

WIRELESS WEEKLY

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VOL. 7, No. 15.

FRIDAY, MARCH 5, 1926.



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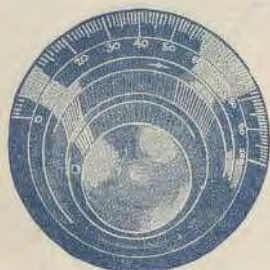
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CONTENTS

	Page
Super Regeneration with Loop Reception	7
Removing the Loud Speaker to any part of the House	11
Broadcasting in N.Z. . .	13
On the Air	15
From Here and There . .	19
Amongst the Traders . .	23
The Reynolds Reflex . .	27
Institute and Club Notes	33
Broadcasting	37

AERIALS.

What is an aerial? A device for intercepting electro magnetic impulses and transferring them to a radio receiver.

No doubt, every one of you in your peregrinations from your home to the office have noticed the network of wireless aerials flung apparently haphazard fashion across the landscape. There's the humble single wire stretched ingloriously from a chimney to the backyard fence, the twin wire swung neatly from two white masts, the ornamental cage suspended proudly aloft, and a variety of other types—all, no doubt, giving good service.

From our own general observations it seems that mighty few people worry over what kind of an aerial they have up, just so long as it's something. Yet since it plays a most important part in the enjoyment of broadcast programmes, its efficiency should be the first care of every enthusiast who wants the utmost out of broadcasting. Obviously, it is ridiculous to hook on a highly efficient receiver to a poor aerial.

Take static, for instance. Thousands grumble about it, but few take the trouble to minimise it as far as possible. Many, many people stick grimly to

the four or five wire cage, when for radio reception purposes it is about the worst possible form of aerial. A single wire gives just as good results with less static. Another good point to remember is that a short aerial is far more selective than a long one—the longer it is, the broader the tuning. Little points such as efficient lead-in insulators, clean terminals, soldered joints, clean aerial insulators—these are all vastly important things requiring at least casual attention. In the case of one particular reader we found that poor reception was caused by the insulation wearing off a piece of covered wire used as a lead-in and coming in contact with a metal guttering. There are probably dozens of others like this. A form of aerial which, unfortunately, all too little attention is given to is the loop. Owing to its directional properties, the loop cuts down static to a minimum, and eliminates a lot of inter-station interference often experienced with the outside aerial.

We have ourselves heard 3LO regularly on a receiver using one stage of radio and a loop—and this at reasonable loud speaker strength. The loop offers a wonderful field for experiment, and we commend it to readers for their benefit.

A. W. WATT.

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SUPER REGENERATION with LOOP RECEPTION

By "WIRELESS WEEKLY."

From time to time we have received requests for particulars concerning super regeneration. One correspondent states that he has bought the large honeycomb coils and other necessary materials for the Armstrong Super Circuit, but so far has had no success whatever. In publishing this article we feel sure that there are many others who, like our correspondents, have been or are experimenting along these lines, and to whom the information contained in this article will prove helpful and instructive.

Data collected by "Wireless Weekly" with super regeneration dates back to the days when amateur phone transmission was a nightly occurrence on 200 metres. Many different hook-ups were tried, but the one which proved the most satisfactory is the only one which will be dealt with here. No patent has ever created such widespread interest amongst radio experimenters as the Armstrong Super Regenerative patents, which were lodged in New York, early in 1922. Yet from the large number of inquiries one sees in world-wide radio journals, it is apparent that few have obtained results really worth while. Only quite a very few of our broadcast receivers employ the principles which were so ably demonstrated by Armstrong himself in his practical demonstration of the Super Regenerative receiver at the Radio Engineers' Institute, New York, 1922.

In giving a detailed description of the receiver constructed by "Wireless Weekly," we would like to point out that it has given most excellent results, and if those who have tried and failed, or those who are sufficiently interested to desire to build a set, will study this article carefully, they will get results from it which are really surprising. The writer's experience on connecting up the necessary batteries and tuning for the first time with this receiver may be of interest. The amateur station 2DS was received, and using a loop with one stage of audio the volume was absolutely remarkable. With the same receiver speech and music loud enough to be heard at a very considerable distance from a Brown's loud speaker was received from the Adelaide station 5CL at an air-line distance of over 800 miles.

Before constructing this set, readers should carefully study the circuit diagram shown in Fig. 1. It will be noticed that five inductances in the form of honeycomb coils are used. L1 and L2 are the only coils which are inductively coupled, and they act in a similar manner to the ordinary tuning circuit, viz., L1 is the tuning inductance and L2 the tickler. All

of the other three coils must be at right angles to each other and separated as far away as practicable (at least 4in.) to avoid mutual inductance. The size of the coil shown as a 250 H.C. coil is not very important. It merely acts as a choke, and together with the fixed and variable condensers shown permanently joined between the grid and plate of the second valve it stabilises the whole receiver. It will be seen that S4 and S5 are joined in parallel, giving a total capacity of .002 mfd. with a .001 mfd. variation. Likewise S2 and S3 are in parallel, giving a total of .003 mfd. with the same amount of variation. All of the fixed condensers must be of good quality, preferably with mica insulation such as the Dubilier Micacons and the better makes of Muta condensers.

The voltage generated in the oscillator circuit is sufficiently high enough to puncture any paper insulated condenser. The paper ones may last for a while, but when they do go they may be the cause of you searching for hours trying to find the fault.

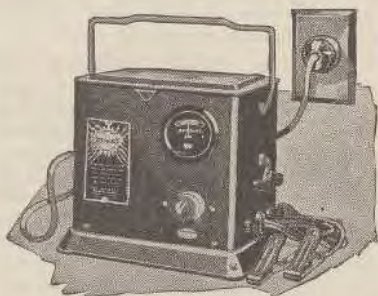
Most of the Armstrong Super Circuits one sees published only show one audio; the writer successfully used two, with the usual D.C. jack to cut out the last stage for local reception. The transformers used, however, must be of good quality, capable of withstanding heavy plate current, and should be mounted at right angles to one another. The condenser shown as S6 is a .002 mfd. Its duty is to by-pass the radio frequency current. The valves used must be all of the hard type, or, if preferred, special power tubes may be used in the audio stages, although it is doubtful if the little extra results obtained warrant the additional expense of power tubes and the necessary extra B and C batteries.

The rheostats on the first and second valves should be of the vernier type, either Bradleystats or Filkostats preferred. Any good type of rheostat will prove satisfactory for the audio stages, when ordinary valves are used, but if the constructor intends to use power valves he should be careful to select one which will be capable of passing the higher current necessary for the filaments of the power valves. C batteries are absolutely essential in the grid circuits of all valves. Try by experiment, varying the voltages of each until stability with ease of operation of tuning controls is obtained.

Don't run away with the idea that the receiver is hard to construct or operate; in fact, you will



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	1.5 "Navy Special"	3/0
	60 "Large Type"	25/0
C	45 "Large Type"	20/0
	4.5 "Diason"	2/9
	4.5 "Large Special"	12/0
	6.0 "Ignite"	15/0

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35 amps Eht. Circuit

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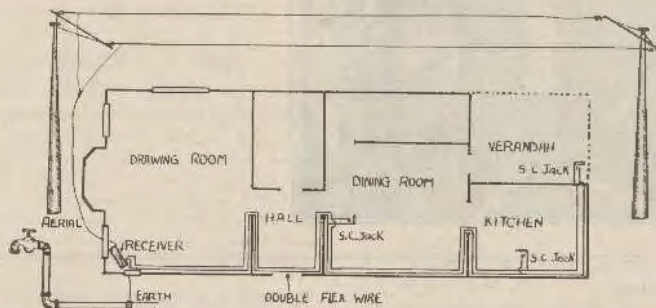
A USEFUL HINT THAT WILL HELP TO MAKE RADIO MORE VALUABLE AND CONVENIENT.

There comes a time when every owner of a broadcast receiver would like to put his loud speaker in some room other than where it is permanently installed. On very hot nights he would prefer to place it on the lawn right outside the house, and likewise during the winter nights it is much better to sit around the fire in the dining-room and listen in rather than be forced to sit in the cold drawing-room or the wireless den. The trouble of moving the whole receiver, batteries, aerial and earth connections, etc., is out of the question. By using the

method pictorially represented in this article it is possible to remove the loud speaker only to any part of the house without affecting the tone or quality in the slightest.

The following materials are necessary:—

- (1) One extra plug.
- (2) Single circuit jacks, according to the number of loud speaker points required.
- (3) The necessary length of double flexible wire, 40-30 gauge, which is heavily insulated, is particularly suitable for this job.



Continued from page 9

of the oscillator valve is connected to the grid of the regenerator.

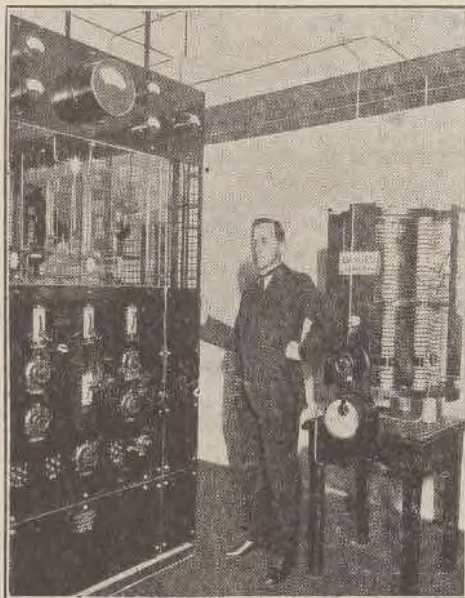
During the half cycle when the oscillator makes the grid of the first valve negative no grid current is drawn, and by the super regenerative action of the circuit the effective resistance is negative. It is during this half cycle that signals are very greatly amplified. Now, taking the other half of the oscillator cycle, when a positive potential is given to the grid, the resistance of the circuit is now increased to several thousand ohms, and once more regeneration fails and a positive resistance stops any tendency to oscillate.

The Armstrong Super Regenerative Circuit is such a radical departure from the standard regenerative circuits that readers will appreciate that the highly technical theoretical action as explained by Armstrong himself is very necessarily briefly quoted here.

The extra plug mentioned in the list of materials is to link up this flexible wire and the respective jacks with the receiver. It will be readily understood that when the loud speaker is being used in the same room as the receiver, this plug is removed, and the loud speaker plug coupled to the receiver direct. In running the flexible leads, they may be placed under rugs or carpets, or if a more workman-like job is required the wire can be secured to the skirting board by small cleats. In going from one room to another the wire should pass through the fanlight or a very small hole drilled in the door jam. Be careful, however, to keep the wire as far away from the electric light cables as possible.

The extra jacks should be mounted on small pieces of ebonite or radion, and may be placed behind a table or other articles of furniture; or, if preferred, the jacks may be mounted in a conspicuous and neat manner, where they will be readily accessible when needed. Mother, wife, or sister may

(Continued on Page 13.)



6 WF

The 5 K.W. Magnifier
Unit.

Mr. W. E. Coxon, Radio
Engineer and Manager
of 6 W F.



Co-operative Reception.

It has from time to time been pointed out in these notes and elsewhere in "Wireless Weekly" that no user of a wireless set uses it for himself alone. If he howls, other sets in the neighbourhood howl in more or less unison. If he receives without distortion, he helps to build up the strength of signals for miles around. There is now yet another very interesting fact that has been discovered in the same connection. In the multitude of aeriels there is safety from static. It has been noticed that in neighbourhoods where there are many aeriels clustered over a large area, very much less trouble from local static is experienced. True to its function as a most efficient and silent discharger of atmospheric electricity, each aerial drains off its own particular section of the air around it, and where there are groups of aeriels as in a city where wireless is popular the charges of electricity are not allowed time to accumulate sufficiently to bring about the conditions necessary to produce "static."

Wireless is, therefore, a very friendly and sociable institution, and the sight of a new aerial going

up in one's neighbourhood ought to give everyone a warm glow about the heart, for it means increased volume, reduced static, and quite a number of other social advantages. Of course, the newcomer may prove to be a "howler," or even a member of the Wireless Institute, but when surrounded by so many others well versed in the decent, orderly, and co-operative reception of civilised wireless, even these social pariahs are bound in time to see the mark and in their turn contribute to the peace, good order and government of his Majesty's other.

TO AMATEURS.

A lot of you are grumbling because there's not enough amateur news in "Wireless Weekly," so it will be good news to you to learn that a special amateur section is published regularly in "Radio." Get a copy of the current issue and see what you think of it.

be keen on tuning-in to the cooking lectures from EPC, and for this reason a jack will be needed in the kitchen. If there is an invalid or one or two elderly "listeners-in," an extra jack in one of the bedrooms will be an advantage. Wherever a jack is required it is only necessary to pull the two wires apart slightly, scrape off the insulation for an inch or so, and then make a complete turn around the two points of the jack, after which you should solder these connections. The leads then continue on to the next point, and the same procedure is carried out. In this way all the jacks are wired in parallel.

A similar method to this is employed by one of the N.S.W. schools to enable the loud speaker to be used in various classrooms. The length of the flex used at this school is 80 ft., and even when the loud speaker is plugged into the last jack only about 30 per cent. decrease in volume is obtained, so that for ordinary house purposes no appreciable decrease in volume will be noticed.

An Aussie Idea which is Novel, Useful and Very Efficient.

A SERIES-PARALLEL SWITCH USING 4 ECS.

With the above arrangements of four Ecs, it is possible to place the aerial tuning condenser in series or parallel, or to use aperiodic aerial tuning at will.

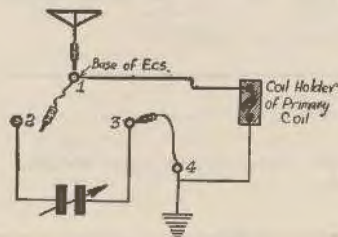
The combinations of connections are as follow:—

(1) With the aerial connection fitted into the top Ecs, and the two flexible connections inserted into the second and third Ecs respectively, the condenser is in the parallel position.

(2) With aerial connection still fitted into Ecs No. 1, and the flexible connections removed from the second and third Ecs, aperiodic aerial tuning is readily accomplished.

(3) With aerial connection fitted into No. 3 Ecs and the flexible connection attached to No. 2 Ecs, the variable condenser is now in the series position.

When attaching the flexible wire to the No. 1 and No. 4 Ecs, it is necessary to secure it on the inside of the securing nut in order to keep the hole at the top of the Ecs clear for the various combinations.



BROADCASTING IN NEW ZEALAND

PUBLIC DISSATISFACTION.

Mr. Charles E. Forrest, Managing Director, International Radio Co. Ltd., has just returned from a two months' tour of New Zealand, during which he was accompanied by Mrs. Forrest. Supplying us with some information concerning the radio conditions in New Zealand, Mr. Forrest said that the situation was not at all satisfactory, and that it would be some little time before broadcasting was established on a regular basis.

The New Zealand Broadcasting Company was registered some time ago with a nominal capital of £20,000, to be increased as required. The stations under control of that company were to be operating by the end of March this year, but this period has since been extended to three months—the end of June. Two special Western Electric 500-watt output stations are on the way from America, and a Western Electric Company engineer is being sent out specially to instal the stations.

The first one is to be erected at Auckland and the second one at Christchurch, and after these are installed two other stations are to be erected—one at Wellington and the other at Dunedin. It is not expected at present that more than four stations will operate in New Zealand.

The annual license fee has been fixed at 30/-, 5/- of which goes to the Government and 25/- to the broadcasting company. A dealer's license varies from £2 to £10 per annum, according to the population of the town in which the license is granted. The license fee only covers one particular town—that is, a dealer having a branch in another town would have to pay a further license for that town. The whole of the dealer's license fee goes to the broadcasting company, with the exception of 5/-, which is deducted by the Government.

There is great dissatisfaction amongst the public owing to the delay in installing the sets. The station operating under the call sign VLDN at the Dunedin Exhibition was the original 4YA, the 500-watt station well known to Australians. The cause of the faulty transmissions from this particular station is attributed to the fact that the circuit was altered and installed at the Exhibition in a new form. However, the original station has been restored and is now working quite satisfactorily. There are no complaints concerning the license fee, but, judging by the newspapers, very few people will renew the license in April, but will wait until the stations are actually in operation. The Auckland station will be erected on top of George Courts, Departmental Store, Karangahape Road, Newton. The roof of this building is 80ft. above the pavement, and

Continued on page 15, bot. col. 1

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BATTERIES

The World's Finest 'B' Battery

AND ITS SEVEN POINTS OF EXCELLENCE.

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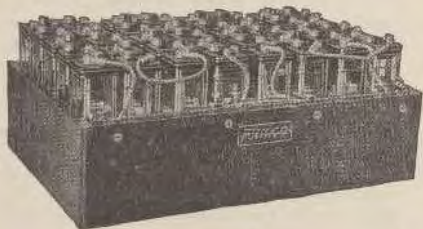
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4. **CHARGE INDICATORS.** Exclusive Philco Feature that tells all conditions of charge and discharge. No more bothering with old-fashioned hydrometer or guesswork charging.

5. **TREMENDOUS CAPACITY.** Double that of ordinary 'B' Battery. Needs recharging only every 2 or 3 months and filling with water only once every season.

6. **EASILY RECHARGED.** With new Noiseless Charger—just a throw of a switch—a plug in the socket. No noise—impossible to overcharge. Recharging costs only from 2½d. to 5d.

7. **DRYDYNAMIC FEATURE.** Insures your getting a fresh new Battery. The life of a Philco Radio Battery does not start until you or the Dealer pours in the electrolyte.



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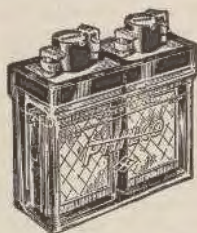
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ON THE AIR

BAPTIST CHURCH.

On Sunday, March 7th, there will be broadcast the usual two Church Services from station 2BL, the first being the Petersham Baptist Church and in the evening the Palmer Street Presbyterian Church Service conducted by the Rev. A. Hay Holden. Other artists who have been engaged to perform from the Studio on this date are Miss Pauline Harford Foster and a new baritone in the person of Mr. Victor Evans. Miss Harford Foster is the possessor of a brilliant light soprano voice and a wide repertoire.

SENSATIONAL DRAMA.

On Monday, March 8th, station 2BL are presenting a sensational drama in one Act entitled "Back from the Dead." This is written by Mr. Donald Corn Wallis, who is also playing one of the leading characters. It will interest the listeners-in to know that this particular drama was specially written in order to be produced on H.M.S. Renown during the tour of the Prince of Wales. It is anticipated that this drama which is of thrilling interest will hold the attention of the listeners-in to the very final word. Mr. Wallis is also producing another sketch on the same evening which is called "Answered." Other artists appearing are Mr. Roger Jones, baritone and Miss Mary Charlton, pianiste. In regard to the latter, it may be said that her studies of modern composers such as Debussy are exceedingly interesting. In "atmospheric" numbers, Miss Charlton excels.

SMART SET DIGGERS.

The Smart Set diggers continue to provide one



Miss Hilda Boyle, who appeared as Leonora in "Il Trovatore" is a favourite artist from 2BL.

of the most delightful entertainments at present being broadcast by any station in Australia and will be heard on Tuesday, 9th, from the Studio of 2BL. In concerted and harmony numbers, the diggers excel. On the same evening, Miss Dulcie Williams, contralto, will also be heard.

OPERATIC PROGRAMME.

Wednesday, March 10th, will be a dance night and jazz numbers will be forthcoming from 2BL, in order that the listeners-in, in addition to hearing, may also have the opportunity of tripping the light fantastic. A sketch by Miss Leah Freedman and partner is promised also and Mr. Lance Jeffres, whose first appearance on a radio programme recently, was in the nature of a sensation has also been engaged, together with Miss Hilda Boyle and Signor Russo who are presenting an operatic programme. It will be remembered that Miss Boyle and Signor Russo achieved great distinction in the Barber of Seville season recently played at the Hippodrome. In addition to this, Miss Boyle has been singing with very great success in a number of country centres and also in Tasmania. As an operatic soprano it is anticipated that this gifted lady will go far.

Continued from page 13

the masts for the broadcasting station are to be 80ft. high. The studio has already been completed. The broadcasting entertainment obtained by New Zealanders at present is supplied by Australian stations, and 2BL and 3LO are universal favourites. According to Mr. Forrest, 2FC is received very badly.

There are plenty of Neutrodyne, Reflex, and Radio Frequency sets in use in New Zealand, but the Tuned Plate method is not popular. A board controlling the broadcasting has been appointed, consisting of four persons—the Postmaster-General, the Minister of Telegraphs or his Deputy, a member of the broadcasting company, and a representative of the public. There is, however, an agitation on foot for the appointing of a member of the trade for this board. To supply a service pending the erection of the new stations, 2YK Wellington has been reopened and is operating on 100 watts.

THE MAN BEHIND THE GUN.

AND THE WOMAN.

When 3LO gives another of its old-time nights perhaps one of its staff will favour us with that good old song "It's the Man Behind the Gun that Does the Work." A note that appeared recently in this column referred to the fact, sometimes overlooked nowadays, that we owe a great deal of the pleasure we derive from 3LO to the work of the man behind the microphone. Like the famous brook he may truly say that performers may come and performers may go, but he goes on for ever, with, of course, that interval for refreshments, now and then, that is relished by the wisest men. When we say "men," of course, it is understood that we, or rather the term, embraces women also, (strictly in the figurative sense). A great deal of the work done at 3LO owes its success to the picturesque half of the staff, who, as every business man knows, keep the mere man up to the collar when there's serious work to be done.

The efficient damsels who pervade the office, typing letters, keeping the clock on time, joggling the manager's memory, regaling him and his visitors with tea and smiles, and generally acting as oil on the troubled cogwheels of office routine, should be and are hereby eulogised equally with the mere men they supplement. It is highly significant that broadcasting has only become possible since woman began to take a hand in such affairs. She can't resist giving an individual touch to her share of the business, as those of us realise who have been privileged to hear that little titter that comes sometimes when Buckley and Nunn's morning session is announced by a fair performer.

In South Australia already a woman, Mrs. Hume, has won golden opinions for her handling of practically the whole of the work of 5DN. In Sydney the name of Miss Wallace is ever foremost, and it would be interesting if in Victoria any of the numerous bodies of what may be termed without malice the talkative sex were to set up a broadcasting station of their own, with just a few men to hold the balance even, although of course these latter would not be indispensable. When Princess Ida holds her modern court the hands that rock typewriter and other cradles would be quite as capable of adjusting commutators and dealing gently but firmly with hysterical modulators. Wouldn't it be fun if 3LO stood for "3 Ladies Only" and all the mere males were removed, leaving the ladies to fill the breaches.

Then Miss Kookaburra could give a very plausible imitation of Billy Bunny, as well as of her favourite bird (sometimes even now you can't tell one from the other, over the wireless, with

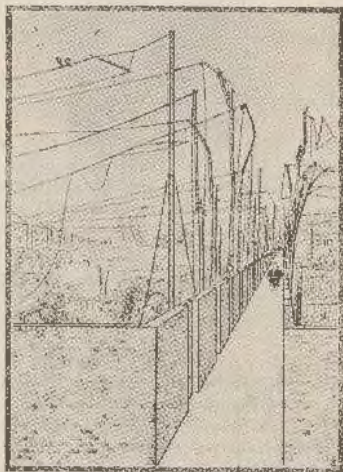
your eyes shut), and even Mr. Andrew's affinity might be found in some rich contralto profundo. In fact a mystery night might be arranged on these lines, for one need not despair of finding a double were it for Frank Russell himself, not to mention Howlett Ross, and with a skilful misadjustment of the modulation female substitutes for all the male identities of 3LO might be arranged and a competition held, the prize, consisting of the lucky girl herself, if unattached, to go to the best guesser.

We commend this to 3LO under the title of "A Princess Ida Night" and so, friends, as J.H.R. says, I wish you all a kind good night.

E.F. (Vic.)

A 3LO PERSONALITY.

Herbert Walton is no stranger to listeners-in. Through 3LO he has given many humorous monologues and diverting numbers. Practically most of his career has been spent on the stage in comedy roles—in fact his family were all before the footlights. Perhaps some fans will remember a J.C.W. Ltd. pantomime in which a specialty called the "Toy Soldier" was featured. The realistically automatic soldier was Fred Walton, a brother of the more diminutive Herbert. It is one of the most famous acts in the world. Herbert Walton himself has played in so many Williamson pantomimes and musical comedies that it is useless enumerating them. He is now in "Lilac Time" as an eccentric continental detective.



Aerial Avenue, the Street of the Future

DUETS AND SOLOS.

Thursday, March 11th, brings back to the Studio of 2BL two of the best loved artists, who regularly appear on Broadcasters' programmes in the persons of Miss Dorrie Ward and Mr. W. E. Lewis. Specialising as they do in duets and solos that suggest the recent past, they provide entertainment for those who remember the melodious days that preceded the reign of King Jazz. At the same time, Miss Ward and Mr. Lewis are quite modern in regard to their repertoire. On the same evening another new comer makes his bow to the wireless audience in the person of Mr. Maurice Frunski, whose banjo solos are so convincing that the instrument appears to do everything except talk.

A MINSTREL SHOW.

Friday, March 12th, sees an innovation when Mr. Hartly Court produces for the benefit of 2BL's auditors, a Minstrel Show which combines all the best of the old effects and also introduces some very modern innovations.

WAIKIKI MEMORIES.

Saturday, March 13th, is a popular programme as far as 2BL is concerned. The Honolulu Duo will recreate visions of Waikiki Beach and the wind swept palms that surround it. All the fragrance of the Hawaiian pine-apple orchards seem to flow through their ukelele and steel guitar produced numbers. Mr. Fred Gooch, a quaint and very delightful humorist at the piano will also be heard on this programme, while Miss Daisy Mangan



Miss Millie Hughes is another of the admirable band of artists that Station 2BL has gathered round itself. Possessed of a rich and thrilling soprano voice, Miss Hughes is additionally fortunate in that she broadcasts to perfection. Many of the radio fans are keen and consistent admirers of the work presented by Miss Hughes.

and Miss Amy Ostinga will also be heard. Mr. Sid Owen with his mandolins, banjos and concertinas is also a feature on this occasion.

ORGAN RECITAL.

On Sunday, March 7, the evening church service will be given from the Lyceum Hall by 2FC. In the afternoon an organ recital by Miss Lillian Frost from the Pitt Street Congregational Church. The second portion of the evening programme will include the 2FC Studio Orchestra, and solos by Oliver King, bass, and Madame Emily Marks, soprano.

"WHITE CARGO."

Friday, March 5, there will be an interview with Mr. Wallace Clarke, of the "White Cargo" Company, taken from his dressing-room at the Theatre Royal, through 2FC. Miss Yvonne de Loitte will give a Gilbert and Sullivan talk; violin solos by Mr. Lionel Lawson; Hilton Porter, New Zealand baritone, will make his first appearance; and there will be dance music and other items from the studio.

"FAUST" PROGRAMME.

A special "Faust" programme, featuring Rene Maxwell and Andre Navarre, will be transmitted from the Crystal Palace Theatre by 2FC on Saturday, March 6. From the studio, Walter Hunt will re-appear in plays with Miss Eve Warhurst; Shirley Cooke, comedian; R. A. Bartleman, baritone; Baluhiku solos; dance music from the Wentworth Hotel.



The Astleys, well known as a Concertina Duo, and also performers on a number of other instruments, are depicted herewith, and it is anticipated that the listeners-in from 2BL who participate in their fine performances will be glad of an opportunity of observing their appearance.



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22½ volt, Reduced to .. 12/6

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FROM HERE AND THERE

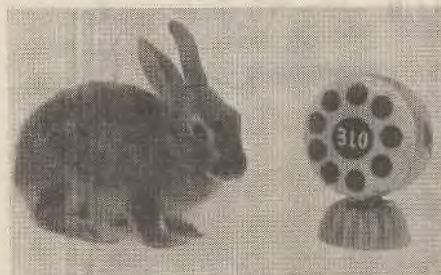
BLAYNEY MAN'S FEATS.

In his radio activities, Mr. Trevor Evans, of Blayney, comes into touch with many other parts of the world, and interesting photos and news reach him constantly from radio "fans" and "hams" with whom he has been in contact. The most unusual relic, however, he has received came last week in a letter from Lima, Ohio, (U.S.), being a small strip of the covering of the ill-fated American airship, Shenandoah, which was wrecked a few months ago with heavy loss of life. Mr. Hughes the writer, said that portion of the airship came down 100 miles from his city. His letter was in reply to one from Mr. Evans, advising that his messages had been picked up at Blayney. Mr. Evans has "received" from stations near and far, but latterly has installed a transmitting set of his own, and working on a low voltage of 170 has been acknowledged from all parts of Australia, with a maximum as far as he can tell of 2,000 miles. He is a splendid example of the type of radio experimenters now becoming quite numerous all over N.S.W.

ON THE WIND?

M. Morris, 110 Drayton Street, Bowden, Adelaide, writes stating that at 10.32 p.m. on January 27th he picked up 2BL on a crystal receiver. He heard the call 2BL and hung on for 15 minutes. Our correspondent offers the novel theory that it came on the wind.

A report also reaches us from John Ferguson, "Sunnyside," Pittwater Road, Brookvale, N.S.W., stating that on Friday, February 19th, at 11 p.m., while listening to the news service from 2BL, he



A conception of Billy Bunny, of 3LO, much loved by the kiddies.

tuned-in 3LO. His report of the items heard tallies with those transmitted from 3LO.

MARCONI IN PERU.

A message from Lima states that one of the most bitterly contested concessions in the recent legislative history of Peru terminated with the Senate's ratification of the Marconi contract for 25 years for administration of the Peruvian posts, telegraphs, and wireless.

The concession has been in effect under a referendum clause since 1921, though the opposition of politicians and private interests threatened its annulment.

SMALLEST RADIO SET.

A receiving set which is claimed to be the smallest in the world was exhibited at Washington recently. It is built on the shaft of an ordinary straight pin seven-eighths of an inch long, and consists of layer-wound tuning coil, crystal detector and adjusting handle. Connections of aerial, earth and 'phones are also provided.

It is expected that similar freak sets will be on display at the Radio and Electrical Exhibition to be held in Sydney Town Hall in May.

RADIO ON TRAWLERS.

Marketing the Catch.

One of the latest developments in wireless in Australia is its application to the trawling industry.

A Sydney trawling company has wireless telephone sets installed on two of its trawlers, and the manager can telephone from his office in Sydney to the trawlers. As a result of being in constant communication with the captains of the trawlers, the manager is able not only to know the location of the ships, but on receipt of advice as to the "catch" is in a position to market a haul of fish almost as soon as it is received on board. This enables him to a large extent to avoid a glut on the market. Besides communication being maintained between the trawler and the head office, speech is made possible between the captains of both vessels, which in the case of the trawling is invaluable.

The route of the trawlers is generally between Sydney and as far south as Eden, over 225 miles away. The method of operation between headquarters and the trawlers is that the telephone conversation is relayed via the Willoughby Wireless Station where there is a modern transmitting and receiving set.



B.406

A Revolution in Radio Reception!

Read what an Australian Radio Expert says about the B.406

PHILIPS NEW WONDER VALVE

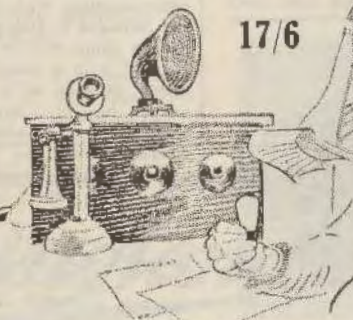
An unsolicited testimonial from a man who sells them:—

"We have to thank you for the prompt delivery of our order for Philips B.406 Valves. After testing six, selected haphazard, we feel compelled to let you know the amount of enthusiasm they have raised.

"We were considerably astonished to find that by using the B.406 on our standard 3 valve set, volume was raised about 30 per cent. over any other valve." But the writer's greatest satisfaction was the beautiful tone, for, in spite of the volume, both speech and music maintain a clarity that is astonishing, being devoid of all distortion. Of course, all valves have been tested in conjunction with high-grade apparatus, and therefore the comparison between the B.406 and other valves was a fair one.

17/6

Of All
Dealers



ALTERATIONS TO BRISBANE RADIO.

Important alterations have and are still being effected to our commercial Morse traffic station at Brisbane.

Rumour asserts that VIB will be removed to another site closer to Brisbane, but there is not very much truth in this claim, as Pinkenba, the small port some miles down the River is an ideal place for a location for a station of this kind.

It is expected that when VIB is finished the station will be one of the most up-to-date of its kind in the Southern Hemisphere.

4QG AND RELAY WORK.

It is expected that when the new station at Brisbane starts operation, the relay stations which are to relay its transmission to some districts, will be commenced. These stations are down on the plan of the complete Queensland Radio Service, and first station to be built will be at Rockhampton.

SUPER POWER STATIONS.

Eric H. Palmer of the Freed Eissman Radio Corporation, predicts that within twelve months a dozen super power broadcasting stations will be erected by rival European interests and that the League of Nations station will be operating in about a year.

THE POSTAL-MAN PART IN THE COLLECTION OF THE FEES.

Since the opening of 4QG, there have been over four thousand licenses collected in Queensland. This number has not been collected from the law-courts as, fortunately, there have not been any prosecutions in this State. The Postman in Queensland has done a great deal in running to earth those who would listen without a license to do so. A warning is issued to persons who listen without a license on indoor aerials and other apparatus and a raid is being organised to catch and penalise the pirates.

Radio in Motor Car. Standard Equipment.

A Sydney motoring man, who has interested himself in the development of portable radio sets, has returned from Melbourne much intrigued by his discovery that the Melbourne agents for an up-to-date car (Marmon) are fitting portable radio sets to the car as standard equipment. The car in question is a very large and handsome automobile, which has figured well in most of the recent reliability contests. She comes under the heading of a "fine" car, and being very roomy and spacious can readily accommodate the radio set, which weighs less than 50 lbs. The aerials for the set are fixed in the hood of the car between the lining, although in some cases a loop aerial is used folding inside the lid of the box which contains the receiving set.

"In either case, the faster the car travels the louder the broadcasting stations are received," said the motorist, and as soon as the car reaches its destination the set can be lifted out and placed in any position the motorist desires.

The Radio Broadcast Bureau reports that the Sydney agents for another modern motor car are taking steps to have their cars also fitted with portable radio.

Sport by Radio. Livening the Towns.

Reports continue to reach the Sydney broadcasting stations as to the livening influence of the broadcasting of sporting results on residents of the country, who in the ordinary course of events would not know how their favourites performed for many hours—perhaps days—after the event.

The secretary of the Murrumbidgee Turf Club called at a broadcasting station (2FC) one day this week and remarked that the radio shops in Wagga had become the gathering grounds of all the local sports whenever a race meeting is in progress in the metropolitan area. The practice is for the broadcasting station to announce the placed horses within a minute or two of the finish of a race, and as a radio message is practically instantaneous in transmission the news is known at the farthest end of the State almost as quickly as it is known to the onlookers on the course.

During the interstate cricket carnival both the broadcasting stations in Sydney were sending out descriptions of the matches during the whole course of the play, and the scores were broadcast at intervals of 15 minutes.

Station 2BL specialises in sport on Saturday afternoons, and by 6 o'clock in the evening practically every sporting event of any importance has been announced.

The country press and the metropolitan journals alike find that the announcement of sporting results in this way stimulates interest in their written reports. Persons who learn the result by wireless are more inclined to buy the newspapers in order to ascertain the details.

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SPECIAL OFFER. 5 watt Transmitting Valves guaranteed in perfect condition.
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To those who are about to build their own Radio Set, we submit the following. These prices of Bakelite we would mention are the lowest prevailing in Australia.

BAKELITE

Cut to any desired size

1/8in. $\frac{1}{2}$ d. PER SQUARE INCH.

3/16in. $\frac{3}{4}$ d. PER SQUARE INCH.

Filko-Stats. Your set deserves one, each **12/6**

Vernier Attachments. 100 to 1 ratio, each **3/0**

Accuratune Ultra-Vernier Dials, each **25/0**

Bakelite Valve Sockets (special line), American, each **3/0**

Neutron Crystal, "The Crystal with Valve Power," each **2/3**

Neutrodyne Kits in Stock.

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THE WORLD'S GREATEST SPORTS STORE
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Before you
Expend
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Equipment
Consult
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Experts.

Your inspection of the big display of everything that is new in the world of Wireless, is invited.

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Anthony Hordern & Sons
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Box 2712 G.P.O.

AMONGST THE TRADERS

PORTABLE MINIATURE TESTING SET.

Fox and MacGillicuddy Ltd., have in stock a most attractive little instrument known as the Portable Miniature Testing Set. This is a volt-milliammeter. It consists of a small moving coil dead-beat, very accurate combined volt, milliammeter, and ammeter. The scale has three graduations. The normal reading for volts is from 0-120 but with an additional exterior resistance this reading can be doubled to 240 volts. Exterior shunts can be used to give various milliammeter and ammeter readings other than those covered on the scale up to 15 amps.

This instrument which is contained in an ebonite case 3 1/8 x 2 3/4 x 1 3/8 inches is specially built for wireless measurements, such as testing accumulators, H.T. batteries, and the filament and plate currents of valves, etc.

This Portable Testing Set is manufactured by Da and Dutilh, Paris, for whom Fox and MacGillicuddy Ltd., are Australian Agents. Amongst other products of this concern should be mentioned a portable, compact and efficient "Insulator Tester" weighing only four pounds and measuring 5 1/2 x 3 1/2 x 5. This contains a small magneto and a moving coil dead-beat galvanometer. The dial is graduated up to 6 megohms. For those interested in fine accurate readings the above two instruments can be recommended.

SUPERTRAN TRANSFORMER.

The International Radio Company Ltd., have landed a shipment of an entirely new type of audio frequency transformer known as the Supertran. After exhaustive tests and investigations by its manufacturers, a company which has specialised for a number of years in the construction of small transformers, its merit has been definitely proved before being introduced to radio users. The Supertran may be used with any amplifying tube on the market to-day and it is claimed that low organ notes and bass notes as well as the high notes of the violin and the piano are brought out extremely clearly with this particular type of transformer.

Leading engineers, while stating that a high tone ratio is not necessarily productive of high amplification at all frequencies, state that it is not possible to make a transformer with a ratio of more than 5-1, which will not distort. There is, however, a certain combination of turn ratio

with inductance, capacity, and quality of core laminations which will give the desired results without distortion. According to the manufacturers the Supertran possesses this combination and it should meet with great success on the Australian market.

THE NEW GENERAL RADIO WAVEMETER AND FILTER.

Oftentimes a broadcasting station creates interference that, while not sufficient to shut out the station from which reception is desired, is strong enough to cause a modulation of its signals. This causes a distortion of the signals received. The use of the General Radio Type 247-W Wavemeter and filter shuts out the interfering station and makes it possible to get the desired station with increased clarity. Where there are several broadcast stations in the same city a filter is almost a necessity, inasmuch as it is seldom that there are less than two stations transmitting at the same time. The connections to your present set are easy, as it connects in series with your aerial and set. The operation is simple.

This instrument absorbs the energy from the conflicting station and allows the desired station to be heard without interference. It consists of a Type 247 condenser with a coil especially designed for filter use. The condenser itself is mounted in a metal case, providing shielding from the body capacity of the operator. The coil is of the low loss type and is provided with two windings.

The condenser of the Type 247-W filter has a dial calibrated in wavelengths and may be used accurately as a wavemeter. When the wavelength of a particular station is desired, it may be determined by tuning the filter to a point where the signals from this station vanish. The reading of the dial setting will then give the wavelength of the station correct to within 20 per cent.

The Type 247-W filter is very compact and has an attractive appearance. David Jones Limited are the city agents and have recently received a shipment of these filters together with a complete range of general radio parts.

WANTED.—All kinds Secondhand Wireless Sets Parts, Speakers, etc. Best prices given. JACK RAPKEN, 16 George Street West. MW 1201.

All Good Radio Stores Sell

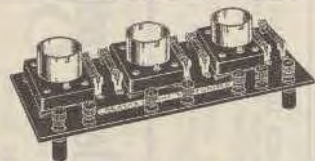


TRUE BLUE VALVES

(Non-Microphonic)

Heath Variable Condensers

The Non-dielectric strictly Low-Loss "Distance getters."



Heath Resisto Formers (3 Stage Resistance coupled amplifier)

Tungstalite Crystals

Not affected by handling or exposure. Not a dead spot in Tungstalite.

Sole Agents:

PARSONS & WHITTEMORE LTD.,
30 MARKET STREET, SYDNEY.

WAVE TRAP & METER

Price £3/15/- Complete

We have just landed a shipment of them. High grade General Radio Wave Traps for making your set more selective and cutting out interference from other stations. Attachable without alteration to the Set. Also for use as an accurate wave meter for setting your receiving set to any desired wave length. Price, complete .. £3/15/-

"King Quality"

5 VALVE NEUTRODYNE Radio Sets

The most popular of all. Featuring simplified control, and guaranteed to bring in Adelaide, Brisbane, Hobart, Melbourne and any station in Australia at loud speaker strength. Wave length 200 to 550 metres. Without accessories. Price, £25

We have just landed complete stocks of the famous high grade General Radio apparatus. Pay a call to our Wireless Shop and see them for yourselves. All accessories are included. Prices are very moderate.

RADIO DEPT. 22 YORK STREET

DAVID JONES'

THE REYNOLD'S REFLEX

By "INSULATOR."

In one of the many radio publications which I have, I came across a circuit which very much appealed to me and which I thought would be worth building. The circuit given is essentially a reflex circuit, and having a strong penchant for this class of receiver I decided to build it, and the result will be seen in the photographs reproduced herewith.

In the body of the article I read that this particular receiver was most selective, and, what is more, had an excellent range of reception. To Glenn H. Browning, of Browning Drake fame, is due the credit for its production, and it certainly lives up to its reputation. Like most reflex sets, it will be seen that this one also employs a crystal detector, but it will be noticed that the crystal is inserted in a somewhat strange part of the circuit. The reason for this will be seen, inasmuch as most reflex sets are particularly broad or flat in their tuning, and in proximity to a high-powered broadcasting station it is a very difficult job to receive any other station without a great amount of interference.

Tunes Sharply.

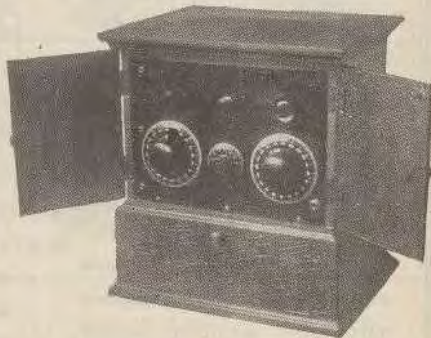
This, of course, is regrettable, and Mr. Browning points out that this particular receiver is not flat, rather is it sharp in tuning. You will notice that there is one portion of the circuit which might even be termed the floating circuit, inasmuch as beyond inductively it is not related directly to any other portion of the circuit. This floating circuit might even be termed a wave trap, because such it really is. The famous Browning Drake regenerator and primary coil is used in the construction. The aerial coil is in itself a solenoid inductance with a centre tapping.

Theoretical Action.

The regenerator is the solenoid inductance acting in a capacity of the secondary generally, and a primary coil of a given number of turns wound on a former which fits snugly inside and at the bottom of this secondary. A reaction coil is provided wound on a rotor reeling on the top of this secondary. It will be noticed that the incoming signal first of all is tuned to the wavelength, with the aerial condenser and aerial coil. The valve amplifies at radio frequency, and it is then passed on to the primary of the regenerator. From this primary is accepted the energy by the secondary, which you will notice is tuned by a variable condenser, and the signal is

then passed on from the secondary by process of induction into the tickler or reaction, in which circuit is included the crystal detector which now detects, and the audio frequency impulses are fed back to the valve through the audio frequency transformer, after which they are recorded on the phones or loud speaker, as the case may be.

It will be noticed that the same tube acts in two capacities, one at radio frequency and the other at audio frequency, the circuit thereby yielding excellent results for one valve; in fact, within 25 miles of a broadcasting station no difficulty should be ex-



The Complete Receiver.

perienced in getting comfortable loud speaker results. Such has been my own experience.

Constructional Details.

However, let us discuss the constructional details. First of all, the following list are the materials which are used in my own receiver, and while not binding you down to these particular brands of components, at the same time be assured that you are employing good quality apparatus. But I may mention that it is necessary to list these parts, so that you may duplicate my own "Reynolds' Reflex."

FOR SALE: Large Stirling "Magnavox" R.3 Loud Speaker. Cost £10/10/-, sell £5 cash, guaranteed. H. SILVESTER, 71 Regent Street, Redfern.

BURGESS—"THEY'RE USED ON THE UNITED STATES AIRCRAFT"—BATTERIES

QUALITY RADIO GOODS AT QUANTITY PRICES

	£	s.	d.		s.	d.
RADEX VALVES: 201A type, .25 amps, 5 volts	9	9		C BATTERIES : Everready or Dia- mond	2	9
PHILIPS VALVES: B406, A110 . .	17	6		THREE COIL HOLDERS: "Col- umbia" geared	13	6
PORCELAIN SOCKETS: Crossley (American)	2	6		THREE COIL HOLDERS: Cam Vernier	11	6
ENGLISH BASE MOUNTING SOCKETS:	1	3		AUDIO TRANSFORMERS: K. & C., 3 to 1	13	6
METERS: Pocket Type "B" Battery Voltmeters	6	6		HEADSETS: K. & C. Special (will not burn out)	15	6
METERS: Pocket Type, combination A and B Voltmeters	10	9		LOW LOSS CONDENSERS: 11 plate Aircraft	11	6
METERS: Pocket Type, combination Ammeter and Voltmeter	7	6		CRYSTAL DETECTORS: Catswhisker, arm and cup	8	
LOW LOSS CONDENSERS: Ad- vance Square Law, .0005	12	6		AERIAL INSULATORS: Black Mould- ed, each	3	
NEUTRODYNE KITS: 3 wound Neutroformers, 2 Neut. Condensers	1	7	6	BATTERY TESTERS: Bulb Hydro- meters	4	6
THREE STAGE R.F. KITS: Includ- ing 3 low loss condensers, 3 trans- formers and full instructions.	3	19	0	FIXED CONDENSERS: .0001, .001 . .	1	6
RESISTANCE COUPLED AMPLI- FIER: "Heath" 3 stage	3	19	0	FIXED CONDENSERS: .006 and .01 . .	2	0
THREE GANG SOCKETS: Standard or 199	5	9		RHEOSTATS: 10 ohm Ormond	1	3
FOUR GANG SOCKETS: Standard or 199	7	9		VARIABLE CONDENSERS: 31 plate, with Pigtail	12	6
TWO GANG SOCKETS: Standard or 199	4	6		VARIABLE CONDENSERS: 43 plate, with Pigtail	15	0
B BATTERIES: Always fresh "Ever- ready," 30 volt 9/6, 42v. 12/6, 60v.	18	0		VERNIER CONDENSERS: 43 plate, with Pigtail	19	6
B BATTERIES: "Diamond" Triple Capacity, 45 volts 20/-, 60v.	1	5	0	SOLDER: Belden, per 18 inch length	3	
				KESTER SOLDER: Per box	2	0
				AMPERITES: Automatic filament Con- trol, 201A or 199 type	7	6

Bring your Radio Problems to Mr. W. L. Hamilton every Friday evening at our
Sydney Store.

Country Customers Note: We do not keep you waiting, send along your orders. We pay car-
riage on goods up to the value of 10/- and over except on Batteries, Loud Speakers and Value
Payable Post Parcels.

"Yours for Lower Prices."

The ECONOMIC RADIO STORES
28 Royal Arcade SYDNEY
569 Hunter St. West NEWCASTLE
Phone B 5891 Phone, Newcastle 1622

List of Parts.

- 1 Radion or Bakelite panel, 12in. x 8in. x 3/16in.
- 1 .0005 Nelslide condenser and dial.
- 1 .00035 Nelslide condenser and dial.
- 1 Radioken regenerator kit.
- 1 Jefferson 6 to 1 transformer.
- 1 Standard American valve socket.
- 1 Variotector
- 1 Marco neutralising condenser.
- 1 Frost 35 ohm rheostat.
- 1 .00025 Improved Wetless grid condenser.
- 1 Frost S.C. jack.
- 3 Ees and plugs.
- 6½ inches of No. 18 gauge stripped brass, ½ inch wide.
- 7 Lengths of busbar.
- Sundry screws, flex, etc.
- 1 Baseboard, 7in. x 11in. x ¾in.

Layout of Parts.

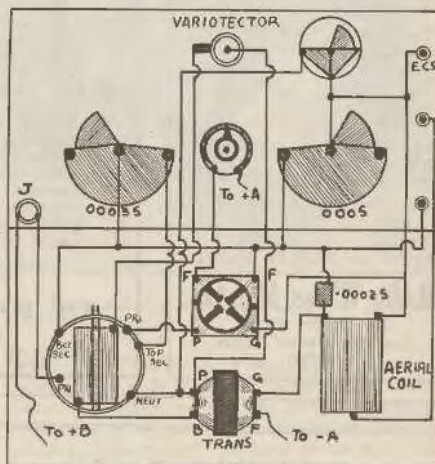
The regenerator kit comprises the aerial coil and the regenerator unit; the one which I have is a particularly well-made article, and built along the principles of low loss. A recent issue of "Wireless Weekly" will give the necessary particulars to those desirous of building these units for themselves, so I will refer you to it. Looking at the front view it will be seen that the two condensers are on the one level—that is, three inches from the bottom of the panel. Each condenser spindle centre is 2½ inches from its nearest edge, and exactly between these two is located the rheostat. On a level of 6½ inches from the bottom of the panel will be seen a Marco neutralising condenser, the variotector in the centre, and the spindle for rotating the reaction portion of the regenerator.

Immediately above the rheostat on the centre line is the variotector, whereas immediately above the .0005 condenser is located the neutralising condenser, while above the .0035 condenser I have placed the spindle of the rotor. The Ees are located half an inch from the edge of the panel, there being three altogether; the bottom one, which is situated one inch from the bottom, is for the earth; the top one, on the other hand, is for the aerial; whereas the centre one, again, is for the aerial coil. The jack is located in the right-hand corner, and I will leave it to you to define this position exactly for yourself.

Mounting the Parts.

Lay your panel on a flat surface, such as a table, and mark it out from the dimensions just given. Do not be afraid to use a centre punch, as it will

save you considerable difficulty in the long run. The template which accompanies the condensers will give you the necessary measurements, and you will notice that I have placed my condensers in such a way that the moving plates slide in a vertical position towards the top of the panel. This method saves considerable space in length. Drill the panel to accept this apparatus, and on it mount your Ees

*Back of Panel Design.*

or jack or rheostat; the variotector and the neutralising condenser leave on the one side while you arrange your baseboard component. Place the valve socket immediately behind the rheostat and your transformer behind this socket again, with the secondary side pointing in the direction of the neutralising condenser.

The primary coil is screwed to the baseboard per medium of two screws through the overlapping bakelita strips provided with the coil. For simplicity of wiring the tap on this coil should be located at the back. Now cut your brass strip exactly in halves, and from each half fashion a right angle bracket with the shorter side 7/8in. long. Two holes are to be drilled in each side of this bracket, one on the shorter side to allow two screws to pass through with which to secure the bracket to the baseboard, and one on the longer side exactly 2½ inches from the bend to allow a bolt to pass right through in order to secure each to the bottom of the regenerator. When this has been done it will be found that the regenerator reaction spindle will

RADIO on Easy Terms.

NO INTEREST.

All sets complete with De Forest valves, phones, A and B battery and Aerial.

Single Valve	£9	10	0
Deposit	0	18	6
Weekly	0	3	3
Two Valves	£13	15	6
Deposit	1	7	6
Weekly	0	4	9
Three Valves	£21	0	0
Deposit	2	0	0
Weekly	0	7	4
Four Valves	£25	0	0
Deposit	2	10	0
Weekly	0	8	8
Five Valves	£29	10	0
Deposit	3	0	0
Weekly	0	10	0

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Radio W'less Mfg. Co.

289 George Street,
Opposite Hunter Street.
B5747.

HOWELL'S SALE & EXCHANGE

Large Variety Loud Speakers from 35/- to £8.
Hear them on music.

	s.	d.
Jefferson Star Transformers	17	6
.0005 Vernier Condensers	11	6
30 ohm Rheostats	2	9
Panel Wire, per doz.	1	0
Egg Insulators, per doz.	3	6
Bull Nose Insulators, per doz.	3	0
12 Point Inductance Switches	2	6
Single Jack	1	9
Double Jack	2	0
Tunatron 201A Valve	9	9
Standard	1	6
Columbia Cells, No. 6	2	6
Bakelite, cut any size, per square inch		3

HOW TO MAKE THE HOWELL REINARTZ STILL MORE SELECTIVE.

YOU CAN'T IMAGINE HOW GOOD IT REALLY IS.
IF INTERESTED, CALL IN AND SEE US.

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"WETLESS" DUO-LATERAL COILS are wound by a special process of constant tension on the wire, ensuring uniformity throughout. The self-capacity is extremely low, and the wire used is of the highest grade, the result being very sharp tuning, low high frequency resistance and maximum signal strength.

Coil No.	Unmounted.	De-Luxe Mounted.
20	1/8	6/8
25	1/7	6/6
25	1/8	6/5
50	1/10	6/7
68	2/-	6/9
75	2/1	6/10
100	2/3	7/1
120	2/4	7/2
106	2/5	7/3
150	2/6	7/3
170	3/-	7/5
200	3/-	7/6
250	3/6	8/5

ASK YOUR DEALER FOR "WETLESS" DUO-LATERAL COILS.

AUSTRALIAN MADE.

Manufacturer:

Phone: Kog. 1155.

J. WETLESS, Bexley, N. S. W.

Wm. Lambert Hamilton

Radio Specialist

Bring your troubles to me.
What I will do for you.

I will remodel or re-wire your receiver, making every valve give of its best. Let me modernise your receiver.

I will build you a set to suit your local conditions.

I will answer any enquiries immediately.

My charges will be moderate.

I will buy your components for you at ruling city prices and despatch them to you within 24 hours of receipt of order. I will advise you as to the quality of the goods. This service is free.

I am at your service in any radio wants.

City address:
VICKERY'S CHAMBERS,
82 Pitt Street,
SYDNEY.

Phone: B4543.

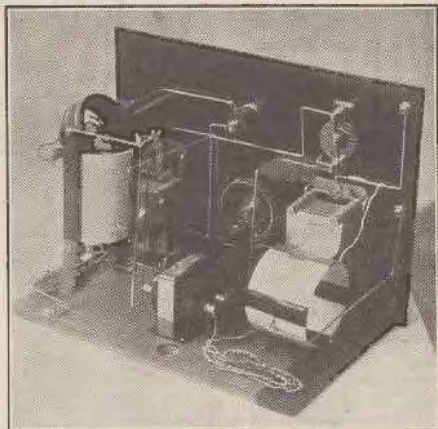
Private address:
16a Ness Avenue,
Dulwich Hill.

just comfortably fit through the hole in the panel provided for the purpose.

Wiring Up.

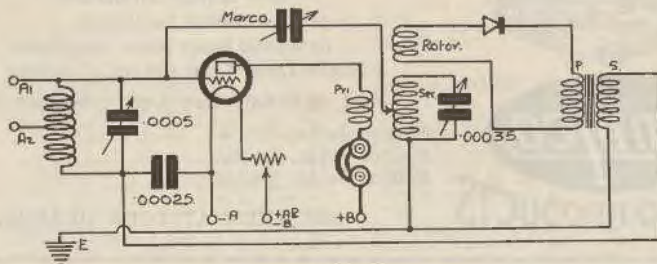
All your components now being mounted, assemble or screw your panel to the baseboard, and you are now ready for the wiring. From the bottom Ecs run a busbar along the edge of the panel; bend it at right angles in an upward direction here, in order that it pass the rheostat, and bend again in such a way that it makes contact with the soldering clip of the smaller Nelslide condenser; solder this, and to this solder the end of the secondary portion of the regenerator. From the left side of the rheostat make a connection to one filament terminal of the valve socket, the other filament terminal of the socket being connected to the earth wire already placed. From the same point as you make this join run another busbar to the F terminal of your transformer, the G terminal of which is joined to the fixed plates of the larger Nelslide condenser, to which point also is connected the end of the aerial coil between the earth wire, and the fixed plates of this larger Nelslide condenser is joined the .00025 grid condenser from the top Ecs is run a busbar to the G terminal of the valve socket.

To this busbar is soldered the bottom side of the neutralising condenser, and the beginning of the aerial coil another short busbar is used to join the bottom side of the neutralising condenser to the moving plates of the larger Nelslide. The top terminal of the Marco condenser is connected to the tap in the regenerator, this tap being located at about the eighteenth turn from the bottom of the small portion of the middle Ecs is wound wire running, and soldered to the top in the aerial coil. One side of the flex provided for the tickler of the regenerator is soldered to the catwhisker side of the crystal detector, while the crystal side of this detector is joined by busbar to the transformer, from the B terminal of which is brought right up the busbar connecting to the remaining side of the



Photograph showing the placing of the parts.

tickler. The fixed plates of the small Nelslide condenser are taken to the top of the secondary regenerator; this leaves us with the primary of the regenerator to be connected, and this is done by taking one side to the P terminal of the valve socket, whereas the other side is connected to the bottom clip of the jack. This completes the wiring, excepting for the filament leads, which for my purpose are of ordinary bell flex. From the top clip of the jack is taken about 18 inches of this bell flex to the B battery positive. From the F terminal of the transformer a similar length of flex is taken to the minus of the A battery, whereas the positive of the A battery is fed through a similar length of flex right through the running terminal of the filament



The Circuit.

rheostat. The wiring is thus completed, and you are now ready to try out the receiver.

Test for Correct Wiring.

In order to be assured that you have correctly wired up the battery terminals, carefully check all the connections. You will readily see that the rheostat is joined in the positive lead, and that the positive A terminal is permanently linked to the negative B terminal.

When you are sure everything is O.K., join up the A and B batteries to these terminals in the usual way. Hook up your aerial, earth; the earth, you will observe, goes to the bottom Ecs and aerial to the top Ecs for a start. Now plug in the phones.

Probably at first you will hear nothing whatever. Don't be alarmed, as you will find plenty of signal strength when you tune your condensers. Try the different position for your aerial and compare your results. In a short time you will certainly understand the set well enough to appreciate it.

Take advantage of our Morse Code Lessons transmitted on 200 metres every Tuesday and Thursday, 7.30 p.m.—8 p.m.

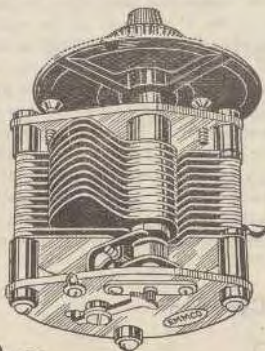
Radio in the Country.

Necessary; Not a Fancy.

The Dubbo Radio Club, which is one of the most energetic bodies of its kind in the State—the City of Sydney not excepted—has done much to popularise wireless in the western parts of N. S. Wales. At the last meeting of the club plans were initiated "to make radio boom, and to show the people that radio is a necessity and not a passing fancy."

Largely through the energies of the club, farmers and graziers in the Dubbo district have learned of the value of radio on the farm. Many who before the club came into existence did not know what it was to get their weather reports and market reports the moment they are issued, now have their own receiving sets and listen-in daily to the latest weather information and the most up-to-date market quotations.

The club is not resting on its laurels, and according to "Lojic," one of the best-informed radio writers in the State, it intends to continue its efforts to secure a broadcasting station for Dubbo—either a self-contained unit such as has been erected at Bathurst by Messrs. Mockler Bros., a local business firm, or a relay station for re-broadcasting the programme sent out by one or more of the Sydney stations.



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RADIO PRODUCTS

Emmco Radio Products

Manufactured by Electricity Meter Mfg. Co., Sydney
AUSTRALIAN MADE GUARANTEED LOW LOSS
CONDENSER.

All Capacities with Direct Vernier.

Built like a Watch.

Most Minute Adjustment.

Absolute Insulation.

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Most up-to-date Low Loss Condenser Made.

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Phone B2235
A.H. Perrett, Publicity Officer

MONTHLY GENERAL MEETING.

The monthly general meeting of the New South Wales Division of the Wireless Institute was held on Thursday, Feb. 18, and was an "All Clubs' Night." Members of the affiliated clubs were invited to attend. The main business of the evening was a debate from tenets representing the affiliated clubs and the Institute. The subject chosen was "Low v. High Loss Apparatus."

A very spirited debate took place, and it was generally conceded that, as low loss signified efficiency, low loss was most desirable. It was pointed out, however, that however good the individual apparatus may be, losses introduced in wiring and construction would invariably produce a poor set, while a set built with care and efficiency in wiring might prove extremely good, although indifferent components might be employed.

Speaking of efficiency, there appears to be a good deal of room for an improvement in the efficiency of the tuning

of many stations. A good many complaints have been received by the Radio Inspector on interference from amateur stations, and there is not the slightest doubt that the authorities will take very strong action against the experimenter if this sort of thing continues. While in many cases trouble is no doubt due to the broadcast listener's set, it is, nevertheless, undeniable that a certain amount of interference is caused by experimental stations. These must be very carefully overhauled and the trouble remedied as far as possible, otherwise there is no doubt that the privileges now enjoyed by the amateur experimenter will be easily curtailed, if not altogether withdrawn. On the other hand, if the experimenters show a genuine desire to make their station as efficient as possible, and do all in their power to prevent undue interference with the rights of broadcast listeners, there is no doubt that the authorities will view very sympathetically any protest which may be made by the amateurs against any curtailment of their present privileges.

Round the Clubs

The asterisk denotes clubs affiliated with the Wireless Institute of Australia (N.S.W. Division.)

WIRELESS SOCIETY OF NEWCASTLE.*

Members of the above society met on the 23rd inst., the attendance being up to the usual standard. Members were pleased to welcome a new fellow-enthusiast to the membership list. The general business of the evening over, another and very interesting lecture was given by Mr. Swain on "Valve Rectifiers."

The club transmitter is again on the air on 57 metres, working Morse, and on 210 metres with Fone. Reports of reception of these transmissions at any time will be much appreciated and replied to promptly.

If interested in the activities of the society, please communicate with the Secretary, Mr. L. Wilson, c/o Messrs. W. G. Watson & Co., 29 Hunter Street, Newcastle.

CONCORD AMATEUR RADIO CLUB, A-2GD.*

The usual weekly meeting of the above club was held at "Enriopades," Wallace Street, Concord, on Thursday night last, at 8 p.m. The President, Mr. J. V. Stephenson, occupied the chair.

Attendance was up to the usual standard, only one member being absent.

After the adoption of the minutes a new member was admitted to the club. Previous proof of this gentleman's enthusiasm was seen in the handsome polished cabinet which he kindly made for the club's waxesetler.

During the past week a two-valve receiver was installed in Ward L., Sydney Hospital, for the benefit of one of our members who met with a serious accident. This was made possible by the courtesy of the Medical Superintendent.

The lecture for the night was unavoidably dispensed with owing to the indisposition of the lecturer.

On Saturday night the members of this club are paying a visit to Croydon Radio Club, and hope to spend an enjoyable and instructive evening. Such has always been the case on previous visits.

Meeting closed for transmission tests at 10 p.m. Reports on these tests will be appreciated and duly acknowledged per card.

Inquiries as to the club's activities will be promptly replied to if addressed to the Secretary, Mr. W. H. Barker, at the club rooms.

THE CROYDON RADIO CLUB.*

On Saturday, Feb. 27, the Croydon Radio Club held the usual weekly meeting at the club room, "Rockleigh," Lang Street, Croydon. The President, Mr. C. W. Slade, opened the meeting at 7.30 p.m.

The minutes of the previous meeting were read and confirmed.

Mr. Mead was elected to be delegate in the Waverley Club for the purpose of arranging the subject for the forthcoming debate with this club.

Our visitors from the Concord and Strathfield clubs were warmly welcomed.

In order to put the members into a good frame of mind for the serious business of the evening, refreshments were served early.

The event for which the members and visitors had been primed now took place, namely, a Dutch Auction.

Mr. Thum was a great success as an auctioneer, and nearly a success as an auctioneer owing to the casual way in which he flourished the hammer.

The purchasers in most cases were better satisfied than the sellers. Several lines changed owners at ridiculous prices.

All communications to the Hon. Sec., "Rhos," Hay Street, Croydon.

THE LEICHHARDT AND DISTRICT RADIO SOCIETY.*

The 165th general meeting of the above society was held on 23rd inst. at the club rooms, 176 Johnstone Street, Annandale. The attendance of members was better than that of the last few meetings, and was quite refreshing.

After correspondence was read, burner practice was indulged in for 30 minutes.

The business was to have been a lecture entitled "Valve and Their Uses" by Mr. W. L. Hamilton, "Tales of the Sea," but owing to his unavoidable absence Mr. H. F. Whitworth stepped into the breach and gave the lecture. Mr. Whitworth is a club member. The lecturer traced the evolution of the valve from the time of its inception to the present day, which was extremely interesting. The func-

BURGESS—"FLASHLIGHT—RADIO—IGNITION—TELEPHONE"—BATTERIES

WHAT I SEE & HEAR

(Continued from Last Week)

The minimum working voltage of a detector tube is about 17 volts. Therefore, a "B" battery should give results until its voltage drops to this figure. Even then it need not be discarded. It can be connected in series with other batteries and used on the amplifier tube. Here it should be serviceable until its voltage has dropped to about 10 volts. In this connection, however, one thing should be watched. Some "B" batteries become noisy when their voltage drops, and if this is the case, the battery should not be used. This is especially true of "B" batteries of ordinary construction, where no special moisture proofing or insulation are provided to eliminate noisy voltage fluctuations.

A low voltage "B" battery usually produces weak or wavering signals.

"C" BATTERIES.

These batteries, like "B" batteries, should be tested by a high grade voltmeter, and when their voltage has dropped to about 1.0 volt per cell they should be replaced.

A low voltage "C" battery usually produces distorted signals.

The Philadelphia Storage Battery Company has now marketed a piece of apparatus which is at once both interesting and wonderfully useful.

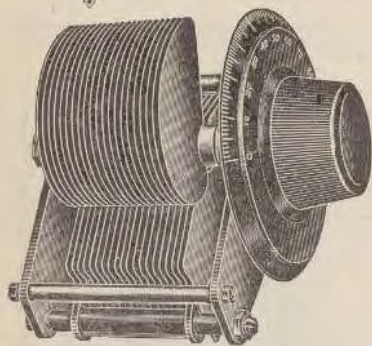
Its name is the Philco Socket Power and it enables wireless enthusiasts to obtain both "A" and "B" current direct from the electric light wall plug. It rectifies, transforms and delivers the respective supplies to the set with no other operation than the snapping on of a switch.

This week I saw a sample at the offices of the Australasian agents and I was struck by its simplicity and amazing utility. Handsome in appearance, it will go all the way on the road to success. (Advt.)



NINE POINTS

THAT MAKE IGRANIC CONDENSERS
THE VERY BEST



The Aristocrat of variable condensers. The IGRANIC Square-law. Designed and built with a real knowledge of Radio requirements. Made in four sizes. 29/6 up.

1. **LOW LOSSES.** Special method of mounting fixed plates reduces dielectric losses to an absolute minimum.
2. **LOW EFFECTIVE RESISTANCE.** Connection to moving plates by means of flexible spiral conductor ensures positive electrical contact and noiseless operation.
3. **EARTHED ROTOR.** Moving plates electrically connected to frame of condenser provides adequate shield and eliminates stray capacity effects.
4. **SMOOTH ACTION.** Ensured by special ball bearings. Facilitates precise tuning adjustment.
5. **SQUARE LAW.** Specially shaped plates give straight-line

tuning relations between dial settings and wavelengths.

6. **ROBUST CONSTRUCTION.** Fixed and moving plates of heavy gauge brass sheet. Perfectly rigid and will not warp.

7. **MENTAL FRAME.** Adequate shielding and strength are provided by a frame of specially prepared hardened aluminium alloy.

8. **INSTRUMENT FINISH.** Highest quality scientific instrument finish, handsome combined tapered knob and 4-inch Bakelite bevelled dial.

9. **EASY TO MOUNT AND CONNECT.** Drilling templates provided with each condenser. Soldering tabs to facilitate making connections.

ONCE YOU HAVE HANDLED THIS CONDENSER YOU WILL
USE NO OTHER.

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BRISBANE: Perry House.

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tioning of the valve as a detector and amplifier was thoroughly explained, and at the termination the usual batch of questions was satisfactorily dealt with. A hearty vote of thanks, carried by acclamation, was accorded the lecturer for his able discourse, especially in view of the fact that he was unprepared.

The Secretary also reported the miserable attendance of members at the debate at Institute headquarters on 18th,

when only three representatives of this club were present. The debate was extremely interesting, and resulted in a win for the combined clubs.

The lecture for the next meeting is by Mr. F. J. Lott, and the subject is to be selected.

Inquiries as to the club's activities and application for membership to this club should be addressed to Mr. J. G. Arkoll, 148 Hereford Street, Forest Lodge.

Esperanto Notes

It is announced that the radio branch of the Russian Governmental Board of Professional Associations has officially adopted Esperanto for international correspondence with radio amateurs.

A special "Zamenhof Programme," broadcast on the date of the author of Esperanto's birthday, was featured at Breslau Radiocasting Station recently. Every item was rendered in Esperanto. Reports of reception were received from all over Europe.

Copenhagen Station, Denmark, sends out Esperanto news items taken from a bi-weekly publication in that language every Monday evening.

Berlin Radio Station, from which Esperanto has been broadcast continuously for over a year, has just commenced a third series of elementary lessons. The directors of the Berliner Rundfunk-Sendestelle, however, do not seem to be content with the mere broadcasting of the language, but desire to provide their subscribers with a real opportunity of learning it. In addition to being extensively announced in the station's official organ, "Die Funkstunde," the course of lessons has been published by them in book form, to be used by listeners in conjunction with the broadcast lectures. It is reported that 4000 of these booklets were sold in a fortnight, and classes were being formed in various parts of the city to cope with the demand of eager learners.

The Radio Club of Brazil has organised a series of Esperanto lessons from SPE (Praia Vermelha),

You can have "Wireless Weekly" mailed direct to your home for twelve months for—13/-.
—13/-.

Rio de Janeiro, thereby demonstrating its active support of the international language.

To celebrate the conclusion of a successful Esperanto course, "Radio Barcelona" (EAJL), Spain, arranged a two-hours' Esperanto concert from the studio recently. Amongst the items transmitted was a gramophone record of a poem recited by the author of the language, Dr. Zamenhof, who died in 1918.



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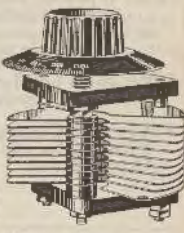
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FRIDAY, MARCH 5.

Midday Session.

12.35—Tune-in Signal.

1—Market Reports supplied by the Council of Agriculture; Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange; Weather Information supplied by the Commonwealth Weather Bureau; "Daily Standard" News Service; Close down.

Night Session.

8—Tune-in Signal to Tivoli Theatre.
8.5—From the Studio: The Workers Educational Association—Aims, Objects and coming lectures, by Mr. Wm. McCook (president, W.E.A.); soprano solo: Over the Water Blue (R. E. Clarke); Miss Jean Jarratt; Ten Minutes' Humour by Syd. Beck and Mr. Victor Gouret; Overture: The May Queen (Von Lehl); The Savoy Orchestra (conductor, Mr. A. K. Featherston); baritone solo: O Flower Divine (Hadya Wood); Mr. S. Mitchell; musical monologue: Old Chap (Martin Passel); Miss Eileen McLennan; contralto solo: I Know a Lovely Garden (D'Hardolot); Miss Grace Barrow; orchestral selections, Fox Trot: (a) New York ain't New York any more (Henderson), (b) Egyptian Rues (Snayder); The Savoy Orchestra; Soprano solo: A Dream of Paradise (Gray), Mrs. I. Thornton.

3.50—Weather Information Officially supplied by the Commonwealth Weather Bureau.
3.55—Announcements.
9—Soprano solo: Could I Forget (Arnold); Miss Jean Jarratt; orchestral: Golden Pheasant Waltzes (Hall); The Savoy Orchestra; baritone solo: Emeralds O' Mine (Ahters), Mr. S. Mitchell; Duo Art selection; Valse Parisienne (Roberts), by request; Contralto solo: A Red Rosebud (Murray-Gibbs); Miss Grace Barrow; orchestral selections: The Magic Ring (Levy); The Savoy Orchestra; Musical monologue: The Dowry (Hemley); Miss Eileen McLennan; Baritone solo: (a) I Did Not Know, (b) Mase (Hibbard); Mr. Gerald Gaskin; overture: Jupiter's Carnival (Barnard); The Savoy Orchestra; soprano solo: La Sorellata (Brangi), Mrs. T. Thornton; March: America First; The Savoy Orchestra.

9.55—"The Daily Mail" News Service; Close down.

SAUNDAY, MARCH 6.

No Midday Transmission.

The Children's Session.

The children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date this session will be made a nightly feature, but in the immediate present, while transmission is being effected under temporary conditions, it is held three times weekly.

6.25—Tune-in Signal.

6.30—The Children's Hour: Nursery Rhymes and Music; Bedtime Stories by "The Sandman."

7.15—Close down.

Night Session.

8.5—Tune-in to Tivoli Theatre.
8.5—From the Studio: Soprano solo: Meadow-sweet (May Brahe); Miss Olga Harris; Hawaiian Instrumentalist: Song to Hawaii; The Kalua Trio; bass solo: As You Kiss (Scott Gatty); Mr. N. S. Mackay; contralto solo: Damos (Max Strang), Miss Vera Parker; Hawaiian Instrumentalist: Dreamy Hawaii; The Kalua Trio; vocal duet: Maying (Smith); Misses Mabel and Vera Parker; male solo: (a) Rose of my Heart, (Lohr), (b) Till Death I Love You (Mascheroni); Signor Curti; violin solo: Canonets (d'Ambrósio); Mr. H. Scott MacCallum; soprano solo: O Dry These Tears (Del Riego); Miss Mabel Parker; Hawaiian Instrumentalist: Aloha Land; The Kalua Trio; soprano solo: St. Nicholas' Day in St. Ursing (Martin); Miss Olga Harris; bass solo: Captain Mac (Sanderson); Mr. N. S. Mackay.

8.50—Weather Information Officially supplied by the Commonwealth Weather Bureau.

9.30—From Lennox's Hotel. By courtesy of the proprietors, an hour's dance music, played by Miss May Dobbin's Vic-Royal Orchestra, will be relayed from Lennox's Ball-room.

10.30—From the Studio. "The Daily Mail" News Service. Close down.

SUNDAY, MARCH 7.

Morning Session.

The complete morning service at St. Paul's Probyranean Church, Spring Hill, will be relayed.

10.55—"Tune-in." Devotional; Hymn 2: Father of Heaven; Lesson: Isaiah 53; Prayer: Psalm 43, Verse 3; O Send Thy Light; Intimations and Offerings; Anthem: Sermon: The Lamb at God's Preacher; The Rev. Jas. Walker; Hymn 500: There is a Green Hill; Prayer; Hymn 415: How O my Lord; Communion; Benediction.

12.30—Close down.

Afternoon Session.

The Band Concert provided in the Brisbane Botanical Gardens will be relayed.

3.10—"Tune-in" Signal.

3.15—Band Concert.

4.30—Close down.

Night Session.

The complete evening service from St. Paul's Church will be relayed.

7.10—"Tune-in."

7.15—Devotional; Intonation; Hymn 164: Spirit Divine; Lesson: Psalm 103; Prayer; Hymn 262: Jesus Lord of Light; Lesson: Matthew 3; Prayer; Hymn 405: Oh, Jesus I Have Promised; Intimations and Offerings; Anthem: Sermon: The Second Mile; preacher, The Rev. Jas. Walker; Prayer; Hymn 402: Jesus Calls Us; Benediction; Vespere Hymn. At the Conclusion of the Church Service, the concert provided by the Greater Brisbane Municipal Concert Band under the leadership of Mr. E. Jackson, in Wickham Park

will be relayed. March Entry of the Gladiators (Frick); overture: Rêverie (Wagner); song: When the Ebb Tide Flows (Gordon); Mr. Robert Parr; selection: I due Essenti (Vendi); Popular numbers: Selected; song: Up from Slumber (Sanderson); Mr. Robert Parr; fantasia: Auld Scotch (E. Jackson).

9.30—Close down.

MONDAY, MARCH 8.

Midday Session.

12.55—Tune-in signal.

1—Market reports supplied by the Council of Agriculture; Stock Exchange Information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

The Children's Session.

A children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date this session will be made a nightly feature, but in the immediate present, while transmission is being effected under temporary conditions, it is held three times weekly.

6.25—Tune-in signal.

6.30—The Children's Hour. Nursery rhymes and music; bedtime stories by "The Sandman."

7.15—Close down.

Night Session.

8—Tune-in to the Tivoli Theatre.
8.5—From the Studio: Contralto solo, A Fairy Song (Willoby); Miss Dorothy Brown; 10 minutes of humour by Mr. Syd. Beck and Mr. Victor Gouret; bass solo, Absent (McCall); Mr. N. S. Mackay; cornet solo, Island Emperor (Farrell); Mr. W. H. Davies; soprano solo, So Early in the Morning (P. Bridg); Miss Verma Moore; elocutionary number, The Road to Heaven (G. R. Sims); Mr. C. W. Cowan; group of banjo numbers by Mr. N. Gould; baritone solo, Rose of My Heart (Lohr); Mr. Lawrence Sheridan; cornet solo, Silver Threads Among the Gold (Hartman); Mr. W. H. Davies; contralto solo, The Silver Ring (Chaminade); Miss Dorothy Brown; elocutionary number, The Newboy's Debt; Mr. C. W. Cowan; bass solo, Young Tom o' Devon (Russell); Mr. N. S. Mackay; group of banjo numbers by Mr. N. Gould; soprano solo, As Through the Street, from La Bohème; Miss V. Moroni; baritone solo, The Deathless Army, (Trovere); Mr. Lawrence Sheridan.

8.56—From Studio: Weather information officially supplied by the Commonwealth Weather Bureau; announcements.

9—From the Band Room: An hour of

TIME BY RADIO.**Setting Your Watch.**

Broadcasting Station 2BL has received from a firm of watchmakers and jewellers in a large country town a letter stating that the broadcasting of the G.P.O. Chimes is of the utmost value to them, as it is much more accurate than the "gun time" received through the local post office. Incidentally they ask when the actual hour is struck—at the commencement of the chime or when the hour bell sounds.

The Officials at the Observatory state that the hour begins with the first stroke of the hour bell. Thus, it is twelve noon on the first stroke of twelve, and not at any later period. At the same time it is pointed out that there can be no guarantee of the absolute accuracy of the post office time, which may vary to the extent of a few seconds, but which is sufficiently accurate for all general purposes.

It is interesting to note, however, that by means of radio watches and clocks hundreds of miles away are daily regulated by their individual owners as well as the watchmakers, to whom a fine degree of accuracy is important.

RADIO FREAK.**Music in Street Lamp.**

A wireless phenomenon has mystified the residents of Purfleet, Essex, where an electric arc lamp lighting a side street each night reproduces London's broadcasting programmes.

Captain Eckersley, chief engineer of the British Broadcasting Co., who has investigated the strange occurrence, explains that by a curious freak the lamp standard, with its associated wires, gather the ether waves, which delicately fluctuate in voltage. Therefore, the heat of the arc, and the resultant variations in air pressure around the arc, reproduce the sound.

He advises the council to procure a receiving license for the lamp-post, otherwise the Postmaster-General may prosecute.

No similar case has been reported in Australia, although telephones have been known to gather in the ether waves and act as receiving sets.

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music by the South Brisbane City Orchestra, under the leadership of Mr. J. W. Ferguson—Coronation March (Eilenberg); overture, Caliph of Bagdad (Baldini); violin solo, selected, Miss H. Bennett; suite, Ballet Egyptian (Laghi), No. 1 and 2, selected, Medistola (Botta); descriptive, Mill in the Forest (Eilenberg).

10.—From the Studio: The "Daily Mail" news service. Close down.

TUESDAY, MARCH 2.

Midday Session.

12.55.—Tune-in signal.

1.—Market reports supplied by Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

8.—Night Session.

8.—Tune-in to the Tivoli Theatre.

8.5.—From the Studio: Three-quarters of an hour's Irish entertainment by Mr. Chas. O'Mara and Miss Anna Burke. The programme will include the following vocal numbers, interspersed with Irish stories—(a) She's Far from Land (Lambert); (b) Mr. Pat O'Flane (Ball); (c) The Rocky Road to Dublin (Weston and Lee); (d) Killakee (McGleeson), Mr. Chas. O'Mara. (a) Girl with a Bit of a Begone (Monckton); (b) Beautiful Eileen (Ball); (c) Bidding me if all those Endearing Young Charms (Moore); (d) Barney Malone (Nono), Miss Anna Burke.

8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.

8.55.—Announcements.

8.55.—Tenor solo, Love could I only tell Thee (Cape), Signor Corti; piano, Three solo, Song of the Sea (Chopin), Miss Rae Phillips; soprano solo, Dawn Skies (Drummond), Miss Ruth Portrize; instrumental number, Cavatina (Raff), the Studio Trio; contralto solo, The Siring of Pearls (Phillips), Miss Winifred Anderson; pianoforte solo, Waltz, Op. 22 (Cole-ridge-Taylor), Miss Rae Phillips; soprano solo, Beyond the Dawn (Wentley), Miss R. G. Husband; Aeolian selection, orchestral, Hawaiian Twilight (Sherwood); tenor solo, I call Thee Love as in a Dream (Lillo), Signor Corti; instrumental number, Sonnetto (Chopin), the Studio Trio; contralto solo, My Ain Folk (Lemon), Miss Winifred Anderson; soprano solo, Slave Song (Nesbit), Miss K. G. Husband.

9.2.—From the Centennial Hall: By courtesy of the Lessee, half an hour's dance music, played by the Centennial Hall Orchestra, will be relayed from the hall.

9.55.—From the Studio, the "Daily Mail" news service.

10.—Close down.

WEDNESDAY, MARCH 10.

Midday Session.

12.55.—Tune-in signal.

1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

8.—The Children's Session.

A children's bedtime story session is held each Monday, Wednesday, and Saturday evening. At a later date a session will be held on a nightly feature, but in the immediate present

while transmission is being effected under temporary conditions, it will be held three times weekly.

6.25.—Tune-in signal.

6.30.—The Children's Hour. Nursery rhymes and music; bedtime stories by "Little Miss Brisbane."

7.15.—Close down.

8.—Night Session.

8.—Tune-in to the Tivoli Theatre.

8.5.—From the Studio: Baritone solo, Ach, Meines, Mr. Les Faulkner; Scottish music, Back of Ben Lomond, Mr. W. Donald, Senr.; instrumental number, Swing Song (Ethel Barnes), the Studio Trio; tenor solo, Ailsa of Mine, Mr. W. Donald, Junr.; harmony duo, One, Two, Three, Four, Mr. Les Faulkner and Mr. W. Donald, Junr.; 10 minutes of humour by Mr. Syd Beck and Mr. Victor Gourlay; baritone solo, Boreetta, Mr. Les Faulkner; Scotch comic, My Wife, Mr. W. Donald, Senr.; instrumental number, Spanish Dance No. 2 (Moscowsky), the Studio Trio; harmony duo, One and One, After. All, Mr. Les Faulkner and Mr. W. Donald, Junr.

8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.

9.55.—Announcements.

10.—An hour's programme of dance music by the Elite Orchestra, under the leadership of Mr. W. F. Kendall, 499 George Street, commencing. (a) A-F double S-I-K (Crossley) (b) If You Know Susie (De Syta), the Elite Dance Orchestra; soprano solo, Parried (Toetti), Miss Jean Jarrold; fox trots, (a) Fox Trot, Three (Young), (b) Oh, Peter (Widoff), the Elite Orchestra; musical monologue, Green Eye of the Yellow Dog (Clarke), Miss Eileen McLennan; waltzes, (a) Memory Lane (Cunard), (b) A Thief in Paradise (Galtman), the Elite Orchestra; baritone solo, (a) When you look in the Heart of a Rose (Mothven), (b) I Hear You Calling Me (Marshall), Mr. Gerald Oshman; one step, Day, Day, Farmer Gray (Leslie, O'Flynn and Vincent), the Elite Orchestra; soprano solo, Break of Day (Sanderson), Miss Betty Henderson; musical monologue, His First Long Trouser, Miss Eileen McLennan; fox trot, Louder (Gilbert), the Elite Orchestra; soprano solo, Good Morning, Brother Sunshine (Schubert), Miss Betty Henderson; voice, The Midnight Valse (Donaldson), the Elite Orchestra.

9.55.—From the Studio, the "Daily Mail" news service.

10.—Close down.

THURSDAY, MARCH 11.

Midday Session.

12.55.—Tune-in signal.

1.—Market reports supplied by the Council of Agriculture; Stock Exchange information supplied by the Committee of the Brisbane Stock Exchange; weather information supplied by the Commonwealth Weather Bureau; "Daily Standard" news service. Close down.

8.—Night Session.

8.—Tune-in to the Tivoli Theatre.

8.5.—From the Studio: Baritone solo, My Old Shako (Trutzer), Mr. Lawrence Sheridan; Bookman's Radiotele, a talk on Literature by Mr. W. A. Pridden; soprano solo, Deputa le Jour from Louise-Charpentier), Miss Beryl Solomons; instrumental number, fox trot, My Little Blue (Egan and Whitford), the Studio Trio; tenor solo, In the Garden of My Heart (Ball), Sig-

nor Corti; "cello solo, Saint d'Amour (Rilge), Miss Pelequinne; contralto solo, The Promise of Life (Cowan), Miss Grace Barnes; Aeolian Vocalion selection, instrumental (strings and piano), Boreuse (Grieg); baritone solo, Little Town in the Acid County Down (Sandors), Mr. Lawrence Sheridan; soprano solo, Elegie (Massenet), Miss Beryl Solomons; Duo Act selection (by request), Valse Parisienne (Roberts); tenor solo, Cantillon Lament (Del Riego), Signor Corti; contralto solo, I Did Not Know (Trutzer), Miss Grace Barnes.

8.50.—Weather information officially supplied by the Commonwealth Weather Bureau.

8.55.—Announcements.

9.—From the Band Room: An impromptu programme of music by the Greater Brisbane Municipal Concert Band, under the leadership of Mr. E. Jackson, will be relayed from the band's room.

9.55.—From the Studio: The "Daily Mail" news service. Close down.

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FRIDAY, MARCH 5.

Afternoon Session.

1.—G.P.O. Clock and Chinese; Weather Report and Special Notes from the Sun.

3.15.—Music from the Studio.

3.30.—G.P.O. Clock and Chinese; A talk on Modern English Poetry, by Mr. J. M. Pridden.

3.45.—Music from the Studio.

4.—G.P.O. Clock and Chinese; Music from the Studio.

4.30.—G.O. Clock and Chinese; Serial Story entitled "The Treasure of Ho."

4.45.—Music from the Studio.

4.55.—Late Market Reports from The Sun.

5.—G.P.O. Clock and Chinese; The Sun News Service.

5.15.—G.P.O. Clock and Chinese; Close down.

Early Evening Session.

6.—G.P.O. Clock and Chinese; Pavilion Dinner Orchestra under the direction of Mr. Geo. Morrison.

6.30.—Sporting Resumes from Sun Newspapers; The Fables of Miss Monica Scully will entertain the Kiddies.

7.05.—Late Stock, Bides and Market Reports by courtesy of Australian Mercantile Land Finance Company.

7.50.—Close down.

Evening Session.

8.—Parsons & Whitmore's True Blue Jazz Band, Miss Thelma Houston, entertain and the Ambassadors Jazz Orchestra under the direction of Mr. Al. Heumett. At 10 p.m. Mr. J. M. Pridden will deliver his "Round the World Travogue."

SATURDAY, MARCH 6.

Afternoon Session.

3.—G.P.O. Clock and Chinese; Special Sporting Information broadcast direct from Sun Office.

5.15.—G.P.O. Clock and Chinese; Close down.

Early Evening Session.

6.—G.P.O. Clock and Chinese; Pavilion Dinner Orchestra under the direction of Mr. Geo. Morrison.

6.30.—Sporting Resumes from Sun Newspapers; Uncle Jack and the Kiddies.

7.—Talk of the Kiddies by "Brio-ga."

7.45.—A Talk on "Roads."

Evening Session.

8.—Popular Concert from the Studio featuring, The Beatles and Chimes; instrumental selections; Mr. Fred Cochrane, in honour at

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SUNDAY, MARCH 7.

At 11 a.m. Church Service broadcast from Pentecost Baptist Church; 3.30 there will be a concert from the Studio, and at 7.15 service broadcast from Chalmers Presbyterian Church. At 8.30 the Manly Municipal Band will broadcast from Ocean Beach, Manly. Following the Manly Band there will be a concert from the Studio including Miss Paulin Hartford Foster, soprano and Mr. Victor Evans, baritone.

MONDAY, MARCH 8.

Afternoon Session.

3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the Sun.
3.15—David Jones' Tea Room Trio.
3.30—G.P.O. Clock and Chimes; A talk on A Course in English Literature, by Mr. J. M. Prentice.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
4.15—Music from the Studio.
4.30—G.P.O. Clock and Chimes; Serial Story entitled The Treasure of Ho.
4.45—Music from the Studio.
4.55—Late Market Reports from the Sun.
5—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.
6.30—Sporting Resume from Sun Newspapers; Uncle George and the Kiddies.
7.30—"What's On?" a guide to the visitors and citizens of Sydney.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
7.50—Close down.

Evening Session.

From the Studio: Roger Jones, baritone; Mary Charlton, pianist; Our Act Play by Donald Connolly.

TUESDAY, MARCH 9

Afternoon Session.

3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the Sun.
3.15—Music from the Studio.
3.30—G.P.O. Clock and Chimes; Home Talk, by Mr. G. A. Saunders.
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes; Music from the Studio.
4.30—G.P.O. Clock and Chimes; Serial Story entitled The Treasure of Ho.
4.45—Music from the Studio.
4.55—Late Market Reports from the Sun.
5—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.
6.30—Sporting Resume from Sun Newspapers; Uncle George and the Kiddies.
7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.
7.50—Close down.

Evening Session.

From the Studio: The Smart Set Diggers; Grace Saville, contralto; Miss Helen Jean Breeling will speak on "My First Day in a Movie Extra" and Mr. F. T. Alkin will speak on "Vitamins and Dietetics."

WEDNESDAY, MARCH 10.

Afternoon Session.

3—G.P.O. Clock and Chimes; Weather Report and Social Notes from the Sun.

3.15—Broadcasters' Trio.

4—G.P.O. Clock and Chimes; Special Musical Socius.
4—G.P.O. Clock and Chimes; Broadcasters' Trio.

4.30—G.P.O. Clock and Chimes; Serial Story entitled The Treasure of Ho.

4.45—Broadcasters' Trio.

4.55—Late Market Reports from the Sun.
5—G.P.O. Clock and Chimes; Sun News Service.

5.15—G.P.O. Clock and Chimes; Close down, Early Evening Session.

6—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.

6.30—Sporting Resume from Sun Newspapers; Uncle George and the Kiddies.

7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land and Finance Company.

7.50—Close down.

Evening Session.

From the Studio: Operatic programme by Miss Hilka Boyle, soprano and Signor Ubaldo Russo, baritone; Leah Freedman, soloist; Louise Jeffrey, tenor.

THURSDAY, MARCH 11.

Afternoon Session.

3—G.P.O. Clock and Chimes; Weather Reports and Social Notes from the Sun.
3.15—David Jones' Tea Room Trio.
3.30—G.P.O. Clock and Chimes;
3.45—Music from the Studio.
4—G.P.O. Clock and Chimes; David Jones' Tea Room Trio.
4.15—Music from the Studio.
4.30—G.P.O. Clock and Chimes; Serial Story entitled The Treasure of Ho.
4.45—Music from the Studio.
4.55—G.P.O. Clock and Chimes; Sun News Service.
5.15—G.P.O. Clock and Chimes; Close down.

Early Evening Session.

6—G.P.O. Clock and Chimes; Pavilion Dinner Orchestra under the direction of Mr. Cec. Morrison.

6.30—Sporting Resume from Sun Newspapers; Uncle Jack and the Kiddies.

7.45—Late Stock, Hides and Market Reports by courtesy of Australian Mercantile Land & Finance Company.

7.50—Close down.

Evening Session.

Populart Programme from the Studio: Miss Dorrie Ward, soprano and Mr. W. E. Lewis, baritone, in solos and duets. Maurice Blyden in Burlesque; Harry Avon-ale in songs at the piano. Mr. C. P. Thorne, B.Sc., will speak on "The Romance of Engineering" and Miss Mary Edwards on "Aqua" (radio).

5CL

CENTRAL BROADCASTERS LTD.

Call Sign, 5CL. Wavelength, 395 metres. Input, 5 K.W.

FRIDAY, MARCH 5.

Morning Session (11.30 a.m. to 2 p.m.)

11.30—G.P.O. Chimes.
11.35—Stock Day Art and Acolian Vocalion recital.
12—G.P.O. Chimes.
12.1—News and Cable Service.
12.30—The 5CL Studio Orchestra will play: 11.30—Relay; concert solo; waltz; for trio; instrumental trio; rustic festival; waltz; cello solo; finale.
1.15—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcements.
2—G.P.O. Chimes.

Afternoon Session (3 to 5).

3—G.P.O. Chimes.
3.1—Relay from Maple Leaf Cafe; Orchestral numbers.
3.45—Broadcast from Simlar's Serial Story.
4—G.P.O. Chimes.
4.1—Broadcast from Arcadia Cafe; Orchestral numbers. Miss Wily, vocalist.
4.35—Stock Exchange Reports, General Information and Station Announcements.
5—G.P.O. Chimes.

Evening Session (6.30 to 10.30).

6.30—G.P.O. Chimes.
6.31—Bedtime Stories for the Children.
7.30—Stock Exchange, Market Reports and Station Announcements.
7.40—Sporting Talk by "Old Timer."
8—G.P.O. Chimes.
8.1—Studio Concert of "Old Folks" songs, arranged by Miss Linda Wald. Quartet; duets; soprano songs; tenor songs; baritone songs; pianoforte solo.
8.15—G.P.O. Chimes.
9.1—Weather Report.
9.3—Studio Concert, continued.
10—G.P.O. Chimes.
10.1—Studio Concert, continued.
10.15—Advertiser News Service.
10.30—Station Announcements; To-morrow's Programme; National Anthem; Good Night.

SATURDAY, MARCH 6.

Morning Session: 10.30 a.m. to Noon
10.30—G.P.O. Chimes.
10.31—The 5CL Studio Orchestra will play: Selection; violin solo; waltz; tenor; fox trot; shepherd's dance; waltz from "Merchant of Venice"; comic solo; serenade; selection from "Luceria Bergia."
11.45—S. C. Ward & Co.'s Stock Exchange Intelligence, official weather synopsis, and station announcements.
12—G.P.O. Chimes.

Afternoon Session

By permission of the Committee of Licensed Victuallers' Association raising description of races held at Victoria Park. Description by Mr. Arnold Treloar.

Evening Session: 6.30 to 10.30
6.30—G.P.O. Chimes.
6.31—Bedtime Stories for the Children.
7.30—Market reports and station announcements.

7.40—A review of the world's chief sporting events.
8—G.P.O. Chimes.

8.1—Studio Concert arranged by Miss Robert James, L.T.C.L. Overture; tenor song; quartette; contralto solo; violin solo; soprano song; humorous vocalization; cello solo; bass song; song; vocal duet; tenor song; piano solo; the harmonical quartette; instrumental trio; humorous recitation; contralto song; violin solo; soprano solo; piano solo; operatic selection; cello solo; instrumental trio.

9—G.P.O. Chimes.
9.1—Weather Report.
9.3—Studio Concert—continued.

10—G.P.O. Chimes.
10.1—Studio Concert—continued.
10.15—Advertiser News Service.

10.30—Station Announcements. To-morrow's Programme. National Anthem; Good-night.

SUNDAY, MARCH 7.

Morning Session:
11—Broadcast from Ross Park Congregational Church, Divine Service. Preacher: Rev. H. Watts Grimston.

Afternoon Session:
2.50—Broadcast from Parkside Baptist Church, Harvest Festival. Talk to young folk. Rev. Bernard E. C. Luck, B.A.

Evening Session:
8.30—Bedtime Stories for the children.
6.55—Broadcast from Parkside Baptist Church. Preacher: Rev. Bernard E. C. Luck, B.A.

11.15—From Studio, Mr. P. H. Nicholls will speak on "Right and Wrong Thinking."
11.35—Relay from Roundabout, Holden's Brass Band.

9—From Studio, Weather Reports.
9.2—From Roundabout, Holden's Brass Band.

Burgess—"They're used throughout the United States Navy"—Batteries

9.45 approx — Station Announcements. To-morrow's Programmes. National Anthem.

MONDAY, MARCH 8.

- Morning Session (11.30 a.m. to 2 p.m.)
 11.30—G.P.O. Chimes.
 11.31—Stock Duo Art and Aeolian Vocalion Recitals.
 12—G.P.O. Chimes.
 12.1—News and Cable Service.
 12.30—SCL Studio Orchestra will play: Overture, "Cello solo, fox trot, serenade petite, instrumental trio, cornet solo, waltz, selection finale.
 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence and Official Weather Synopsis and Station Announcements.
 2—G.P.O. Chimes.
 Afternoon Session. (3 to 5).
 3—G.P.O. Chimes.
 3.1—Relay from Maple Leaf Cafe: Orchestral numbers.
 3.45—Broadcast from Studio: Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from Arcadia Cafe: Orchestral numbers.
 4.55—Stock Exchange Reports, General Information and Station Announcements.
 5—G.P.O. Chimes.
 Evening Session (6.30 to 10.30).
 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories for the Children.
 7.30—Stock Exchange and Market Reports and Station Announcements.
 7.40—Swimming Talk by Mr. Boatwright.
 8—G.P.O. Chimes.
 8.1—Programme of band music relayed from Railway Institute Hall, by S.A. Railway Band, under baton of Mr. W. J. Thorpe: March, overture, cornet solo, euphonium solo, selection, cornet and euphonium duet, song hit, quick step.
 8.20—"Twinkler's" Boys Club.
 8.40—Band Music Continued.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Band Music continued.
 9.40—G.P.O. Chimes.
 10.1—Band Music, continued.
 10.15—Advertiser News Service.
 10.30—Station Announcements; To-morrow's Programmes; National Anthem; Good Night.

TUESDAY, MARCH 9.

- Morning Session (11.30 a.m. to 2 p.m.)
 11.30—G.P.O. Chimes.
 11.31—Stock Duo Art and Aeolian Vocalion Recitals.
 12—G.P.O. Chimes.
 12.1—News and Cable Service.
 12.30—The SCL Studio Orchestra will play: Selection; violin solo; fox trot; columbine suite; waltz; cornet solo; Highland Lament; oriental; finale.
 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis and Station Announcements.
 2—G.P.O. Chimes.
 Afternoon Session. (3 to 5).
 2—G.P.O. Chimes.
 3.1—Relay from Maple Leaf Cafe: Orchestral Numbers.
 3.45—Broadcast from Studio: Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from Arcadia Cafe: Orchestral Numbers.
 4.55—Stock Exchange Reports, General Information and Station Announcements.
 5—G.P.O. Chimes.
 Evening Session (6.30 to 10.30).
 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories for the Children.
 7.30—Stock Exchange, Market Reports and Station Announcements.
 7.40—Physical Culture Talk by Mr. Noel H. Hobble.
 8—G.P.O. Chimes.
 8.1—Studio Concert, arranged by Madame Bernstein: Piano solo, violin solo, aria, song, piano solo, romance, violin solo, song, violin solo, songs (2), piano solo.
 8.30—Cookery Talk arranged by S.A. Gas Co.
 8.50—Studio Concert, continued.

- 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Studio Concert, continued.
 10—G.P.O. Chimes.
 10.1—Studio Concert, continued.
 10.15—Advertiser News Service.
 10.30—Station Announcements; To-morrow's Programmes; National Anthem; Good Night.
 Morning Session (11.30 a.m. to 2 p.m.)

WEDNESDAY, MARCH 10.

- 11.30—G.P.O. Chimes.
 11.31—Stock Duo Art and Aeolian Vocalion Recitals.
 12—G.P.O. Chimes.
 12.1—News and Cable Service.
 12.30—SCL Studio Orchestra will play: Selection: Venetian reverie, fox trot, three dances from Nell Gwyn, cornet solo, oriental, waltz, suite, finale, selection, Sully.
 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis, and Station Announcements.
 2—G.P.O. Chimes.
 Afternoon Session. (3 to 5).
 3—G.P.O. Chimes.
 3.1—Broadcast from Maple Leaf Cafe: Orchestral Numbers.
 3.45—Serial Story from the Studio.
 4—G.P.O. Chimes.
 4.1—Relay from Arcadia Cafe: Orchestral numbers.
 4.55—Stock Exchange Reports, General Information and Station Announcements.
 5—G.P.O. Chimes.
 Evening Session (6.30 to 10.30).
 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories for the Children.
 7.30—Stock Exchange and Market Reports, and Station Announcements.
 7.40—Boy Scouts' Corner.
 8—G.P.O. Chimes.
 8.1—Studio Concert arranged by Miss Sylvia Thomas, I.M.A., A.M.I.A., L.A.B.
 8.30—Science and Health Lecture, arranged by Miss M. Mosca, F. H. Foulding & Co. Ltd., "The ill all fresh air is heir to" Mr. R. B. Aldersey, B.Sc., A.A.C.I.
 8.45—Studio Concert, continued.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Scottish Night, continued.
 10—G.P.O. Chimes.
 10.1—Studio Concert, continued.
 10.15—Advertiser News Service.
 10.30—Station Announcements; To-morrow's Programmes; National Anthem; Good Night.

THURSDAY, MARCH 11.

- Morning Session (11.30 a.m. to 2 p.m.)
 11.30—G.P.O. Chimes.
 11.31—Stock Duo Art and Aeolian Vocalion Recitals.
 12—G.P.O. Chimes.
 12.1—News and Cable Service.
 12.30—SCL Studio Orchestra will play: Selection; "Cello solo, fox trot, moment musical; mazurka, violin solo, waltz, instrumental trio, finale.
 1.55—S. C. Ward & Co.'s Stock Exchange Intelligence, Official Weather Synopsis and Station Announcements.
 2—G.P.O. Chimes.
 Afternoon Session. (3 to 5).
 3—G.P.O. Chimes.
 3.1—Relay from Maple Leaf Cafe: Orchestral Numbers.
 3.45—Broadcast from Studio: Serial Story.
 4—G.P.O. Chimes.
 4.1—Broadcast from Arcadia Cafe: Orchestral Numbers.
 4.55—Stock Exchange Reports, General Information and Station Announcements.
 5—G.P.O. Chimes.
 Evening Session (6.30 to 10.30).
 6.30—G.P.O. Chimes.
 6.31—Bedtime Stories for the Children.
 7.35—Lunch Talk arranged by Mr. A. M. Whittenbury.
 7.30—Stock Exchange and Market Reports, and Station Announcements.
 7.40—Talk on Poultry by Mr. A. M. Whittenbury.

- 8—G.P.O. Chimes.
 8.1—"The Justices in the Mock Court," Messrs. J. F. Gillman, J. R. McCabe, H. R. M. R. Knewaldt, B.A., LL.B., and members of S.A. Railway Institute, Literary and Debating Society.
 9—G.P.O. Chimes.
 9.1—Weather Reports.
 9.3—Programme of Classical and popular music arranged by the Studio Orchestra interspersed with vocal numbers by leading artists.
 10—G.P.O. Chimes.
 10.15—Advertiser News Service.
 10.30—Station Announcements; To-morrow's Programmes; National Anthem; Good Night.

3AR

Wavelength, 484 metres. Power, 1600 watts.

FRIDAY, MARCH 5.

- 11.00—The Government Wireless Press, received by 3AR's operator from Rugby Super Wireless Station, England; The Age News Bulletin.
 12—Time Signal; 1st Weather Report; Events of the Day.
 12.5—Musical Selections from Hoyt's De Luxe, Bourke St.
 12.30—Stock Exchange News.
 12.35—Market Reports.
 12.40—Musical Selections.
 12.55—Mail Notices; Shipping Movements.
 1—Close down.
 Afternoon Session.
 3.30—Selections by Hoyt's Premier Orchestra.
 3.45—Graphic News.
 4—Time Signal.
 4.1—2nd Weather Forecast.
 4.2—Hoyt's Premier Orchestra.
 4.30—Mr. R. Standley Haines (of Brunswick's Fry Ltd.), weekly Chatting talk to the children, "Interesting Botany."
 4.45—Hoyt's Premier Orchestra.
 5—Close down.
 Early Evening Session.
 6.43 to 7.30—The Children's Corner by Uncle Red, 1. The Children's Bedtime Story; 2. Talk on Hobbies; 3. The Children's Jig Saw Painting Competition.
 8—Time Signal.
 8.1—Racing Anticipations by "Horse Show."
 8.16—Mr. R. Standley Haines, Gardening Talk: "Perfect Lawns."
 8.25—Miss Ruby Gray (soprano).
 8.30—Madame Royer Easton (French Talk): "Etude des voyelles — le son a. — Anstree's Histories finishes."
 8.35—Mr. Fred Smyrk (bass-baritone).
 8.37—Mr. Sydney Falk (tenorist).
 9.5—Miss Margaret Draffin (soprano).
 9.10—Mr. Roy Gilbertson (baritone).
 9.15—Mr. Lionel Davies (solo pianist).
 9.22—Miss Irene Tullis (contralto).
 9.27—Mr. Walter Holder (baritone).
 9.32—Miss Fanny Lyndhurst will give a lecture "Musical Imagery" with musical illustrations.
 9.44—Mr. Sydney Falk (flautist).
 9.54—Mr. Fred Smyrk (bass-baritone).
 10—Time Signal.
 10.1—The Age News Bulletin, exclusive to 3AR.
 10.15—Hoyt's Premier Orchestra, until closing down; National Anthem.
 SATURDAY, MARCH 6.
 Morning Session.
 11.30—The British Official Government Press, received by 3AR's operator from Rugby Super Wireless Station, England; The Age News Bulletin.
 12—Time Signal; 1st Weather Forecast; Events of the day; Musical Selections.
 12.30—Stock Exchange News.
 12.35—Market Reports.

12.40—Selections from Hoyt's De Luxe, Bourke Street.

12.53—Mail Notices; Shipping Movements. Afternoon Session. Fleamington Bazaar.

1—Result of the Gibson Gramophone Stakes, 7 furlongs.

1.40—Result of Leonard Stakes, 6 furlongs.

2.05—Description while racing of the King's Plate, 2 miles.

2.40—Hoyt's Premier Orchestra, under the direction of Miss Ella Briens, relayed from the De Luxe.

3.18—Result of Kauribee Handicap, 1 1/4 miles.

3.50—Description while racing of the Autumn Steeple, 3 miles 1 furlong.

4—Time Signal.

4.1—Hoyt's Premier Orchestra.

4.30—Result of Farewell Handicap, 1 mile.

4.35—Hoyt's Premier Orchestra.

4.55—The Evening Amusement Guide.

5—Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Peter, 1, The Bedtime Story; 2, Talk on Bobbies; 3, The Children's Big Saw Painting Competition.

8—Time Signal; Spotting Results; Local News.

8.15—Dance Night. The Ethnic Dance Orchestra, under the direction of Mr. George Lewis, relayed from the Maizen De Luxe, Broadway, St. Kilda.

9.30—Week-End Traveller's Information. Supplied by the Victorian Railway's Department and Transport Board.

9.50—The Maizen De Luxe Dance Orchestra.

11—National Anthem and Close down.

SUNDAY, MARCH 7.

Morning Session.

10.30—The Bells from St. James Old Cathedral.

11—Service from the Collins St. Independent Church. Preacher: Rev. George H. Gosson. Afternoon Session.

3—Time Signal. Concert from the Studio, 4—Close down.

Evening Session.

6.30—The Bells from St. James Old Cathedral.

7—Service from the Church of Christ, Swanson's Preacher: Mr. J. E. Shipway.

8.30—From the Studio. Mr. Donald McDonald will speak regarding his forthcoming trip to America to investigate broadcasting.

9—The Eclipse Grand Orchestra, relayed from the Ellipse Theatre, Port Melbourne, under the direction of Mr. George Henry.

9.50—The Age News Bulletin, exclusive to 3AR.

10.55—National Anthem and Close down.

MONDAY, MARCH 8.

Morning Session.

11.30—The British Government Wireless Press, received by 3AR's operator from Rugby Super Station, England; The Age News Bulletin.

12—Time Signal; 1st Weather Forecast; Events at the day.

12.5—Musical Selections from Hoyt's De Luxe, relayed from Bourke Street.

12.50—Stock Exchange News.

12.55—Market Reports.

12.55—Musical Selections.

12.55—Mail Notices; Shipping News.

1—Close down.

Afternoon Session.

Richmond Trouting Club.

Results immediately after dark race.

2.30—Selections by Hoyt's Premier Orchestra, under the direction of Miss Ella Briens, relayed from the De Luxe, Bourke Street.

4.15—Graphic News.

4.35—Time Signal.

4.1—2nd Weather Forecast.

4.5—Hoyt's Premier Orchestra.

4.55—The Evening Amusement Guide.

5—Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Peter, 1, The Bedtime Story; 2, Talk on Bobbies; 3, The Children's Big Saw Painting Competition.

7.50—Transmission from the Collins St. Inde-

pendent Church. Organ Recital, by Mr. 11—Devils.

7.45—The Public Demonstration of the British and Foreign Bible Society. The Chair will be taken by His Excellency the Governor-General, and Sir Isaac, B.C., C.M.G., D.S.O. Speakers: The Rev. A. T. Thompson, M.A., B.D., Commonwealth Secretary B.F.B.S. and Rev. C. Maxwell Chesham, B.A. of status. Full Musical items by Miss Dorothy Humphries, Miss Wynne Mackay; Mr. Ernest Sage, Mr. Bernard Thomas.

10.30 approx. — The Age News Bulletin, exclusive to 3AR. At conclusion of concert, selections by Hoyt's Premier Orchestra until closing down. National Anthem.

TUESDAY, MARCH 9.

Morning Session.

11.30—The British Government Wireless Press, received by 3AR's operator, from Rugby Super Station, England; The Age News Bulletin.

12—Time Signal; 1st Weather Forecast; Events of the Day.

12.5—Musical Selections.

12.50—Stock Exchange News.

12.55—Market Reports.

12.40—Selections from Hoyt's De Luxe, relayed from Bourke Street.

12.55—Mail Notices; Shipping Movements.

1—Close down.

Afternoon Session.

3.30—Hoyt's Premier Orchestra, relayed from the De Luxe, Bourke Street.

3.45—Graphic News.

4—Time Signal.

4.1—2nd Weather Forecast.

4.5—Hoyt's Premier Orchestra.

4.40—Result of Nursery Handicap.

4.55—The Evening Amusement Guide.

5—Close down.

Early Evening Session.

6.45 to 7.30 The Children's Corner by Uncle Peter, 1, The Children's Corner; 2, Talk on Bobbies; 3, The Children's Big Saw Painting Competition.

8—Time Signal.

8.1—Mr. Ernest Bond, (Australia), will speak on "The Prevalence of the New Moon."

8.15—Miss Gwen Mattingley (solo pianist).

8.22—Miss Hazel White (soprano).

8.28—Miss Eva Kitchner (soprano).

8.36—Miss Valda Bland (violinist).

8.44—Miss Edith Harris (soprano).

8.50—Mr. Kenneth Sutherland (baritone).

8.57—Miss Jean Jamieson (soprano).

9.4—Mr. Wilfred Kane (tenor).

9.11—Miss Elsie Mitchell (soprano).

9.18—Miss Valda Bland (violinist).

9.25—Miss Isabel Harris (soprano).

9.32—Miss Gwen Mattingley (solo pianist).

9.39—Miss Hazel White (soprano).

9.46—Miss Eva Kitchner (soprano).

9.53—Mr. Kenneth Sutherland (baritone).

10—Time Signal.

10.1—The Age News Bulletin.

10.15—Hoyt's Premier Orchestra relayed from Bourke Street, until closing down; National Anthem.

WEDNESDAY, MARCH 10.

Morning Session.

11.30—The British Government Wireless Press, received by 3AR's operator, from Rugby Super Station, England; The Age News Bulletin.

12—Time Signal.

12.1—2nd Weather Forecast.

12.2—Events of the Day.

12.5—Musical Selections.

12.50—Stock Exchange News.

12.55—Market Reports.

12.40—Selections from Hoyt's De Luxe, relayed from Bourke Street.

12.55—Mail Notices, Shipping Movements.

1—Close down.

Afternoon Session.

Sandown Park Races.

2.15—Result of Trial Weight, 1 mile.

2.30—Hoyt's Premier Orchestra, relayed from Bourke Street, under the direction of Miss Ella Briens.

2.45—Result of Bush Steeple, about 2 1/4 miles.

3.15—Result of Sandown Plate, 6 furlongs.

3.45—Result of Sandown Park Handicap, 1 mile.

3.50—Graphic News.

4—Time Signal.

4.1—2nd Weather Forecast.

4.5—Hoyt's Premier Orchestra.

4.15—Result of Sandown Purse, 1 mile.

4.20—Hoyt's Premier Orchestra.

4.45—Result of Jumpers Flat Race, 1 1/4 miles.

5—Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Peter, 1, The Bedtime Story; 2, Talk on Bobbies; 3, The Children's Big Saw Painting Competition.

8—Time Signal.

8.1—Mr. Arthur Chester, Mus. Bac. will talk on "Composers" (1st Series).

8.15—Miss Elsie Bernard (soprano).

8.22—The Cecilia Trio (instrumental).

8.30—Mr. J. Fraser, Talk on Swimming.

8.43—Miss Marian Jolly (soprano).

8.52—Mr. J. G. Croft (baritone).

9.2—Miss Holly Haines (solo solo).

9.9—Miss Etta Bernard (soprano).

9.16—Mr. Les McEwan (tenor).

9.23—Mr. Sturrock (violin).

9.30—Miss Marian Jolly (soprano).

9.37—J. G. Croft (baritone).

9.45—The Cecilia Trio (instrumental).

9.53—Mr. Les McEwan (tenor).

Madame Sartory, Accompanist.

10—Time Signal.

10.1—The Age News Bulletin.

10.10—Hoyt's Premier Orchestra, relayed from Bourke Street, until closing down; National Anthem.

THURSDAY, MARCH 11.

Morning Session.

11.30—The British Government Wireless Press, received by 3AR's operator from Rugby Super Wireless Station, England; The Age News Bulletin.

12—Time Signal; 1st Weather Forecast; Events of the Day.

12.5—Musical Selections, from Hoyt's De Luxe, Bourke Street.

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12.30—Stock Exchange News.

12.35—Market Report. By Mr. Brien, relayed from the De Luxe, Bourke Street.

12.40—Musical selections.

12.55—Mail Notices: Shipping Movements.

1—Close down.

Afternoon Session.

2.30—Hoyt's Premier Orchestra, under the direction of Miss Ella Brien, relayed from the De Luxe, Bourke Street.

3.45—Graphic News.

4—Time Signal.

4.15—2nd Weather Forecast.

4.50—Special Pig and Calf Report, supplied by Messrs. McPhail, Anderson & Co.

4.55—The Evening Amusement Guide.

5—Close down.

Early Evening Session.

6.45 to 7.30—The Children's Corner by Uncle Peter. 1, The Bedtime Story; 2, Talk on Hobbies; 3, The Children's Jig Saw Painting Competition.

3—Time Signal.

8.1—Lecturette "Care of Infants."

8.15—Hoyt's Premier Orchestra.

8.30—Mr. Ewan McKinnon, B.Sc., B.A., Investigator of Science, will lecture on: The Milk Scurf; The Truth; No need for a Scurf, or the Position Scientifically reviewed.

9—Dance Night. The Rhythmic Dance Orchestra relayed from the Maison De Luxe, Broadway, St. Kilda, under the direction of Mr. George Lewis.

9.30—Hoyt's Premier Orchestra, relayed from the De Luxe, Bourke Street.

10—Time Signal.

10.1—The Age News Bulletin, exclusive to J.A.R.

10.10—The Rhythmic Dance Orchestra, relayed from the Maison De Luxe, Broadway, St. Kilda, under the direction of Mr. George Lewis, until 11 o'clock; National Anthem and Close down.

3LO

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FRIDAY, MARCH 5.

Midday Session, 12 to 2.

12—Time signal; British official wireless news and Rugby; Reuter's and the Australian Press Association cables; "Argus" and "Herald" news services' shipping intelligence.

12.45—Stock Exchange information.

12.50—Meteorological information; weather forecast for Victoria, Tasmania, S. Australia, and N.S.W.; ocean forecast; river reports.

1—Time signal.

2.1—The Studio Orchestra, Rosamunde (Schubert).

2.10—Dorothy Roxburgh, viola solo, Sonata No. 2, D Major (Bach).

2.20—Jack Dunne, now playing in Daddy Long Legs (by permission of J. C. Williamson Ltd.), I Sometimes Wonder (Finden), Just a-wearyin' for You (Bond).

2.27—The Studio Orchestra, Walks and Fairy Dances (Grieg).

2.34—Thama Tierman, cello solo, Grey Days (Johnston).

2.39—Jack Dunne, baritone, Sleepy Hollow Tune, Ye San (Finden).

2.46—The Studio Orchestra, Miss Hook of Holland (Rabens).

2—Time signal. Close down.

Afternoon Session, 3 to 5.

3—The Studio Orchestra, Titus (Mozart).

3.6—Walter Smith, cornet solo, In Old Madrid (Trotter).

3.15—The Studio Orchestra, Peter Pan (Henderson).

3.20—Marie Bremner, soprano, by permission of J. C. Williamson Ltd., Messengers (Brube), Down at the end of the Garden (Brube).

3.27—The Studio Orchestra, Spanish Dance (Kohfeld).

3.34—Agnes Fortune, piano solo, The Ruelle (Mendelssohn).

3.40—Au Fait, of Buckley and Nunn Ltd, fashion talk.

3.55—Howard Edie in a Shakespearean Recital, King John, act 4, scene 1.

4.10—The Studio Orchestra, The Triumphant Right (Lovel).

4.15—Marie Bremner, soprano, The Early Morning (Pool), Allah (Chadwick).

4.25—Bessie Gaudson, violin solo, Sonata No. 1 (Brahms).

4.35—The Studio Orchestra, Der Piergunde Hollande (Wagner).

4.45—"Argus" and "Herald" news; Reuter's and the Australian Press Association cables.

6—Time signal. Close down.

Evening Session, 6 to 7.15.

6—Children's Hour. Stories by Billy Bunny; Nursery Rhymes, The Magical Trip, Houses of the Eagle.

6.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.

6.53—Weather synopsis; shipping movements.

6.57—Stock Exchange information.

7.2—Fish market reports by J. R. Borrett Ltd.

7.4—Fruit market reports by the State Fruit Advisory Board.

7.6—Market reports by the Victorian Producers' Co-operative Co. Ltd.

Night Session, 7.20 to 11.

7.15—Mr. R. H. Wilmot, Everyday Chemistry.

7.30—Mr. M. Chamberlain, The Intellectual Value of Secondary Industries, under the auspices of the Develop Australia League.

7.4—Mascotte Raletton, now playing the part of Tili in Lilac Time, will speak from her dressing-room at the Theatre Royal, by permission of J. C. Williamson Ltd.

8—The Collingwood Citizens' Band, selection, Memories of Wallace.

8.12—James Hifford, bass, Uncle Caldiott, Rip Van Winkle (Carroll).

8.19—The Collingwood Citizens' Band, Waltz, Night of Gladness.

8.31—Cornet solo, J. Armour, Lizzie.

8.39—Vera Savage, soprano, Two Eyes of Grey, Oh Promise May.

8.45—W. Armstrong, concertina, A Musical Zigzag, The Irish Washer Woman.

9.1—Mr. R. A. Brodnikov, Famous Men of the Ages.

9.16—Rinaldo Torre, baritone, Remigite Barcelona (MaTe), Pari Siamo (Verdi).

9.23—The Collingwood Citizens' Band, fox trot, In Sussey Ilavannah, O Katherina.

9.30—Howard Edie, recital, The Story of the Bell.

9.49—The Collingwood Citizens' Band, one step, I Miss my Swiss, Ukulele Lady.

10—"Argus" and "Herald" news.

10.6—James Hifford, bass, Jolly Bachelor (Morgan), A Soldier's Toast (Dix).

10.12—W. Armstrong, concertina recital, Imitation of Organ Grinder, Col. Boney March, Reminiscences of Shearling Sheds, Scotch Reels, The Grand Day of York.

10.26—Vera Savage, soprano, Idle Words, Fleurette.

10.33—The Collingwood Citizens' Band.

fox trot, Billy's Cow Shed, Yearning, 10.42—Rinaldo Torre, baritone, Farted (Trot), Adieu (Dix).

10.50—The Collingwood Citizens' Band, hymn, The Church's One Foundation, Silver Trumpets.

11—God save the King.

SATURDAY, MARCH 6.

Midday Session, 12 to 2.

12—Time signal; British official wireless news from Rugby; Reuter's and the Australian Press Association cables; "Argus" and "Herald" news services' shipping intelligence.

12.45—Stock Exchange information.

12.50—Meteorological information; weather forecast for Victoria, Tasmania, N.S.W., and S. Australia; ocean forecast; river reports.

1—Time signal; result of the Gibson Carmichael Stakes from the V.R.O. Meeting.

1.3—The Studio Orchestra, Raymond (Thomas), Sweet Baby Mine (Frost).

1.16—Jack O'Hagan, baritone, I Miss my Swiss, Let Me Linger Longer, 1.23—The Studio Orchestra, Indian Summer (Lake).

1.33—Walter Smith, cornet solo, Robin Adair (Hartmann).

1.40—Result of the Leonard Stakes.

1.41—Jack O'Hagan, baritone, When I Dream of the Last Waltz, Picannony Blues.

1.47—The Studio Orchestra, Yes, Sir! That's my Baby (Donaldson).

2—Time signal. Close down.

2.55—Result of the King's Plate, 3—Time signal.

3.1—The Rivoli Dance Band, Peter Pan, Seventeen.

3.15—Result of the Northcote Handicap.

3.18—The Rivoli Dance Band, Ukulele Lady, Pal of my Cradle Days.

3.28—Violet Jackson, soprano, Comin' (to) the Eye, Bonnie Mary of Argyle.

3.35—The Rivoli Dance Band, Show me the Way to go Home, I Miss my Swiss.

3.48—Violet Jackson, soprano, My Ships (Sanderson), Four Leaf Clover (Wilbey).

3.55—Result of the Autumn Steeple.

3.58—The Rivoli Dance Band, Semmole, I'd rather Fox Trot than Waltz.

4.18—The Rivoli Dance Band, Yes, Sir! That's my Baby, Yearning.

4.30—Result of the Farewell Handicap.

4.33—The Rivoli Dance Band, Say! Who is that Baby Doll.

4.40—The Rivoli Dance Band, Let it Rain.

4.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.

5—Time signal. Close down.

Evening Session, 6 to 7.15.

6—Children's Hour. Stories by Mary Gumleaf; Poem, The Nest a Thrush Built, The Lost Princess, Kit's Fortune.

6.15—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.

6.53—Weather synopsis; shipping movements.

6.57—Stock Exchange information.

7.2—Fish market reports by J. R. Borrett Ltd.

7.4—Fruit market reports by the State Fruit Advisory Board.

7.6—Market reports by the Victorian Producers' Co-operative Co. Ltd.

7.8—Time signal.

7.20—Mr. R. Rawson, Esperanto.

7.40—Mr. C. R. Long, M.A., Golden Point (Ballarat), Forest Creek (Castlemaine), 1851

- 8.—The Studio Orchestra, On the Mountains (Graig).
- 8.15—Alan Mitchell, tenor, The Mountains of Mourne (Collisson). By the Blue Alsatian Mountains (Adams).
- 8.22—Dorothy Roxburgh, viola solo, In the Hall of the Mountain King.
- 8.30—Jack O'Hagan, baritone, When the One You Love Loves You, Pal of my Cradle Days.
- 8.40—The Station Trio, Mountain Pieces (Blachow).
- 8.50—Thelma Neill, soprano, The Not Mender (Clarke), Over the Dreamland Sea (Phillips).
- 8.57—Agnes Fortune, piano solo, Sea Pieces (Blachow).
- 9.6—Jack O'Hagan, baritone, After the Dawn, I'm Going to Hamp my Blues.
- 9.12—The Studio Orchestra, Calm Sea.
- 9.22—Mr. J. Hewlett Ross, the Australian Poet and Writer—Alexander Sutherland.
- 9.42—The Studio Orchestra, By the Lake of Geneva.
- 9.48—Ella Riddell, contralto, Killarney, Loch Lomond.
- 9.59—Tasma Tierman, 'cello solo, The Swan (St. Saens).
- 10.5—'Argus' and 'Herald' news services.
- 10.10—Alan Mitchell, tenor, Song of the Volga Boatman.
- 10.13—Walter Smith, cornet solo, On the River's Brink.
- 10.22—Ella Riddell, contralto, Deon the Bury.
- 10.23—Ella Riddell, contralto, In Sheltered Vale (d'Alquen).
- 10.26—Bessie Gaunson, violin solo, The Deluge (St. Saens).
- 10.31—Thelma Neill, soprano, Down the Vale, in the Valley of Laughter.
- 10.33—The Studio Orchestra, Sahara.
- 10.45—Alan Mitchell, tenor, a desert love song, Will Await Thee.
- 10.48—The Studio Orchestra, Desert Suite (Grawm).
- 11.—God Save the King.

SUNDAY, MARCH 7.

- Morning Session, 11 to 12.15.
- 1.—Service from the Wesley Church Central Mission, conducted by Rev. J. H. Cain.
- Afternoon Session, 3 to 4.30.
- 2.—Service from the Wesley Church Central Mission, Pleasant Sunday Afternoon Service; chairman, Rev. S. J. Hoban.
- Evening Session, 6 to 8.45.
- 4.—Children's Hour. Stories by Billy Bunny; Bible Battles and other stories.
- 6.45—Close down.
- Night Session, 7 to 11.
- 7.—Service from St. Paul's Cathedral. By the Studio.
- 8.40—Harold Rodgers, pianist, Romance (Wagner-Liszt).
- 8.47—Jack Balston, baritone, by permission of J. C. Williamson Ltd.
- 8.57—Harriet Bennett, soprano, by permission of J. C. Williamson Ltd., Charity (Hageman), My Love is a Mulstee (Di Nagero).
- 9.1.—C. R. Chugg, flautist, Birds in the Woods.
- 9.35—Jack Balston, baritone.
- 9.40—Mabel Gibson, mezzo-soprano, I Heard You Go By (Wood), Nook by the Sea (MacKenzie).

- 9.47—'Argus' and 'Herald' news services.
- 9.50—Harold Rodgers, pianist, Scene du Bollet (Taylor).
- 10.—God Save the King.

MONDAY, MARCH 8.

- Midday Session, 12 to 2.
- 12.—Time signal; British official wireless news from Rugby; Reuter's and the Australian Press Association cables; 'Argus' and 'Herald' news services; shipping intelligence.
- 12.45—Stock Exchange information.
- 12.50—Meteorological information; weather forecast for Victoria, Tasmania, S. Australia, and N.S.W.; ocean forecast; river reports.
- 1.—Time signal.
- 1.15.—The Studio Orchestra, overture, 1st Movement, Jupiter Symphony (Mozart).
- 1.17—Bessie Gaunson, violin solo, Menuetto (Beethoven).
- 1.25—Beatrice Kendrick, contralto, by permission of G. O. Williamson Ltd., The Birds Go North Again (Willyby), Nature's Lyma (Beethoven).
- 1.32—The Studio Orchestra, In a Persian Melod (Kretzler).
- 1.39—Beatrice Kendrick, contralto, Drift Down, Drift Down (Ronald), Light My Light.
- 1.36—Instrumental Trio, Larghetto.
- 1.4.—The Studio Orchestra, Night Song (William).
- 2.—Time signal. Close down.
- Results of the Richmond Trots will be given as they come to hand.
- Afternoon Session, 3 to 5.
- 3.—Time signal.
- 3.1.—The Studio Orchestra, selection, Old Folks at Home and In Foreign Lands (Roberts).
- 3.11—Dorothy Roxburgh, viola solo, Adieu and Serenade (Tor. Aulin).
- 3.17—Beatrice Lasker, soprano, Nina (Pergolesi), Si meae vers (Hahn).
- 3.25—Instrumental Trio, Flower Song—Carmen (Bizet).
- 3.30—Tasma Tierman, 'cello solo, Gondallera (Crowell).
- 3.37—Miss Flora Fell, domestic economy.
- 3.52.—The Studio Orchestra, The Heavens Are Telling (Haydn).
- 4.—Jack O'Hagan, baritone, When I Dream of the Last Waltz with You, I Want You to Want Me.
- 4.7.—The Studio Orchestra, Serenade (White).
- 4.14—Eddie Lasker, soprano, Invitation (Barry), Fairy Lullaby (Quilter).
- 4.21.—The Studio Orchestra, Sleepy Time Gai (Whiting).
- 4.26—Walter Smith, cornet solo, O Summer Night (Benzetti).
- 4.33—Jack O'Hagan, baritone, Five Foot Two, I'm Tired of Everything But You.
- 4.4.—The Studio Orchestra Meditation (Tachakovsky).
- 4.45—'Argus' and 'Herald' news services; Reuter's and the Australian Press Association cables.
- 5.—Time signal. Close down.
- Results of the Richmond Trots will be given as they come to hand.
- Evening Session, 6 to 7.15.
- 6.—Children's Hour. Stories by Billy Bunny; Nursery Rhymes, The Magical Trip, Houses of the Eagle.
- 6.45—'Argus' and 'Herald' news services; Reuter's and the Australian Press Association cables.
- 6.53—Weather synopsis; shipping movements.
- 6.57—Stock Exchange information.
- 7.2.—Fish market reports by J. B. Barrett Ltd.

- 7.—Fruit market reports by the State Fruit Advisory Board.
- 7.3.—Market reports by the Victorian Producers' Co-operative Co. Ltd.
- 7.40—Night Session, 7.40 to 11.
- 7.40—Mr. C. R. Long, M.A., Australian Prose Literature—Our Early News-papers.
- 8.—Robert Koors and the Tivoli Orchestra, and the first half of the Tivoli programme, by permission of Musgrove's Theatres Ltd.
- 9.10—Harold Rodgers, organist, Mendelssohn Recital, Spring Song, Duet, Fifth Song.
- 9.20—Rupert Hazell, the famous English comedian, speaking from his dressing-room at the Tivoli Theatre, by permission of Musgrove's Theatres Ltd.
- 9.30—Professor Pietro Sarcoli, violin recital, Largo (Veracini-Corti), Andantino (Mozart-Kreisler), Minuet (Porpora-Kreisler).
- 9.45—Norman Bradshaw, tenor, All in a Lilly White (Gow (Martin), All Souls' Day (Lawson).
- 9.52—Louise Moorhead and William Tansh in 'A Restaurant Episode.'
- 10.12—'Argus' and 'Herald' news.
- 10.18—Professor Pietro Sarcoli, violin recital, Moment Musical (Schubert-Kreisler), Londouerry Air (Kreisler), Liebesfrond (Kreisler).
- 10.33—Norman Bradshaw, tenor, The Sea Giver (Willyby), Before You Came (Wilson).
- 10.40—Harold Rodgers, organ recital—Handel, Overture—Occasional Oratorio, Hallelujah Chorus, Overture Messiah.
- 11.—God Save the King.

TUESDAY, MARCH 9.

- Midday Session, 12 to 2.
- 12.—Time signal; British official wireless news from Rugby; Reuter's and the Australian Press Association cables; 'Argus' and 'Herald' news services; shipping intelligence.
- 12.45—Stock Exchange information.
- 12.50—Meteorological information; weather forecast for Victoria, Tasmania, S. Australia, and N.S.W.; ocean forecast; river reports.
- 1.—Time signal.
- 1.1.—The Studio Orchestra, overture, Euryanthe (von Weber).
- 1.9—Fox trot, Picanyiny Blues (McKiernan).
- 1.14—Marie Bremner, soprano, by permission of J. C. Williamson Ltd., Song of Florina (Godard), The Cuckoo (Lehmann).
- 1.21.—The Studio Orchestra, Dreamland Shadows (Dozel).
- 1.24—Agnes Fortune, piano solo, 2nd Mazurka (Godard).
- 1.31—Marie Bremner, soprano, Allah (Chadwick), Messengers (Rabe).
- 1.35—Walter Smith, cornet solo, Tranquility (Hugg).
- 1.46.—The Studio Orchestra, Viennese Melody (Kreisler).
- 2.—Time signal. Close down.
- Afternoon Session, 3 to 5.
- 3.—Time signal.
- 3.1.—The Studio Orchestra, selection, The Street Singer (Fraser-Simson).
- 3.11—Instrumental Trio, No. 1 1st Movement (Mozart).
- 3.16—Eddie Lasker, contralto, A Soft Day (Stanford), To You (Rodegobach).
- 3.23.—The Studio Orchestra, Boheme (Praelni).
- 3.32—Matron Morland, infant welfare.
- 3.45.—The Studio Orchestra, A Day in May (Prinl).
- 3.50—Kenneth Impett, baritone, The

BURGESS—"ASK ANY RADIO ENGINEER"—BATTERIES

- Star (Rogers), The Wedding of Sara Lee (Marica), Mr. Eric Fox, pianist.
- 3.57—The Studio Orchestra, Hamadan (Daer).
- 4.2—Eddie Lasker, contralto, Cherry Rino (Home), Cense Your Fuming (Gay).
- 4.9—Thema Tiersma, 'cello solo, La Cinquantaine (Marie).
- 4.16—Kenneth Impett, baritone, St. Nicholas' Day in the Morning (Martini), Spring's a Lovable Lady (Elliot).
- 4.23—The Studio Orchestra, Elsa's Dream (Wagner).
- 4.30—Au Pair of Buckley and Nunn Ltd., Fashion talk.
- 4.40—The Studio Orchestra, Humoresko (Boroni).
- 4.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.
- 5—Time signal. Close down.
- 5.5—Result of the Bourke Handicap.
- 6—Evening Session, 6 to 7.15.
- 6—Children's Hour, Stories by Mary Gimblet; Poems, I Like Boys the Best, Growing Up; stories, Serial Nursery Rhymes, How Pixie Found Her Mother, Uncle Bomas the Parrot.
- 6.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.
- 6.53—Weather synopsis; shipping movements.
- 6.58—Stock Exchange information.
- 7.2—Fish market reports by J. R. Borrett Ltd.
- 7.1—Fruit market reports by the State Fruit Advisory Board.
- 7.6—Market reports by the Victorian Producers' Co-operative Co. Ltd.
- 7.10—Night Session, 7.20 to 11.
- 7.20—Under the auspices of the New Settlers' League, Mr. F. H. Dodge, Sport in the Country.
- 7.40—Mr. O. de B. Fochander, Lecturer Political Economy and European History, University of Melbourne, Foreign Investments—some economic and political considerations. University Extension Lecture.
- 8—Agnes Fortune, piano solo, Improvisata, Op. 99 (Schubert).
- 8.7—John Hobbs, baritone, The Blue Man of Minch (Bantock), Tavern Song (Fisher).
- 8.14—Agnes Fortune, piano solo, Military Polonaise (Chopin).
- 8.18—John Hobbs, baritone, Bulls Won't Bellow (Horkins), The Carpet (Sanderson).
- 8.26—"Argus" and "Herald" news services; announcements.
- 8.30—Concert transmitted from the Returned Soldiers' New Memorial Hall, Tatura; Chairman's introduction and welcome to Governor-General; Governor-General's reply; selection, Tatura Orchestra; Trio, A Regular Royal Queen (Sullivan), Miss Thelma Neill, Miss Eileen Pascoe-Webbe, Mr. Joseph Foster; song, The Floral Dance (Moss), Mr. Joseph Foster; Miss Eileen Pascoe-Webbe will entertain; song, Here's to Love (Rubens), Thelma Neill; humorous monologues with Mr. Fred Champion; selections, Tatura Orchestra; duet, At Love's Beguiling (Lehmann), Miss Thelma Neill and Mr. Joseph Foster; Miss Eileen Pascoe-Webbe in humorous monologues; song, The Call of Maytime (Brake), Miss Thelma Neill; song, On the Road to Mandalay (Spencer), Mr. Joseph Foster; duet, Farewell to Summer (Johnston), Miss Eileen Pascoe-Webbe and Miss Thelma Neill; vote of thanks to Governor-General; Mr. Fred Champion in humorous monologues; Mr. Eric Fox, pianist.
- 11—Time signal. Close down.
- WEDNESDAY, MARCH 10.
- 12—Midday Session, 12 to 2.
- 12—Time signal; British official wireless news from Rugby; Reuter's and the Australian Press Association cables; "Argus" and "Herald" news services; shipping intelligence.
- 12.25—Lenten midday address transmitted from St. Paul's, Mr. John Barr.
- 12.55—Stock Exchange information.
- 1—Time signal; meteorological information; weather forecast for Victoria, Tasmania, S. Australia, and N.S.W.; ocean forecast; river reports.
- 1.10—The Studio Orchestra: The Pearl of Kona (Rosner).
- 1.18—Beatrice Kendrick, contralto; Prelude (Ronald), The Winds are Calling (Ronald).
- 1.25—The Studio Orchestra, Fox Toll; Poemang Home.
- 1.30—Agnes Fortune, piano solo; Wedding Day (Grieg).
- 1.38—Beatrice Kendrick, contralto; Arise O Sun (Creske Day), Caller Heerin.
- 1.45—The Studio Orchestra: Ballet Egyptian.
- 1.55—Instrumental Trio; Prelude (Bachman-imoff).
- 2—Time Signal; Close down.
- 2.15—Result of the Trial Welter from the Sandown Park Meeting.
- 2.45—Result of the Bush Steerle from the Sandown Park Meeting.
- Afternoon Session, 3 to 5.
- 3—Time Signal.
- 3.1—The Studio Orchestra: On the Steppes of Central Asia (Boroni).
- 3.9—Miss S. V. Parker, in talks of other lands, General Introduction. Life in Ceylon from a resident, not a tourist point of view.
- 3.24—Beatrice Kendrick, contralto; The Sandown Park Meeting.
- 3.25—The Studio Orchestra: You Forget to Remember (Berlin).
- 3.30—Semolina (Kings).
- 3.34—Sata Furell, "bushcraft."
- 3.50—Result of the Sandown Park Handicap from the Sandown Meeting.
- 3.51—The Studio Orchestra: In Sunny Spain (Elliot).
- 3.55—Frances Lea, soprano; Shamshere, soprano (France), Desire (Parker).
- 4.7—The Studio Orchestra: Molemicia Girl (Balle).
- 4.15—Result of the Sandown Purse from the Sandown Park Meeting.
- 4.18—Thema Tiersma, cello solo; Franseschies Lied (Moffat).
- 4.23—Frances Lea, soprano; They Say (Evans), When I'm Home Again (Wood).
- 4.30—Gunnison, violin solo; Sonata in E (Handel).
- 4.40—The Studio Orchestra: Moments Capriccioso (Weber).
- 4.45—"Argus" and "Herald" News; Sporting results; Reuter's and the Australian Press Association Cables.
- 5—Time Signal; Close down.
- Evening Session, 6 to 7.15.
- 6—Children's Hour, Stories by Wal Jaly Bill; The Court of the Chinese Emperor, The Coming of Tan San.
- 6.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.
- 6.53—Weather synopsis; shipping movements.
- 6.57—Stock Exchange information.
- 7.2—Fish market reports by J. R. Borrett Ltd.
- 7.4—Fruit market reports by the State Fruit Advisory Board.
- 7.6—Market reports by the Victorian Producers' Co-operative Co. Ltd.
- 7.10—Night Session, 7.20 to 11.
- 7.20—Mr. S. P. Jones, Assistant Engineer Signals and Telegraphs, Victorian Railways, "Railway Crossings Problems."
- 7.40—Mr. A. E. McInken, Librarian City of Perth, "Talks on Great Writers—Charles Lamb."
- 8—University Symphony Orchestra in conjunction with The Lady Northcote Permanent Orchestra Trust Fund. Conducted by Professor Bernard Heinic; Concert Grosses for 2 Pianofortes and Orchestra, in B minor (Handel); Symphony in D minor (Branck); Australian Rhapsody (Date); Pyraque (Ravel); Land of Mountain and Flood (McGinn); Vocal, Madame Caruso Pascoa; 10.15—"Argus" and "Herald" News Services. 10.23—Harold Rodgers, organist; Cetus Antrim (Rossini); Woodland Rev.
- 10.30—Frances Lea, soprano; When shadows fall (Kenley); A once told song (Ronald), 10.40—Harold Rodgers, organist; Andante in F (Merkel), Andante in C (Baptiste).
- 10.47—Frances Lea, soprano; Balls of Evening (Elliot), My Mary Sweet and Brown (Kings).
- 10.54—Harold Rodgers, organist; Ballet Music, No. 1 Rosalind (Schubert), Entracte (Schubert).
- 11—God Save the King.
- THURSDAY, MARCH 11.
- 12—Midday Session, 12 to 2.
- 12—Time signal; British official wireless news from Rugby; Reuter's and the Australian Press Association cables; "Argus" and "Herald" news services; shipping intelligence.
- 12.45—Stock Exchange information.
- 12.50—Meteorological information; weather forecast for Victoria, Tasmania, S. Australia, and N.S.W.; ocean forecast; river reports.
- 1—Time signal.
- 1.1—The Studio Orchestra: The Lost Continent (Safirkan).
- 1.11—Dorothy Roxburgh, viola solo; Berceuse (Koenig).
- 1.16—Frances Lotie, contralto, My Lady 'O'er the Sea (Lewins), The Little Brown Brother (Battier).
- 1.23—The Studio Orchestra: Serenade Espagnole (Kammerfist).
- 1.30—Peggy Linn, contralto; My Joan (Wood), Guess you know (Brake).
- 1.37—Instrumental Trio, Memories (Caldman).
- 1.42—The Studio Orchestra, Prometheus (Beethoven).
- 2—Time Signal; Close down.
- 2—Time Afternoon Session, 3 to 5.45.
- 3—Time Signal.
- 3.1—The Studio Orchestra, Selection: Il Traviatore (Verdi).
- 3.20—Jack O'Hagan, baritone; Who wouldn't love you; Mighty Luce.
- 3.27—Quartet for pianoforte and strings, 1st Movement (Schumann).
- 3.37—Louise Morehead and William Talish in "The Blue Man."
- 3.57—The Studio Orchestra, selection: Magic Flute (Mozart).
- 4.7—Bessie Gunnison, violin solo; Romance (Wieniawski).
- 4.15—Jack O'Hagan, baritone; I'm an Aussie girl in you, My Sweet Australian Dimple girl.
- 4.22—The Studio Orchestra: Tum Jones (German).
- 4.37—Ralph Smith, cello solo; Wendourne (Code).
- 4.45—"Argus" and "Herald" News; Sporting results; Reuter's and the Australian Press Association Cables.
- 5—Concert transmitted from St. Paul's Cathedral.
- 5.20—Time Signal; Close down.
- Evening Session, 6 to 7.15.
- 6—Children's Hour, Stories by Mary Gimblet; Ten True Friends, Birthday Cake, The Babe who went to Bed First, The Leaf Boy, The Panama Canal.
- 6.45—"Argus" and "Herald" news services; Reuter's and the Australian Press Association cables.
- 6.53—Weather synopsis; shipping movements.

BURGESS—"THE CONSTANT SATISFACTION ASSURED"—BATTERIES

- 6.57—Stock Exchange information.
- 7.2—Pish market reports by J. K. Borrett Ltd.
- 7.5—Fruit market reports by the State Fruit Advisory Board.
- 7.6—Market reports by the Victorian Producers' Co-operative Co. Ltd. Night Session (7.40 to 11.)
- 7.20—Madame S. Soward, French Talk.
- 7.40—Wesley C. Peck, "Chemistry, Animal Orthography."
- 8—Transmission from Jointment Yards, Victorian Railways: Description of an Electric Train including functions of all controls, and take listeners on an imaginary trip in Drivers Cabin from which the whole operation of starting, driving and stopping the train is described.
- 8.30—The League Concert Orchestra: Semitola King, Albany Board (Henderson).
- 8.38—Jessie Smith, contralto: Somewhere a Voice is Calling, Might's like a rose.
- 8.45—The League Concert Orchestra: You Forget to Remember (Boilin), If the rest of the world don't want you (Dreyer).
- 8.53—Laurie Barnett, violinist: She won't, She won't, Lulu.
- 9—The League Concert Orchestra: The world is waiting for the Sunrise (Schiz), If you knew Suzie (de Sylva).
- 9.5—Mr. Leslie Branning, "Cadenzaing Notes."
- 9.23—Norman Bradshaw, tenor: 'Tis the Day (Leucavalli), Bell Marquise (Roll).
- 9.30—The League Concert Orchestra: The Collegiate (Bons), O Katharina (Fall).
- 9.35—Jessie Smith, contralto: Tumble down Nook, If I might only come to you.
- 9.42—The League Concert Orchestra: Lazy (Boilin), Don't Bring Lulu (Henderson).
- 9.49—Jack O'Hagan, baritone: What a Dream of the Last Waltz, Sitting on top of the world.
- 9.55—"Argus" and "Herald" News Services.
- 10—The League Concert Orchestra: Close your Eyes (Vincent), Mississippi Rippler (Earl).
- 10.8—Laurie Burnett, violinist: Days of Adam and Eve, Funny Little man.
- 10.15—The League Concert Orchestra: Twilight, The Stars, and You, China Girl (Zingars).
- 10.23—Norman Bradshaw, tenor: Times Noce (Barry), Virginia Love Song (Harley).
- 10.30—The League Concert Orchestra: Yearning for you, Peter Pan.
- 10.40—Jack O'Hagan, baritone: Sleepy Time Gal, I'm So disappointed in You.
- 10.47—The League Concert Orchestra: Charley my Boy (Kahn), Monday (Barnett), Oriental Love Dreams (Miller).
- 11—God Save the King.

2KY

WEEKLY BROADCASTING PROGRAMME.
TRADES HALL.
 Call Sign, 2KY. Wavelength, 280 metres.

FRIDAY, MARCH 5

Afternoon Session.

2.30—A varied vocal and musical programme

will be transmitted closing down at 4.45 p.m.
Children's Hour.
 6.30—"The Man in the Moon."
 Evening Session.
 7.45—Latest News Items, Miss Ema Diehl, L.L.C.M., Miss Mavis Carvell (soprano), Mr. Alf. James (baritone), Mr. Beard, Technical designer of 2KY, (Wireless Lecturer); Ed. Godery's Moulders Dance Orchestra, and others to be announced.

SATURDAY, MARCH 6

Evening Session.

7.45—Latest News Items and Sporting Results. Mr. J. O'Sullivan (baritone), Lecturer: "Hints on Motors," Mr. W. B. Burgess, Mr. Frank Redman (monologues), Lecturer: "A talk on the great ice age," Mr. Gen. F. Mansel, Herbert Beaver (humorist), and others to be announced.

MONDAY, MARCH 8

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45 p.m.

Children's Hour.

6.30—"The Man in the Moon."
 7.45—Latest News Items, Miss Amy Ruwald (soprano), Miss D. Johnstone (soprano), Mr. W. Stovin (tenor), Mr. Walter Faulkner (musical baritone), Lecturer, "Local Topics, Industrial and Political," Mr. J. S. Garden, (Wireless Lecturer), Mr. Beard, technical designer of 2KY.

TUESDAY, MARCH 9

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted, closing down at 4.45 p.m.

Children's Hour.

6.30—"The Man in the Moon."
 Evening Session.
 7.45—Latest News Items, Mr. McKillop (Transway conductor), Miss Durrington (soprano), Mr. Cec. Morris and his Blue Bird Jazz Band, (Lecturer), Miss E. M. Swain, "Teaching the Child to know how," Miss Zara Wilson (soprano).

WEDNESDAY, MARCH 10

Afternoon Session.

2.30—A varied musical and vocal programme will be transmitted during the afternoon, closing down at 4.45 p.m.

Children's Hour.

6.30—"The Man in the Moon."
 Evening Session.
 7.45—Latest News Items; Miss Eileen Chartes (soprano), Miss Dean (soprano), Mr. Don Ellis (baritone), Lecturer, International Topics, Industrial and Political, Mr. J. S. Garden, Mr. B. Webster (baritone), Mr. Percy Brown (monologues), Mr. Sullivan (tenor), Miss Thompson.

THURSDAY, MARCH 11

Afternoon Session.

2.30 A varied musical and vocal programme will be transmitted closing down at 4.45 p.m.

Children's Hour.
 6.30—"The Man in the moon" and Uncle Val. Evening Session.
 7.45—Latest News Items, Messrs. Haydon and Price (tenors) duet; Miss Tibbie Smith (monologues); Miss Beckie Lucas (contralto); Mr. Eric Goldick (Hawaiian Steel Guitar), Lecturer (Australian Poets), Mr. Thomas; Lecturer, "Some Remarkable cases by the Abraxus Method," Mr. Fannell. "For full programmes and times of lives see daily newspapers."

2FC

Sydney Mean Time.

Wave Length: 1160 metres.

Power: 5 Kilowatts.

Morning Session:

- 10.10 The Chimes of 2FC.
- 10.15 Weather Reports, etc.
- 11.0 Cables.
- 11.5 Cookery Talks on Tuesdays, Wednesdays, Fridays. Fashion Talks on Mondays and Thursdays. Gardening Talks on Saturdays.
- 11.20 Mondays, Wednesdays, and Fridays, Educational Talks to the Kindergarten Classes, Primary Schools and Secondary Schools.
- 11.45 Close down.

Midday Session:

- 12.30 The Chimes of 2FC.
- 12.35 Stock Exchange, morning call.
- 12.40 Music.
- 12.58 Time Signals.
- 1.3 Coastal Farmers (no Stock Exchange change).
- 1.30 Musical Programme.
- 1.30 Stock Exchange, noon call.
- 1.35 Musical Programme.

Afternoon Session:

- 3.25 The Chimes of 2FC.
- 3.30 Musical Programme from Oak Hall Restaurant.
- 4.45 Last call from Stock Exchange.
- 4.50 Close down.

NOTE: Race results are transmitted on all race days immediately after each event has run.

Early Evening Session:

- 8.30 The Chimes of 2FC.
- 8.55 "The Hello" Man."
- 7.15 Market Reports, etc.
- 7.30 Close down.

Night Session:

- 7.45 Talks on various subjects.
- 8.0 Musical Programme.

The evening entertainment broadcast from Station 2FC is varied and includes theatrical transmissions from the Theatre Royal, Her Majesty's Theatre, the Criterion Theatre, the Palace Theatre, the Tivoli Theatre,

Australian Broadcasting Stations—Schedule of Operations

Located at	Operated by	Call.	Wavelength.
Sydney, New South Wales	Furmer & Co. Ltd.	2FC	1160 metres
Sydney, New South Wales	Broadcasters (Sydney) Ltd.	SBL	353 metres
Melbourne, Victoria	Anal. Broadcasting Co. Ltd.	3LO	371 metres
Melbourne, Victoria	Associated Radio Co.	3AR	434 metres
Perth, West Australia	West Australia Farmers Ltd.	6WF	3250 metres
Hobart, Tasmania	Associated Radio Co.	7ZL	410 metres
Brisbane, Queensland	Queensland Radio Service	4QG	385 metres
Adelaide, South Australia	Central Broadcasters Ltd.	5CD	395 metres

Haymarket Theatre, and the Prince Edward Theatre. Jazz music provided by the Westworth Orchestra is also broadcast direct, and high-class musical entertainments provided at the Studios of 2PC, in which Sydney's leading artists participate, are also features of the programme.

SUNDAY.

Morning Session:
Church Services.

Afternoon Session:
Sacred Programmes, including Band, Concert and Organ Recitals.

Evening Session:
Church Services broadcast from St. An-

draw's Cathedral, St. Mary's Cathedral, St. Mark's (Darling Point), St. Stephen's (Phillip Street), All Saints' (Woolahra), Lyceum Hall, Pitt Street Congregational Church, Petworth Congregational Church, St. Jude's (Randwick), William Street Methodist, from 6.45 to 8.30. Until 10 o'clock, Sacred Concerts and Band Recitals.

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No doubt the defendant, in the case under review, has the sympathy of a number of people who love heroic battling with the law and causing the authorities the maximum of trouble. That Britain was once a free country is due to the efforts of such martyrs in the dark ages, but we confess to a feeling that passive resistance to the G.P.O. Wireless License has little of the self-forgetting self-sacrificing spirit that the true Reformer should show, but rather is characterised by the meanness of the petty pilferer. Here is no gallant fighting for a great principle, but merely the dodging of a payment of half a guinea.

(Amplion Magazine).



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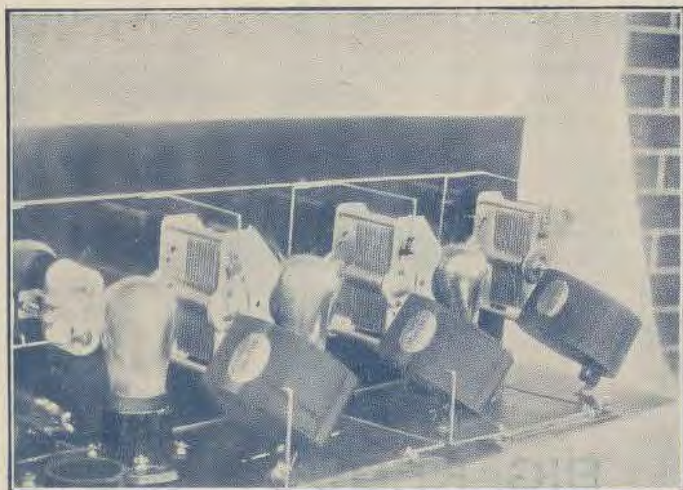
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