Com-any's Women's Association, conducted by

MIDDAY SESSION-12 noon to 2.30 p.m. 12.0: G.P.O. chimes. Announcements. 12.2: The Luncheon Hour Quartet. 1.0: Afternoon news from the "Sun."

Alternoon news from the "Sun."
 Studio music.
 1.15: Women's interest talk—Mrs. Mildred Muscio. "Uniform Divorce Law."
 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 to 5.45 p.m.
2.30: Business efficiency talk. Jean Arm-trong—"What Would Cleopatra Say?"
2.45: The Magic Carpet Series. F. H. Ra-rard—"Venice. the World's Wonder City."
3.0: Radio rhythm.
3.12: Ruby Lesley, soprano—

(a) "Lilies of Lorraine" (Connor)
(b) "Just Love Me" (Phillips).
3.19: Music of the moment.
3.22: Rita Graham, violinist—

(a) "Reverie" (Vieuxtemps).
(b) "Andante Cantabile" (Tschaikow-sky).

3.36: Doris Lascelles, monologues.
3.43: Songs of to-day.
3.53: Rita Graham, violinist—

(a) "Serenade" (Hubay).
(b) "Madrigale" (Simonetti)

4.0: Ruby Lesley, soprano
(a) "When Song is Sweet" (Sans Souci).
(b) "Butterfly Wings" (Phillips).

4.7: Melody memories.

3.29: Popular dance number.
3.36: Doris Lascelles, monologues.

- 845: Mational and the for the count.
 845: Mational and the count information.
 850: Memory melodies.
 9.0: This morning's story.
 830: A musical interlude.

toria

pany's

strong-

ward-

- 9 40 British official wireless press. 9.45: News music.
 10.2: News from the "Labor Daily."
 10.5: News from the "Daily Telegraph Pic-

Miss Gwen Varley. 11.0: G.P.O. chimes. Close down.

Page Mitr-One

- 10.7: Carlton Fay, pianist— (a) "Song of Autumn" (Hall). (b) "Grand Valse Caprice" (Engle-

- (b) "Grand Valse Caprice (Engletmann).
 (c) "Intermesso Brillante" (Hall).
 10.14: Duet by the Wireless Singers.
 10.19: Dulcie Blair, violinist—

 (a) "Air" (Goldmark).
 (b) "Deutscher Tanz" (Dittersdorf).
 10.25: Late official weather forecast. Late news from the "Sun."

 10.30: Close. National Anthem.

2GB

2GGB Thessophical Broadcasting Station, 29 Biligh St. Sydney (Wavelength, 316 Metres). 10: Music. (10.10: Happiness Talk, by A. E Bennett. 10:20: Music. 10:30: Women's session, by Miss Helen J. Beegling. 11:30: Music. 11:45: Close down. 1:30: Speeches from Legacy Club. 2:0: Music. 2:5: Women's Radio Service, by Mrs. Dorothy Jordan 2:50: Music. 3: Labor saving demonstration from Buckinghams, Ltd. 4:0: Close down. 5:5: Children's session, by Uncle George. 7: Music. 7:45: Feature story. 8:0: Miss Mary Neal, contraito. 8:7: Instrumental Quartette. 8:15: Mr. Edward Barry, barltone. 8:22: Symphony Orchestra. 8:30: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 8:40: Miss Gwen Selva, soprano. 8:50: yiolin solos. 9: Weather report. 9:3: Ad-dress. 9:15: Miss Mary Neal, contraito, 8:25: Symphony Orchestra. 9:30: Mr. Edward Barry, barltone. 9:40: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 9:50: Miss Gwen Selva, soprano. 10: In-store Sora Windle in a humorous sketch. 9:50: Miss Gwen Selva, soprano. 10: In-Barry, barltone. 9:40: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 9:50: Miss Gwen Selva, soprano. 10: In-Barry, barltone. 9:40: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 9:50: Miss Gwen Selva, soprano. 10: In-Barry, barltone. 9:40: Mr. Jack Win and Miss Nora Windle in a humorous sketch. 9:50: Miss Gwen Selva, soprano. 10: In-1:50: Miss Inster In 1:50: Close down.

strumental music. 10.30° Citose down. 2UW Radio Broadcastine, Ltd., Palinc's Building, Ash St... Sydney (Waveleugth, 267 Metres). MIDDAY SESSION 12.30° Request numbers. 1.0° G.P.O. clock and chimes; music. 1.15° Talk on "Home-craft," by Pandora. 1.40° Music and request numbers. 2.30° Close down. 4.30° Musical

numbers. 2.30: Close down. 4.30: Musical programme. **EVENING SESSION** 5.30: Children's Hour, conducted by Uncle Jack. 6.30: Close down. 7.0: G.P.O. clock and chimes; request numbers. 7.45: Garden Talk, by Mr. S. H. Hunt. 8.0: Tenor and baritone recital. 9.0: G.P.O. clock and chimes; comments on Foreign Affairs, by Mr. J. M. Prentice. 9.10: Music and request numbers. 10.30: Close down.

2KY

 ZK I

 Trades and Labor Council, Goulburn St., Sydney (Wavelength, 280 Metres). MORNING SESSION

 10.0: Tune in to the ticking of the clock.

 10.3: Popular fox trots.

 10.4: Topolar fox trots.

 10.5: Hawaiian

 steel guitar selections.

 10.6: Tune in to the ticking of the clock.

 10.7: Topolar fox trots.

 10.8: Women's Session—Home Hints and Information, con-ducted by Mrs. Gray.

 11.5: Pianoforte selections.

 11.30: Labor's Federal Radio Campaign.

 11.40: Musica and vocal items.

 11.40: Musica announce-ments.

CHILDREN'S SESSION 6.0: Birthday calls, request numbers and kiddles' entertainment, Aunt Jamima and Uncle Bert.

Uncle Bert. EVENING SESSION 7.0: Musical interlude. 7.5: Birthday calls. 7.15: Request numbers. 7.30: Hawaiian steel guitar selections. 7.45: Humorous interlude. 80: Orchestral selections. 8.10: Tenor solos, Mr. G. Mason. 8.17: A humorous interlude. 8.30: Frederick Holt presents a recital of Australian compositions and composers, with musical and vocal illustrations. 9.10: Re-quest numbers. 9.40: Continue record recital. 10.0: Closing announcements.

2UE

 EVEL

 Breadcasting Station fUE, Everett Street, Maroubra, Sydney (Wavelength, 293 Matres).

 EARLY MORNING SESSION.-7.15 a.m.:

 Breakfast time hour orchestral music. 8.0:

 Clock and chimes. 8.1: Musical items. 8.30:

 Weather report. Close down.

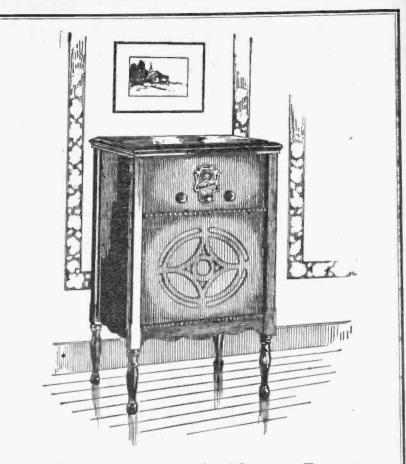
 MIDDAY SESSION.-11.30 a.m.: Orchestral and vocal music. 12.30: Close down.

 AFTERNOON SESSION: 1 p.m.: Vocal and instrumental items. 1.45: Organ recital. 2.0: Music. 2.30: Announcements.

 Close down.

 EVENING SESSION -715 p.m.: Orchestral

Close down. EVENING SESSION.—7.15 p.m.: Orches-tral and vocal dinner music. 7.58: pro-gramme announcements. 8.0: Clock and chimes. 8.1: Overhure, "Maritana" selections. 8.11: Orchestral and vocal concert. 10.15: Close down. Close down.



Colville-Moore A.C. Three Receiver

A TRIUMPH IN TONE AND MECHANICAL PERFECTION

ALL-ELECTRIC 100 p.c.

Right off your Power or Electric Light Socket.

Plug In-Tune In

No Aerial or Other Loose Wires

SOLVES YOUR ENTERTAINMENT PROBLEM.

DEMONSTRATIONS given in your own home Day or Night, without obligation.

RING B2261 and make arrangements to hear this wonderful Receiver. T' ELVE MONTHS' FREE SERVICE-WRITTEN WARR ANTY

TABLE MODEL, £29. Dep. £6, Monthly £2/2/9 CONSOLE, £34. Dep. £7, Monthly £2/10/1

> See last week's Wireless Weekly for our List of Parts for "THE 1930 SUPER-HETERODYNE."

Colville-Moore Wireless Supplies Limited, 10 ROWE STREET (Next Hotel Australia), SYDNEY 'PHONE, B2261. PHONE, B2261.

Friday, 4th October, 1929

Interstate Programmes, Thursday, October 10

3LO

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

EARLY MORNING SESSION 7.0 to 8.15: Sec Friday

MORNING SESSION 10.30 to 12.30: See Friday.

MIDDAY SESSION

1.0: Melbourne Observatory time signal, etc. 1.15 uncheon music, supplied by the Studio Light Orchestra.

EDUCATIONAL SESSION

Great Australians—Archibaid, of the "Bulle-tin," Mr. J. Howlett Ross. 2.15: Musical interlude.
 2.20: Music Explained and Illustrated—Mr. O. g. Monteath, F.R.O.O. 2.35: Musical interlude.
 2.40: Romantic stories of Australia's early days—Mr. C. R. Long, M.A. 2.55: Musical interlude.

THE RADIO MATINEE

THE RADIO MATINEE 3.0: The Lyric Brass Band-March, "Strathcons." Melody Weitz, "Ah, Sweet Mystery of Life." 3.6: Alf. Lawrence-Songs at the Plano, 3.14: Cecil Parkes, violin-"Arioso" (Handel), "Spanish Dance" (Sarasate). 3.20: Neil Crane- "The Personality Singer." 3.21: The Lyric Brass Band-Selection, "Daughter of the Regiment." 3.33: A playlet. The Philosopher of Butterbiggins. Produced by Betty Rae. Cast: David Pirme, H. N. Gregory, Lizzie this daughter). Betty Rae. John Betl (His son-in-lawy, Rex Binclaft. Alexander (John's Hitle cont Marchine in Buitcribggins. 3.45: Pfittern minutes of popular music. The Gremona Tio-"Trio in G. Major" (Huristone). Allegro moderato, Andante. Allegro commodo. 4.0: The Lyric Brass Band-Fox-troi, Latest hit. 4.6: Alf. Lawrence and Neil Crane-A comedy sketch. 4.16: Myra Montague, plano-"Vacturne" (Sibelius). "Moorth March" (Moszkowsky). 4.22: Lyric Brass Band-"D'ye Ken John Peel." 4.33: Acceptances and bariter positions for the V.A.T.C. Races at Caulfield on Saturday. Cetober 12. 4.35: Close down. **The CHLDERYS HOUR.**

5.45: "Bobbie Bluegum

Bobble Bluegum." EVENING SESSION.
6.35: Melody broadcast. 6.40: Let's talk about Our Animais-"The Origin of the Racehorse," Mr. J. Loiler. 6.55: Melody broadcast. 7.0: Mel-bourne Observatory time signal. 7.1: Country-man's session. 7.25: For the man on the land-Shesring Shed Practices. Mr. N. R. Bowman. 7.40: News service. 7.45: Novels and authors of to-day. Captain C. H. Peters. 6.0: Melbourne Observatory time signal.

NIGHT SESSION

NIGHT SLESION 8.0: Hon. J. H. Scullin, M.H.R., election speech. 9.15: National Broadcasting Orchestra—Overture, "Rokoczy" (Keler Bela). 9.22: Rose Clayden, contraito—"Husheen" (Need-hami, "The Fields of Ballyclate" (Turner Makey). 9.29: Albert Durand, banjo—'The Lost Chord" (Suillyan), by request. A banjo's description of a Military March Past. 9.36: Allan Adcock, entertainer—"Shakespeare Snapshottd."

Snanshotted

Singaiolited." 9.43: National Broadcasting Orchestra-"Haban-fra. from 'Natoma' 'Herberl). Durt for Flute and Clarinet-"Lo! Here the Gentle Lark" (Bishop). 9.50: An original one-act farce. "The Estate Agent." Produced by David Rowland. The agent. David Rowland. The girl, Marion Redwood. 10.2: Rose Clayden, contrailo-"Yonder" (Herbert Oliver. "So Little Time" (Hermann Lobri. 10.9: Albert Durand, banjo-"Londonderry Air." 'Tatioo."

"Tailor", "here't Durka, ownjoe Boudsterry har "Tailor", "Alan Adoesk, entertainer-An old favorite, "The Body In the Bag." 10.23: Nutional Broadcasting Orchestra-Selection of Squir's Popular Songs. 10.30: Britishi officiai wireless news. Meteorological information: items of interest. 10.40: A.B.C. Troubadours-"Broadway Melody" (Browni, "You Were Meant for Me" (Brown), "I Faw Down and Go Boon" (Brockman). 10.50: Horace Caivert, tenor-"The Little Irish Girl", Lobrit.

(Brownit, "You were meant for at the service of the

3AR

Australian Broadcasting Co., 120A Russell St., Melbourne (Wardlength, 181 Metres). MORNING SESSION

8.15 to 11.0: See Friday

MIDDAY SESSION Chimes

mes. 12.1: Community Singing from th Town Hall. Conductor. Frank Hatherley Melbourne ? 2.0: Chines.

AFTERNOON SESSION

2.1: Orchestral—Regal Concert Orchestra. 2.8: So-prano—Annie Rees. 2.16: 'Cello--Guiseppi de Silva. 2.24: Voca:-Regal Mixed Quartette. 2.32: Orchestral —Regal Concert Orchestra. 2.40: Tenor-Herbert Perry. 2.43: Plano recital—Prank Black 3.0: Re-quest numbers. 3.20: At a Baby Health Centre--Miss Hattic Knight. 3.35: Musical interlude. 3.40; Food and Cookery-Gas Cooking, Miss E. Noble. 3.55:

Musical interlude: 4.0: Your Health and Appearance How to Keep Your Figure-Miss Evelyn N. Ellis, 4.15. Musical reproduction. 4.45: Evensong, transmitted from St. Paul's Cathedral. 5.30: Weather data. 5.45: Close down.

EVENING SESSION

6.15: Dinner music supplied by the Studio Light Orchestra. 7.32: Sporting results. Acceptances and barrier positions for the Y.A.T.C. races on Saturday, October 12. 7.35: Latest musical releases. 8.0:

NIGHT SESSION

NIGHT SESSION 8.1: The Aristo Quartetit.-Ensemble (haritone, so-prano, violin, pisno): violin: "Mazuris" (Mynar-ski), "The "Phartom Melody", Kietelby); soprano, "When Love is Kind" (Oid Irish), "The Little Sun-bonnet of Blue" (Henry). Piano; "Pierette" Chamin-ade). "Polly Novelty Foxtrot" (Zamecnik). Baritone: "All the Fun of the Fair" (Martin). "The Pishermen of England" (Sanderson). Ensemble (baritone, so-prano, violin, piano). 8.30: A.B.C. Troubadours-"I Can't Give You Any-thing but Love" (Pields), "Malkin" Whoopee" (Don-aldoon), "Tm Bringing a Red, Red Rose" (Donald-son).

8.40: Ernest Wilson, baritone--"Sca Fever" (Ireland)

8.43: 8.43: A.B.C. Troubadours--"Love Dreams" (Men-doza), "Chilly Pom-pom-Pee" (Wendling), "It Wasn't Menal to be" (Benson).

8.53: Etta Bernard, contralto-"When My Ships Come Sailing Home" (Dorel).

8.56; A.B.C. Troubadours-"The Things that we're Made for Love" (Tobias), "If I Had You" (Sha-piro), selected.

9.6: Horace Calvert, tenor-"A Warwickshire Wooing

10g. 9.9: A.B.C. Troubadours—"Another Kiss" (Schaz-inger), "Here Comes the Show Boat" (Rose), "Weary River" (Slivers). 9.19: Molly Mackay, soprang—"Butterfly Wings"

(Montagle)

9.22: A. (Gilbert), A.B.C. Troubadours—"Onward to Oregon , "Up the River" (Gilbert). "Couquette Berlin 9.32: Ernest Wilson, baritone.

9.35: A.B.C. Troubadours-"Honey" (Simons), "Reaching for Someone" (Doualdson), "There's a Pour Leaf Clover in my Pocket" (Wendling).

9.45: Etta Bernard, (Dodge). contraito-"Gossiping"

5.48: A.B.C. 'Troubadours---''The Heart of the Sun-(Berlin)

9.58; Horace Calvert, tenor-"A Brown Bird Sing-1117

ing." 10.1: Weather information and "Heraid" news. 10.10: A.B.C. Troubadours..."Paradise and You" (Packay). "Shout Hallelujah" (Dixon, "The Little Green Valley" (Robison). 10.20: Wolly Mackay, sopraco..."Ships of Arcady"

(Head).

(Head). 10.24: A.B.C. Troubadours-"Down South" (Myddle-ton), "Mimosa" (Evans), 10.30: God Save the King.

3DB

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

MORNING SESSION.

11.0: Nat Shikkret and his Orchestra- Betty. 11.30: Hubert Eisdell-Columbine's Garden." 12.0. Orchestra-Merry Widow" Sciection. 12.30: Market reports-John M'Namara and Co. Pty., Ltd. 12.32: Harold Williams.- "The Lute Player." 1.0. New May-fair Orchestra- "The Egg Song." 1.30. Marie Burke -"Bill." 1.45: Close down.

AFTERNOON SESSION.

2.15: Waring's Orchestra---'Alt, Sweet Mystery of Life." 2.30: The Duncan Sisters---Bullfrog Patrol." 3.0: Atwater Kent Radio Hour-sponsored by A. G Healing, Ltd., and E. T. Muir. 4.0: Clore down. 01

EARLY EVENING SESSION.

5.30: London Symphony Orchestra-"Puntasia and Fugue" (Bach). 6.0: Children's requestr. 6.30: Elsie Suddaby (sorrano)-"Faith of Spring." 7.10: Sandier and his Orchestra-"Love Everlasting " 7.15: Mar-ket reports. 7.20: Barbara Maurel (mezzo-soprano)-"In the Heart of the Hills." 7.30: Market reports. 7.40: Nat Shilkret and his Orchestra-"Night of Memories."

EVENING SESSION

8.0: H. Squire Celeste Octet- Memo:les of

Mendelssohn 8,30: The

- (e)deissonn." 5.30; The Revellers—"Comin' Home. 9.0; Milan Symphony Orchesita—"La Matache 9.30; Johnny Marvin—"Then Came the Dewn 10.0; W. H. Squire ('cello)—"Lament." 10.30; Walter Glynn—"Song of Sleep." 10.40; News. 10.45; God Save the King. Maachere

4QG

Queensland Government Radio Service, Brisbane (Wavelength. 383 Meires). (For day sessions schedules, see Friday.) NIGHT SESSION

8.0; To-night's programme will be a varied one, relayed from the Acada Garden, 10.0; News; weather. Close down.

5CL

Central Broadcasters, Ltd., 111 Hindmarsh Square, Adelaide (Wavelength, 409 Metres). MORNING SESSION.

11.15 to 2.0: See Friday.

AFTERNOON SESSION

3.0 to 4.30: See Friday.

EVENING SESSION.

5.45 to 7.35: See Friday.

NIGHT SESSION.

8.0: Chimes. NIGHT SESSION.
8.10: The Station Quartette, conducted by Lineater Station Quartette, conducted by Lineater Station Quartette, Conducted by Lineater Statistics, and the statistical conduction of the statistical condition of the statistical condition, will enterial your statistical condition of the statistical condition, including Semaphore tides.

- 9.1: Meteorological information, including Semaphore tides.
 9.2: Overseas grain report.
 9.3: The Station Quartette—"Oriental Mosaic" (Gower), "Pale Moon" (Logan).
 (Gower), "Pale Moon" (Logan).
 Calling" (An Edons, Soprano-"The Pipes of Pan are Calling" (An Edons, Soprano-"The Pipes of Pan are Sali? Geoff. Goldsworthy, 'cellist—"Old Italian Love Song." "Simple Avue" (Thome).
 9.24: Lyric Male Quartette—"I Hear Kentucky Calling" (Moore).
 9.28: The Station Quartette—"Terese Del Riego's Songs."

10.5

p.

do

the

9.38: Dave Howard, comedian, will entertain you Balin. B.48: Tom King, planist---''Nocturne in D Flat'' 'Tom King, 'La Jonglouse'' (Moszkowski). 9.53: Mary Edson, soprano--''Down Here''' (May

The Station Quartette-"In the Cloisters. Lyric Male Quartette-"Story of a

Bce

Wellington

S. Lyric Mane quarteries State
 Sarks),
 The Station Quartette—Selection, "Bird of aradise" (Yearsley).
 S. News.
 No.30: Modern Dance Recordings.
 Close Down.

6WF

S1. Perta (Wavelength, 450 Alterrs).
 EARLY MORNING SESSION.-7.30; Chimes; meter, orological 7.35; Music. 7.55; Mails and shipping.
 8.5; Market reports. 8.10; Musical reproduction. 8.22;
 Cables. 8.27; Peatures. 8.30; Close down.
 MORNING SESSION.-Traders' Demonstration-10.0; Chimes. 10.1; Reproduced music. 10.15;
 Women's talk. 10.30; Organ recital. 11.0; Close down

down. MIDDAY SESSION.-12.30: Chimes. 12.31: Repro-duced music. 12.37: Racing acceptances. 12.45. News. 12.58: Weather. 1.0: Chimes. 1.1: Luncheon music. 2.0: Close down. THE RADIO MATINEE.-3.0: Chimes. 3.1: Repro-ting During During the adjornmon a description of

International Control of the Alternative Control of the Alternative Control of Co

Gueed husic. During the alternoon a description of the ring events will be broadcast from the Royal Ag-ficultural Show, 3.45: "Women's Service Gulld." 4.0; Gue Day, 4.30: Reproduced music. 4.15: The Story of the Day, 4.30: Reproduced music. 4.55: Features. 5.0: Glose down. EARLY EVENING SESSION-5.45: Children's Good-night Stories, by Uncl Bas and Aunty Maxine. 6.15: A.B.C. Younger Set Seison-"A.B.C. Junior Radio Club." 6.30: Dinner music. 7.30: Westher. 7.31: A.B.C. News Service; market reports; features of to-night's presentation. EVENING SESSION-6.0: R.S.L. Band. 9.0: Chimes. 9. EVENING SESSION-6.15: R.S.L. Band. 9.0; S. Elsa 9. EVENING SESSION-6.20: R.S.L. Band. 9.0; S. Elsa 9. Eventor, 5.2; Thelma Nell, soprano, 9.2; Elsa 9. Elsa Charles Wicks, baritone. 9.53: Graham and Manning, entertainers: 10.0; Town Hail chimes. 10.1: Temple Court Dance Band, conducted by Merv. Lyons. 41.0; Close down.

7ZL Tasmanian Broadeasters Pty., Bursary Bulidings, Elizabeth St., Hobart (Wavelength, 516 Metres).

Tasmanian lipandeasters Pty. Bursary Fulldings, Elizabeth St., Hobart (Wavelength, 516 Metres).
 11.30: Record recital. 11.34: Weather. 11.35: Ade-line Eager will speak on "Household hints." 12.15: Shipping: mail notices: housewives' guide. 12.80: Record recital. 12.30: News service: announcements 12.40: Record recital. 1.57: British official wireless news: railway auction sales. 1.10: Record recital. 1.30: Close down. 3.15: Record recital. 3.44: Wea-ther. 3.5: Chid von realist. 4.15: A representative of the lack-in-the-box baby." 4.30: Close down. 6.15: Chidren's corner, with "Uncle David" and "The Story Lady." 7.10: Recorder music. 7.30: News session. 7.40: Under the auspices of the "Come to Tasmania" organisation, Phil. O'Relly will speak on "Catuanore Football Club." 7.50: Sid Jones on "Cricket activities." 8.1: Record recital. 8.15: "ZL's old-time night: music by the Alla Polacea Orchestra tinterspersed with vocal numbers), dances, waltz, polkar mazurka, Highland schottische, vuleta, polka, quadrilles. 10.0: News session. 3.0:10: Waltz, 10.20: Close down.

Australian Broadcasting Company, Ltd., We St., Perth (Wavelength, 435 Metres).

Friday, 4th October, 1929

WIRELESS WEEKLY

Page Fifty-Three



Page Fifty-Four

WIRELESS WEEKLY

Friday, 4th October, 1929

FOUR "SQUARE" DEALS

WALLACE B ELIMINATORS Not a "Death-trap" Type

With Power Transformer (not a bell-ringer), no Dangerous Leads or Separate Earth Connection, the WALLACE ELIM-INATOR conforms with all regulations. No other Commercial Type Eliminator Kit has ever been sold at the same price.

59/6.

Can Be Assembled in an Hour. Suitable for Large Sets with Correct Valve. Diagrams Supplied with "Electrified Radio."

Your Old Speaker Traded In

We will make a Substantial Allowance on your Old Speaker-it doesn't matter how old—on the purchase of a BRANDES' ELLIPTICON CONE or DE FOREST AUDALION Speaker. The Price itself is remarkably attractive-

59%

(Less the Trade-in Value of Your Present Speaker). Let us give you a Valuation.

WALLACE POWER PACK Or "B" and "C" Eliminator

Something new in Eliminators. B and C Current from Something new in Eliminators. B and C Current from the one valve, without loss in B voltage. FOR ADDI-TIONAL 10/6 B AND C UNIT CAN BE MADE INTO COMPLETE A, B, AND C PACK, replacing the expensive and cumbersome commercial job. The cost of the Kit, which can be assembled easily in an evening, is astonishing

B and C Eliminator A, B, C Power Pack Diagrams with "Electrified Radio" (making your Set All Electric). Posted, 1/3.

Those Sixpenny Lines

We regret to state that owing to the entirely unexpected demand for the Sixpenny Lines advertised in "Wireless Weekly," 20/9/29, the following only are left:--Power Rheostats, 2 ohms. Rotary Change-over Switches. Panel Mounting D.P.D.T. Switches. Switch Arms for Crystal Sets. Push-Pull Filament Switches. Honevromb Coil Pluce, new pair Honeycomb Coil Plugs, per pair. Please add Postage to Sixpenny Orders.

Money Back

Guarantee

CO.,

Same Day Service for **Country** Clients

Established 8 Years

EVERYTHING FOR RADIO THE WIRELESS SHOP"

Miss F. V. Wallace, 6 Royal Arcade, Sydney THE OLDEST RADIO FIRM IN TOWN 'Phone: MA5543

Two Doors from George Street, opp. Q.V. Markets.

1930

Superhetrodyne

By WIRELESS WEEKLY **Uses Radiokes Components**

As do most successful modern Receivers, whether power or battery operated, and whether manufactured by our large Radio concerns or by the homebuilder.

A Special shielded R.F. Coil Kit has been produced by Radiokes for this Wonderful Screen Grid Superhet. As illustrated above, this consists of three beautifully finished shielded R.F. Units, and sells for £3/15/- per kit. The special tuned and shielded Intermediate Frequency Coil Kit has also been produced for this Superhet, and this

stal tuned and shielded Intermediate Frequency Coil Kit has also been produced for this Superhet, and this consists of three shielded Units, as shown, with facilities to tune to resonance when actually under operating conditions. You have no need to worry about "faking" coils and shields to build your Super. These Radiokes Kits are supplied complete, and ready to mount and wire directly into your set. Price of Inter-mediate Frequency Kit, £3/15/. THE NEW RADIOKES ALL STEEL CABINET has the correct construction of metal chassis to permit your sub-panel wiring for this New Receiver, size 192in. x 12in. x 8in. Price complete; with Steel Chassis, £2/7/6. Special sizes to order at slight variation in price. See the colour range of these beauti-ful Cabinets at your dealers or

ful Cabinets at your dealers, or

METROPOLITAN ELECTRIC "RADIOKES HOUSE," 126-130 SUSSEX STREET, SYDNEY

Friday, 4th October, 1929

Kadio Information Service Under the Direction

Page Fifty-Five

What Is An Alternator?

(Yarralumia).-"Please define an Y.A.F.

Y.A.F. (Yarralumla).—"Please define an "alternator' for me." Answer: An alternator is one of the simp-lest machines for the transfer of mechanical penergy into electrical energy. The alternator generates an alternating electro-motive-force by what is commonly know as elec-trongenetic-induction. See recent "Amateur Proficiency" articles. When an electric con-magnetic flux cuts across a conductor, an electromotive-force is induced, or generated, in the conductor. Most of the modern alter-nators have revolving magnets which pro-ductors inounted on a stationary frame. In some cases, the active conductors are rotated past stationary magnets, thereby cutting magnetic flux. In either case, the stationary frame is called the stator, and the obt the flux and the conductor are station-ary or if the motion of the conductor or the fux is used that the conductor or the fux is used that the conductor or the fux is used that the conductor or the fux is such that the conductor or the fux is such that the conductor of the magnetic fux.

GENERAL: Can any reader supply Mr. 1 Olarke, Red Cliffs, (full address), with a co WIRELESS WEEKLY dated February 1, 1929, have no copies left. P. copy or We

E.H. (Queensland).—The first set of colls mon-tioned are for the original receiver. The other set are for the screen-grid version. No, they cannot be used. A .00025 mfd. condenser will be quite O.K. for reaction control in the old Marco. men-er set

ELECTROLYSIS (South Australia).—We have not published a receiver of six valves to cover 10 to 550 metres, though a four valve receiver covering your requirements was published under the title. "The Wasp All Wave Four."

CONSTANT READER (Newtown).-We have not Mr. Thomson's full address, but will inquire for it through these columns. The crystal receiver for-warded us by Mr. Cook, and subsequently published in queries columns has been a successful receiver according to reports. See below.

MR. THOMSON (Safety Valve) .-- The above query-ist asks that you forward us your circuit for pub-lication in these columns.

W.K. (Earlwood).—Faulty grid leak probably. Also, see that condenser plates are clean and pigtail con-nections are not losse. If you are using dry butteries, test them on load. Using the Bond addi-tional grid blas is necessary. The valve is unsuitable as detector. It is a power valve, and though it may be used as a detector in certain types of receivers, it will not give satisfactory results in yours. Use a 201A.

201A.
8. W.J. (Brisbane).—The ,0005 mid. condenser too large for short waves. Use a ,00014. Here is wiring in words:—Aerial to first turn of primary coll. End of primiary to earth and to last turn of secondary, thence to rotor plates of ,00014 mid. condenser, and to one of the filament terminals of the valve soc-ket, to the rotor plates of ,00014 mid. condenser, and to one of the filament terminals of the valve soc-ket, to the rotor plates of ,00014 mid. condenser, terminal of the valve socket on minn turn B imment of the grid tesk and condenser (10 mesolim lesk and .00025 mid. grid condenser), thence to fixed plates of .00014 mid. condenser. Other side of grid leak to ore side of the telephones, and also to one side of secondary. Other side of secondary to fixed plates of .00025 mid. condenser. There side of one side of secondary. Other side of secondary to fixed plates of .00025 mid. condenser. And the side of sock the substance. Conter side of fixed plates of .00025 mid. Condenser. Other side of ... B plus 400. Details on colls suitable for these con-densers appeared in these columns a few weeks back, or colls described with Go-Getter may be used.

v.w. (Melbourne).—Out of a 9 plate De Jur condenser, 00014, how many plates will I require double spaced to make a .00005 to tune short wave coils given in your last issue?
 Answer: Three plates will give approximately .0001 mid. capacity, and only using two plates and adjusting for correct capacity by spacing will give por tuning arrangement. Even double spacing will peet plan is to use a Rady we have a .00025. Your denser, 100126. 'O' ''What reaction condenser shall I use?'' Answer: .00015 condenser for coils mentioned last week.
 (3) '' I am not sure of the mathed of the mathed of the start of the start of the mathed of the start of the start

week. ... (3) "I am not sure of the method of winding the coils. Please give details." Answer: Break out the old glass from a discarded valve base, and scrape away the cement. Hold each pln in turn on a soldering iron, and draw out the lead wire. The molten solder can be blown out of the bollow pin by applying the mouth to the top of the valve base. Three-sixteenths of an inch below

NEXT WEEK Service Readers' Special Inset

Thousands of readers who follow the WIRELESS WEEKLY Radio Information Service pages will be particularly interested in a handy 16-page booklet to be given away free with the next week's issue.

It will take the form of a useful Trouble Finding Chart for lis-The common comteners-in. plaints of radio receivers are listed, with their probable cause and remedy, in a manner which enables a quick discovery and All elimination of the trouble. the experience answering readers troubles which has been gained in the Radio Information Service is contained in this booklet.

Extra Remember, next week. copies will be printed, but it is expected that the demand will be keen, and readers, especially those in the country, are advised to order their copies early.

the top rim of the valve base, drill a 1 16 inch hole directly in line with the plate pin you can find this by inserting in a valve socket), then bare end of wire, push through hole, down into plate leg, and solder. Correct number of turns are then lightly wound on, wind's could be added to the sold of the sold of the sold of the sold of the passed to inside of base, and soldered to leg inme-tately below. In the with other filament pin drill a 1/16 inch hole for slart of the reaction winding, end of wire being led through valve pin and sol-on, winding finishing at grid pin. Aeria and reaction colla stre wound with 26 D.S.C. and reaction col-tuna turns will be nacessary. **J.A.L. (Parramatica).--When** you start trying out

with 30 D.S.C. No spacing on colls, otherwise additional turns will be necessary.
J.A.L. (Parramatia).--When you start trying out receivers of your own design and get poor results, we are unable to assist you greatly unless you give us an idea of the line in which your alterations are made. No dircuit accompanied your query, and there is insufficient space for us to mention the thousand and one things that may be wrong. Please forward circuit or part of 1t, detector stage especially, and mention parts used in smplifier.
W.N.S. (Clarence River).--Primary 20 turns, secondary 50 turns, reaction 25 turns, on a 3-inch diameter former, (2) Primary 20 turns, secondary 50 turns, reaction 25 turns, on a 3-inch diameter former, (2) primary 20 turns, secondary 50 turns, reaction 25 turns, on a 3-inch diameter former, and secondary coils.
Tim de Countryman is one Valver, as described, and with a couple of avdid stages added, as menestioned, I, 25L, 47L, 24A, and 1004-speaker strength. 2YA comes in strongly at times. but there is a certain amount of interference at times. What you do the set more selective?''
Answer: See reply to your fourth question.
S.C. (Lane Cove).--The woods condenser should or

S.C. (Lane Cove).-The .0005 condenser should or used. .00035 is too small for colls. This explains why you cannot tune over the entire broadcast

band. Re hand-capacity, try changing over counce-tions to variable condenser. With the condenser in use, 00035, use primary of 25 turns, secondary 67 turns, and place a 001 fixed condenser across the telephones to assist cociliation.

Direction

M-I-R-F

G.N. (Gordon).--"Please publish a circuit of the straordinary One valve receiver, with two stages audio added." Answer: Circuit is published in these columns as mussted Sty

"NEUTRO" (Victoria).—Quite O.K. As per the S.C. Marco, using Neutrodyne colls, only using * slightly larger primary, say 10 per cent, more turns on primary than usual.

on primary than usual. G.H.V. (Brisbane).—No trace of your former let-ter. Thanks for the compliment of saying we stick any old thing in, and that we cull our articles from other papers, and do not make up or test our re-ceivers, etc. You are at liberty to see the ori-ginals any time if you advise us in time. The sets are usually pulled to pieces some time after publi-cation in order that the material may be used again. If our receivers are only fittonal, how do you think we get the photographs? The original plates are filed. Even small sets are made up, and injustice. Re your query. If you had repeated in this space. Please repeat query, and don't forget cou-port.

H.W. (Redellifs) .-- Yes, can be added. See creen Grid Marco receiver published recently 8/

B.I. (Vietoria)---Colis may not be matched. Ex-periment with coupling. Found this a very difficult receiver to adjust, but very satisfactory when every-thing was O.K.

F.G. (Lismore).-Depends on how often the re-edver was used. Advise number of hours per day set was in tase. types of valves, number of valves in set, types of batteries used, etc.

NO NAME (Queensiand). "I have a wireless ear-piece with adjustable diaphragm on hand, and I would like to convert it to about 120 ohms resist-ance. Could you tell me the number of turns on each limb of the electro-magnet, and what gauge of wire to use?" Answer: Depends entirely on dimensions of core. However, 11 you use 40 gauge B, and S, wire, D.S.G., exactly 128 feet 4 inches will be required.

L.K.P. (Eastwood) .- We have stopped this proce-ure. May be offered for postage only. dure

L.D.T. (Mosman) .-- Probably a broken down con-enser in the eliminator.



A.B.M. (Cobar).--Any S.W. adaptor will do. Seve-ral circuits have appeared in queries columns. The R.P. valves will have to be removed, and the de-tector valve plugged into the adaptor socket.

Lettor vary plugged into the auspior source. J.H. (Toonsable).—The rectifier must first be formed by connecting it across the secondary of the transformer, and using resistance ismps in the pri-mary until rectifier will stand full load. If you did try rectifying and the plates did not take on a film, it is fairly certain that the material used was not pure, or they may have been greasy. Remove grease in lye. Your request published below.

C.B.S. (New Zealand) .- Report forwarded.



AEROPLANES

WITH WIRE FRAMES, SILK COVERED WINGS, ELASTIC DRIVEN.

MATERIALS FOR MAKING

AEROPLANE MODELS.

Spruce	Wood, in	four-fect lengths.
3-8 x 3- 3-8 x 1- 3-8 x 3- 1-4 x 1-	16 5d 16 7d	3-8 x 1-8 6d 1-4 x 5-16 8d 2 x 1-4 1/2 1-4 x 1-4 7d

Aero wire, in 6ft. colls, 18 s.w.g., 6d. 20 s.w.g. 4d. 16 s.w.g., 6d. 30 s.w.g., 3d. Jap. carved propellers, 6åin. 1/-, 7åin. 1/6. 8åin., 2 -.

Silk for wings, 2/6yd., 10d per foot. Dope for wings, 1 3 per bottle, Rubber elastic, 1-16in, square, 3d; 1-8in., 6d per yard.

POSTAGE MUST BE ADDED TO ALL ABOVE.

Walther & Stevenson Limited THE BOYS' MODEL SHOP.

395 George St. (opp. Dymock's), Sydney.

GENERAL .-- will some reader who built the In-expensive Trickle Charger with success please get in touch with Mr. J. Hewlett, Barnett's Road, Toongabble?

W.N.L. (Parramatia).-Two chokes are necessary. Evidently the power is not amouthed out enough. Use more chokes and condensers.

C.J.M'D. (North Sydney).--2FC, 2BL, 2KY, 2UW, GB, 2UE. (2) A .002 condenser may be used. 2GI

A.B.C. (Gleneig) .- Try by-passing to earth. R.F. may be getting into power leads from transmitter, so try a few R.F. chokes.

so try a few R.F. Chokes. **ROBO** (Redern)--Set probably not neutralised. Remove any fixed or variable condensers in series with astrial, then tune in a station term of the dial, say 3LO or 2BL. Remove first R.F. and insulate one of the filament prongs with a plece of paper. Replace waive, then adjust neutralising condenser till station almost fades away. Remove insulation from vaive prong, and replace vaive, when station should be heard at good volume. Treat each R.F. stage the same.

A.J.C. (Clifton) .- Letter forwarded as requested.

GENERAL-Radio Ace's address, which should have been published in these columns last week, was inadvertently left out. Here it is: H. Unger, Alectown, via Parkes, N.S.W.

L.L. (Watson's Bay) .- See above.

L.L. (Watson's Bay).-See above. H.U. (Parkes).-All of the Q signals. The Morse signal for semi-colon is - Q signals. The Morse early in 1930. Re AO.P.C. erits will probably finish early in 1930. Re AO.P.C. exams. We're by Radio Inspector. Mr. W. Grawford. cy/GRV by ther it is worth publishing in "Safety Valve." Re input power of 3EY. Sorry, have no information, but you can write him direct. His address is Mr. H. Hoist, 27 Bambra Road, Caulfield, Victoria.

Hoist, 27 Bamiora Road, Caulheid, Victoria. W.A.C. (Rurwood).—"T have built the Countryman's One Valver, and have added a stage of audio am-plification with good results. I now desire to know it stage of resistance oupling can be added, and two to connect it up." A connect it up." The state of the state of the 100,000 ohm fixed resistor as the primary of a transformer, and a % megohum resistor as the secon-dary. Connect a .005 fixed condenser between the resistors. Naise the addition as follows: Connect that side of the phone jack which goes to plate of last



. £3 0 A CHARGERS 0 A.B.C. POWER PACKS . £5 10 0 Usually Noid £6 to £12-Sold direct from factory to you: hence these low prices. Fully guaranteed, 12 months. Installed Free Easy Terms. Mail Order, add Carriage. EXELTRON ELECTRICS. 51 Oxford Street, Sydney.

METAL CABINETS Finished in Attractive Designs. Made by HARRY CRABB, LTD., 261 Riley Street, City 'Phone, FL1887.

HOW A SHILLING GROWS!

One shilling per week deposited regularly in the Commonwealth Savings Bank will, in 232 years, reach a total of £100-provided that the deposits are regular, and the interest is allowed to remain in the Savings Account.

Here, however, is the real point. Of the £100 mentioned in this example, you deposit only a little over £61. The Commonwealth Savings Bank provides the balance in compounded interest-over one-third of the total.

Idle money earns no profit. Set your shillings to earning, as well as accumulating.

Commonwealth Savings Bank of Hustralia

Friday, 4th October, 1929

SOS Answered

SOS Answered WIRELESS WEEKLY wishes to thank the folowing for having forward, the miss-ing copies advertued in a recent issue: "Obs." (Surry Hills), A.P.C. (Armi-der, O.W.H. (Martickville), F.M. (Burry Hills), A.P.C. (Martickville), F.M. (Martickville), M.T. (Brighton-le-Sands), D.S.LO. (Gunnes), J.S.M. (Bega), H.O. (Brighton-le-Sands), D.S.LO. (Gunner). A.G.M. (Condobolta), F.W.R. (Centrel Tilba), V.P. (Gordon), S.J.M. (Bega), H.O. (Binabi), A.W. (Dubo), M.G. (Bouth Brisbane), R.V.G. (Petersham), R.W.P. (Ulmarra), G.L. (Wombarra). Wiccopies and postage has been remitted. Are due than enough copies have been reelived than enough copies have been

valve (in existing set) to one end of the 100.000 ohm resistor, and to one side of the .006 con-denser. The other end of the resistor should be con-hected to the other side of the jack, i.e., B plus. The remaining side of the condenser connects to one end of the ½ megohm leak and to the grid terminal of the additional valve socket. The other end of the ½ meg. leak connects to one of the filament ter-minals and thence to A minus. A plus connects to exist. The plung filament terminal of the valve to exist. The plung filament terminal of the valve of the speaker, and the other side of the speaker to B plus (Max.).

J.C.H.W. (Papua).-Sorry, cannot oblige at pre-nt. Radiokes, however, can supply.

L.E.H. (Auburn).---Parts O.K. Yes, slight hum. A lamp with only one electrode cannot have capacity. Suppose you mean resistance. As mentiohed in the article, this depends on the voltage required. Advise what valves you are using, and we will be pleased to tell you lamp to use.

B.L.M. (Murrind), ---'' would suggest that you pub-lish a chart to show the time at the chief broad-casting centres throughout the world--say, at noon, Sydney, on a certain day. I'm sure a chart on these lines would be useful to many.'' Answer: If you'd been a subscriber to WIRELESS WEEKLY, you wouldn't have missed the list that was published a few issues ago. Send 13/ post haste, and advise if you would like a copy of the chart forwarded you.

A.G.S. (Marrar) .- Try a 100,000 ohm variable re-sistor across the primary of the first audio trans-former.

J.J.W.G. (Adelaide): A 1928 Browning Drake was published, also an A.C. model. Copies forwarded as requested. Provided the rotor plates of the conden-sers have to be earthed there is no harm in con-necting them directly to the shield. If, however, the condensers are not connected to this circuit, they must be insulated from the shield. Depends on clim-inator used. With a good one you should not strike hum.

DIAL TWISTER (Victoria): Will cover from ap-oximately 5 to 12 metres. 0.00

W.W.T. (Queensland): "I have built the Country-man's one valve set, original circuit, and am getting good results. As I want to built the Extraordinary one valve and test, which is the best circuit for this locality? I would be pleased if you could give me an idea as to where I could get hold of the circuit. Perhaps some reader could send me the back num-ber. It was published December 28, 1928. I will pay for postage and copy. I have written to several readers, but have been unlucky, usually being either a mail too late or the issue is missing from their collection." Answer: The circuit was also republished in

Answer: The circuit was also republished in Answer: The circuit of the issue is inising from their with two stages of transformer coupled audio added will be published next week. In case some reader can supply you with the copy required, your address is published below: Mr. W. W. Terry, Reptriation San., Stanthorpe, Queensland.

GENERAL: Mr. P. Moore, Box 10. Tweed Heads N.S.W., writes: "I have back numbers of WIRELESS WEEKLY from April 15, 1827, to January 18, 1929. Readers can have same by paying postage."

Wanted, by Old-established Radio Firm, Cash quotations from Manufacturers, for A.C. Power Packs, B Eliminators, Bypass Condensers, Filament Transformers, and B Supply Transformers.

Reply, "Confidential," c/a "Wireless Weekly," Box 3366 PP.





A.W.A. Logarithmic Condensers are designed on the centraline principle. This, combined with their square law characteristics, renders tuning extremely selective. Hollow spindle makes provision for clockwise and anti-clockwise movement, together with gang operation if required. Absolute minimum of insulating material—essentially low loss. Silver plated throughout, giving attractive appearance.

Made in four capacities.

ca.

.0005 (23 plates) .0001 (7 plates) .00035 (17 plates) .00025 (13 plates)



Queensland Distributors: J. B. CHANDLER & CO., 45 Adelaide Street, Brisbane.

Sydney, Melbourne, Adelaide, and Wellington, N.Z.

OBTAINABLE FROM ALL RADIO DEALERS





Representing the newest and cheapest Amplion Cone.—Nothing flimsy, foreign or doubtful, but a solid; substantial British Product of undisputed merit, of tried performance, and like all other Amplion Speakers, carries a 12 months' guarantee.

Brass Stands to support the Frame, that can be fitted in a second, are obtainable for 1/6 extra.

Demand an Amplion with your Receiver

BRITISH

DISTRIBUTORS IN ALL STATES.

AMPLION A/SIA LTD., 53-55 YORK ST., SYDNEY

Published by Godfrey Blunden, of "Reigate House," Hughes St., Darlinghurst, for the proprietors. Messrs Wireless Newspapers Ltd., 60-66 Elizabeth St. Sydney. and printed by Sun Newspapers Ltd., Forbes Street, Sydney, and Mortons Ltd., Chalmers Street, Sydney. Wholesale Distributors: Messrs. Gordon and Gotch (Australasia), Ltd. All States.