

THE RADIO RECORD

Published Weekly

REGISTERED G.P.O., WELLINGTON, N.Z., AS A NEWSPAPER.

Vol. III., No. 21.

WELLINGTON, FRIDAY, DECEMBER 6, 1929.

(Price, 3d.)

Theory and Construction of Frame Antennae

Ideal for Summer Conditions



WING to the character of the atmosphere during summer, reception is more or less uncertain. There is always a great deal of static which is picked up by the aerial and passed into the set much to the annoyance of all who listen-in. Static, as has been explained before, is the result of charges of electricity present in the air in greater or in smaller quantities according to the degree of ionization of the air.

The longer the aerial the more static is picked up, and it is apparent that if reception during the summer is to be enjoyed, the aerial must be reduced in length.

If we imagine this reduction to go on until the aerial is so small that both static and signal strength have been reduced considerably, we get the first function of the loop antenna. In any aerial system the portion which connects the greatest degree of signal strength is the vertical part. Suppose we have a loop of wire arranged as shown in Figure 1, the vertical portion A-B will pick up a small amount of energy from the transmitting station. The horizontal position A-C and B-D will likewise pick up energy, but not to the same extent. If the antenna takes a square form as indicated in the diagram, there will be presented to the oncoming waves two receptive surfaces, A-B and C-D. Oncoming waves will then strike first one edge of the loop and then pass across to the other side. As a wave strikes the nearest side of the loop, a voltage is generated. The wave then travels across to the other side and causes an equal voltage on that side. The two voltages oppose each other in phase. Both voltages tend to force a current up, or both tend to force it down on both sides of the loop. If the currents reach the points E and F at the same time they will cancel out one another and the loop will be ineffective. The only reason the loop delivers any signal is because the two voltages generated on the opposite sides are not generated at the same time. The voltage on the side of the loop towards the transmitting station will rise to its maximum before the one on the side distant from the station. There is, then, a difference of phase between both sides when they are in the position indicated in the diagram. Because of this difference in the voltage produced a

certain amount of signal strength is available. Obviously, therefore, the voltage, even in the maximum position, will be extremely small.

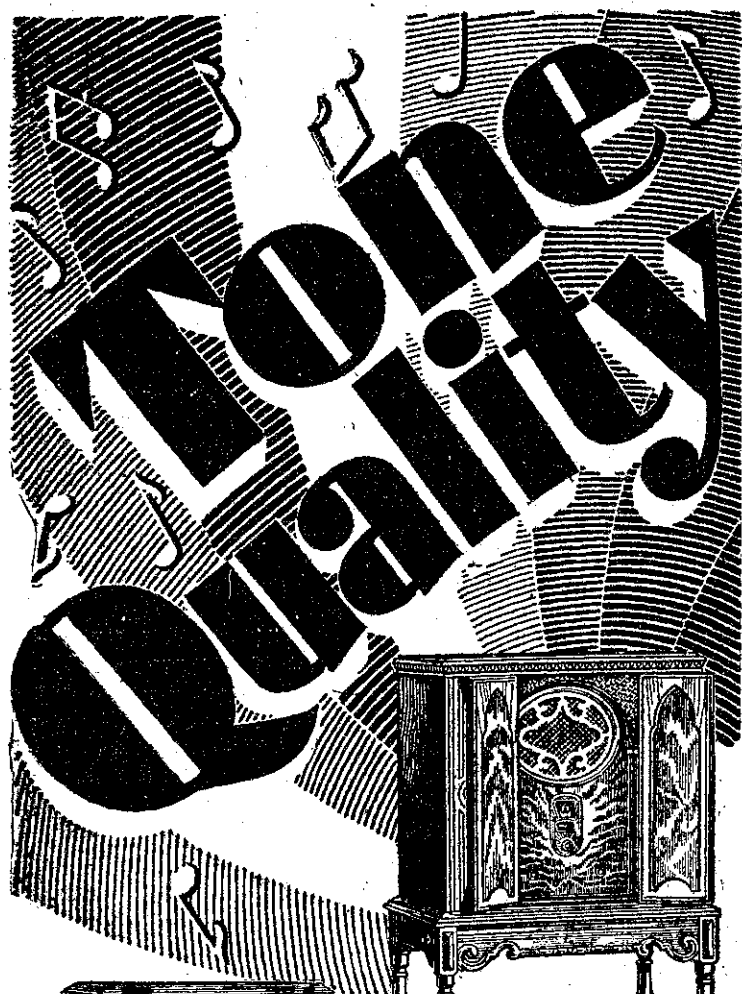
Were it possible to build a loop with its sides so far apart that they would be separated by one-half the length of the wave we would have ideal conditions, because the rise of the wave to positive voltage would then act on one side of the loop while the increase of the wave in negative voltage acted on the other side. This, however, is not practicable, and some compromise is necessary.

The higher the loop the greater will be the length of the vertical side. The greater the length of wire exposed to the radio wave the greater will be the voltage generated. Therefore, the higher the loop, or the longer its vertical sides, the greater will be the signal strength received. The signal energy received by the loop increases with the increase in the number of turns or the increase in the inductance of the loop. The signal energy increases with the decrease of the resistance of the loop. The resistance of a loop increases rapidly as its natural frequency is approached.

The natural frequency is the resonance produced by the inductance of the loop and its distributing capacity. For best results the frequency of a signal must be equal to at least one-third the natural frequency of the loop. For frequencies closer to the natural frequencies the results will be unsatisfactory. Therefore, for high frequency (or short waves) the operation of a small loop would be better than a large one.

The capacity in between parts of the loops cause it to act as an ordinary antenna as well as a loop for it is generally understood that an ordinary aerial and earth system obtaining its energy by virtue of its being a species of huge condenser. For this reason, the actual strength of signals received by the loop is always greater than a calculated signal. The aerial effect is one reason why the signal from the loop can never be reduced to zero, no matter how the loop is turned with reference to the direction of the incoming signal.

DUE in no small measure to the prevalence of static, conditions for radio reception are adverse during the summer months. This to a very large extent can be overcome by the use of a loop antenna. The accompanying article tells how a loop works, how it differs from an aerial, and how to build one.



... unmarred by hum or "background" noise

MAJESTIC has removed those last two obstacles to perfect enjoyment of radio reception... the low hum and clicks brought in with power from the light socket... and the distortion caused by old style detection. Development to the utmost of the proved practical type 27 valve accomplished the first of these advances... Power detection made possible the second.

The magnificent tone quality of Majestic's Super-Dynamic Speaker and type 45 power valves... without the irritating accompaniment of clicks, hisses and hum that have constantly intruded.

Those who have heard the new Majestic Models... then noted the inspired beauty of the cabinets... and compared... have created such a demand that Majestic leads the World in Radio sales. Any Majestic Dealer will be glad to demonstrate the superlative qualities of this wonderful Receiver

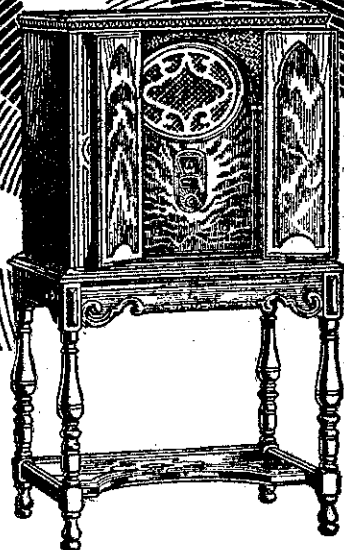
MODEL 91.—Detection and the NEW 45 valves plus 4 tuned stages of Radio frequency. Absolutely no hum or oscillation at any wave length. Automatic sensitivity control gives uniform range and power all over the dials. Improved Majestic Super-Dynamic Speaker, heavy, sturdy Majestic Power Unit with positive voltage ballast ensures long life and safety. Early English design cabinet of American walnut. Instrument panels overlaid with genuine imported Australian lacewood. Escutcheon plate and knobs finished in genuine silver. Price, Main Ports **£48**

Inland and Outports **£50**

MODEL 92.—Power detection and the new 45 valves plus 4 tuned stages of Radio frequency. Absolutely no hum and no oscillation at any wave-length. Automatic sensitivity control gives uniform range and power all over the dial. The improved Majestic Super-Dynamic Speaker, heavy, sturdy Majestic Power Unit, with positive voltage ballast. Jacobean period cabinet of American walnut. Doors of matched butt walnut with overlays and interior panel of genuine imported Australian lacewood. Escutcheon plate, knobs and door pulls finished in genuine silver. Price, Main Ports—

£57/10/-

Inland and Outports **£60**



MODEL 92



MODEL 91

Majestic Factory Representatives:

Box 462, Auckland; Box 1581, Wellington;
Box 516, Dunedin; Box 962, Christchurch.

Majestic

ELECTRIC-RADIO

"MIGHTY MONARCH OF THE AIR"

Beam Wireless

Proof of Value

THE value of Beam wireless in maintaining communication was strikingly exemplified in the past week by the occurrences following on the large scale break in the Atlantic cables by the severe earthquake experienced near the coast of Newfoundland. This shock had the unexpected result of breaking some 13 cables of the number which stretch across the Atlantic Ocean. Their repair will necessarily take some time, and will cost upwards of £100,000. Under ordinary conditions the loss of 13 cables would have imposed a very severe congestion upon the remaining number, and have held up business and private communications between America and Europe very considerably. Fortunately the Beam service was available, and proved itself fully able to meet all demands, avoiding any congestion. So satisfactory and remarkable was this service that comment was made upon it in the British House of Commons. The British Postmaster-General, in a subsequent debate on broadcasting matters and wireless communication methods, stated that the Trans-Atlantic wireless telephone service was steadily progressing. Very shortly it was proposed to introduce another long-wave and another short-wave channel of communication, which would make altogether five channels in operation from the Rugby wireless telephone station. The volume of business thus being transacted was providing a very satisfactory revenue, and this would lead to a reconsideration of the fees in the near future.

Experiments in the way of telephonic communication between Australia and London have been in operation for some time past, and have reached a high degree of efficiency. The Beam service between Australia and London is also operating at full pressure, and has had a marked effect in reducing the cost of communication between the Antipodes and the heart of the Empire. The volume of traffic being secured by the Beam service is remarkable, as is also its service in facilitating communication and permitting more extensive and ready business negotiations than has hitherto been possible. So far New Zealand has not benefited by the Beam service, except in a very minor degree. That position is not likely to endure without protest very much longer. Complications of course exist in connection with the cable service, but in view of the rapid advances being made in other parts of the world by the Beam service, and their effects in facilitating communication, a demand is likely to spring up before very long for an extension of the facility to New Zealand.

ON the shelf of every Radio Listener should be found the

RADIO LISTENERS' GUIDE

AN INDISPENSABLE WORK.

PRICE 2/6 from Booksellers, or 2/9 Posted.

BOX 1032 :: WELLINGTON.

Safeguarding Rights of Listeners

Is Advertising Popular in America?

AN American paper, the "Oakland Tribune," recently conducted a questionnaire, with the object of ascertaining the views of radio listeners on a number of subjects. Circulars were sent to 35,000 individuals by the Commonwealth Club of California. The recipients comprised housewives, business men, shop workers, editors, and clubmen. The response totalled 6000, and these have been summarised by the journal concerned with rather interesting results. Hundreds of listeners professed saturation with jazz. Hundreds more evinced a decided preference for male singers, as compared with the

car transfers, and a tax on sports and amusement gate receipts.

These suggestions are again of interest in New Zealand, listeners as showing the feeling of listeners that some alternative should be devised to the radio service being absolutely dependent upon revenue derived from advertising service for its maintenance. Our own feeling on this matter is that the interests of listeners are of paramount importance in the radio service, and that being so, that means should be adopted for financing a service which is best calculated to preserve unimpaired those in-



MRS. LEONARD CRONIN
Soprano at IYA.

—S. P. Andrew, photo.



MR. L. J. CRONIN
Who gives humorous talks at IYA.

—S. P. Andrew, photo.

feminine voice. Others urged a strong censorship in the programmes. A summary of the pet objections recorded by listeners is of decided interest to New Zealanders. The paper says: "Pet peeves of those who tune in each day are many and varied. They include complaints as to too many stations, mediocre programmes, obscenity and smut, women announcers, too much advertising, high cost of sets, and too much preaching."

Some of the objections listed above will, we think, come as a surprise to New Zealand listeners. A desire was expressed for more educational talks, radio talks, classical and semi-classical music, less jazz, and the elimination of talking and tiresome announcing. Seven out of ten adults confessed that they were getting a thrill out of the children's hour.

One of the questions submitted to listeners was how an ideal radio service could be best financed without advertising, which, as listeners know, is the mainspring of the American radio service. The suggestions made included a tax on radio manufacturers or on set owners, a Government subsidy, the provision of radio clubs, slot machine sets, voluntary contributions, philanthropic subsidies, tax on phone bills, railroad tickets or street-

car transfers, and a tax on sports and amusement gate receipts. There are three major ways by which a radio service can be economically financed: First, by revenue derived from the listeners themselves; secondly, by revenue derived from the sale of advertising over the air; thirdly, by a Government subsidy. If the methods of finance were to include either the provision of revenue from the sale of advertising time or a Government subsidy, then immediately a factor would be introduced which would establish conflict with the interests of listeners. The firm paying for advertising time would naturally expect an effective quid pro quo for its cash payment. Those interests would, therefore, immediately conflict with those of the listener. The owners of the broadcasting station deriving revenue from advertising would necessarily have to model their policy to accord, in greater or less degree, with the wishes of the advertiser. In that conflict the interests of the listener would necessarily take second place. Similarly, if a broadcasting service were to be maintained in whole or part by Government subsidy, then the authorities dispensing that subsidy would necessarily exercise an influence upon the character of the service given to listeners. We therefore come back to the point that the best means of pro-

tecting the interests of listeners is for the listener to be directly responsible for the revenue side of the radio service. Under those conditions those operating the service will necessarily mould the whole quality and type of the programme and the conduct of the stations, along lines calculated to appeal to the listeners themselves, and to induce the greatest possible number of listeners to patronise the service. Thus the fullest measure of independence and satisfactory service seems to be assured by the system prevailing in New Zealand, where those paying for the service are the listeners, and they in their numbers really dictate the character of the service provided; for it is only as a service is provided calculated to appeal to the greatest possible number of listeners for the greatest possible length of time that satisfaction will be given and good programmes maintained.

AS bearing on the foregoing and the suggestion that powerful advertisers necessarily, in their own interests, seek to exercise pressure upon radio programmes, we note from a recent issue of "Editor and Publisher" that a conference was recently held in America between thirty advertising managers who use radio advertising. Their complaint was that, when they purchased a network of radio stations, they sometimes found they were unable to secure complete coverage, because some local station included in the chain was unable to "deliver the goods" in connection with a national advertising campaign, by reason of having to switch the time to "a local advertiser with a pull." One of the advertising managers said: "There is too much politics and too little science in the buying of radio time. We are going to request that the national chains weld their stations into a compact national advertising medium, which will be delivered according to the terms of the contract, just as printed advertising is delivered. When this is done we can merchandise our programmes in advance and carry them out on schedule." This is admirable from the point of view of the advertiser who is paying the price, and to it no exception can be taken as a means of self-defence. We quote the passage, however, to emphasise the point that once a radio service relies upon advertising money for its support, then the advertiser calls the tune, and not the public.

The Government
Tourist Dept's.
Booking System

Considered by Experts
The Best in the
World

Offices in all Main Centres

A Huge Broadcast In Schools throughout America

IT has been estimated that more than 175,000 children in the public schools of New York listened in recently to the first of a series of lecture-concerts on "Music Appreciation." These broadcasts, which are to be presented for three years, now form a regular part of the curriculum of most of the schools in America.

Officials of the National Broadcast-

ing Company, whose stations broadcast the concert throughout the United States, estimated that as well as the children of New York, nearly 5,000,000 pupils in America and adjoining countries heard the programme. More than 50,000 class rooms and auditoriums in every State in America were linked by specially-installed receivers to the broadcast, which travelled over a network of sixty-two transmitters.

It was said to have been the largest network ever employed for an educational programme in the history of radio broadcasting. Telegrams and cablegrams indicated that many class rooms heard it in Canada, Mexico, West India, Argentina, and the Philippine Islands.

Screen Grid Radio

Favoured by Many Traders

A SHORT time ago we published an account from an American publication concerning the application of the screen grid to a well-known make of receiver. This paragraph has created a great deal of interest as the following communication from members of the radio trade indicate. The N.Z. manager of Amalgamated Wireless, Mr. G. Robertson, writes:—

Referring to the paragraph on screen grid radio in your issue of the 22nd

instant, we would like to give our experience with the screen grid valve and screen grid circuit.

During the comparatively short space of time that receivers embodying the screen grid valves have been on the market in New Zealand, our turnover has been exceptionally high and our customers without exception are delighted with the results achieved. Trouble with screen grid receivers has been practically non-existent.

It is common knowledge that A.C. valves are now as consistent in their operation as any of the battery types. Our records show that although the percentage of faulty A.C. valves is abnormally low, the UY-224 screen grid is the least troublesome of all. Our dealers have been unanimous in their praise of our screen grid receivers and of the performance of the screen grid valve.

In view of the fact that other dealers handling screen grid receivers have had exactly similar experience, we can only suggest that the manufacturers who have had trouble with screen grid must have been experimenting with a valve less reliable than Radiotron UY-224.

IN addition to the foregoing, the New Zealand agents for the well-known Stewart-Warner Radio, Hope Gibbons Limited, advise that they have complete confidence in the new screen grid principle, and have had less valve trouble with this type of valve than with any other. The Stewart-Warner Corporation is turning its entire radio division over to the manufacture of screen grid sets. This clearly indicates their favourable attitude towards screen grid, especially at a time when radio is commencing its annual winter sale season in America.

MR. C. W. RICKARD, of Odins Ltd., New Zealand distributors for the Atwater Kent, has sent along a newspaper which reads: "Determined to find out for themselves how good the Atwater Kent screen-grid set was, two American distributors put a model 55 on test. The valves were selected from random from the regular stock and carefully tested. The set was then tuned to a local station. All controls were turned on full and the set left to its fate. It was not touched for an entire month, and when examined was still functioning perfectly. The valves were again tested, and all rendered a good account of themselves. Some tested better than when new. The screen-grid valves were best of all. 'Five weeks—thirty-four days—eight hundred and sixteen hours of continuous operation—without a single fault showing up,' was the comment of the dealers. A length of operation equivalent to eight or ten months of normal operation, not taking into account the fact that it was operating continuously, a circumstance that at least triples the strain. Here is concrete proof of a most definite sort that the model 55 Atwater Kent receiver is built to endure as well as perform."

Mr. Rickard adds that the sales from the Atwater Kent have increased enormously, and his records show that the screen-grid receiving set represents fully 90 per cent. of the total sales. He adds that they have had less trouble with the screen-grid valve than they did with the earlier types of A.C. valves over a similar period.

Bargains in Shop-Soiled and Demonstration RADIO SETS

THIS is your opportunity to purchase a Christmas Present, which will bring joy to your entire family—not only during the Christmas Season, but for 365 days in the year. It is a genuine Sale of Shop-soiled and Demonstration Radio Sets.

EVERY instrument is tested, and guaranteed free from mechanical or electrical defects.

At the prices quoted, each instrument is COMPLETE with all accessories, including valves, batteries, and loudspeaker, etc. (but excepting aerial equipment, which can be supplied for 11/6 extra when desired). Further particulars of any model will be supplied on request.

	List Price	Sale Price
	£ s. d.	£ s. d.
Watnet 2-Valve, in oak cabinet. Complete	10 0 0	7 15 0
Astor 2-Valve, in metal cabinet. Complete	10 10 0	7 0 0
Astor 3-Valve, in metal cabinet. Complete	13 10 0	9 0 0
Aerola 3-Valve, in oak cabinet. Complete	13 15 0	9 10 0
Selectra All-Electric 3-Valve. Complete	25 0 0	20 0 0
Airmaster All-Electric 3-Valve. Complete	26 0 0	21 0 0
Browning-Drake 4-Valve, less cabinet. Complete	14 10 0	10 10 0
Screened Grid All-Electric 4-Valve, less cabinet. Complete	26 0 0	20 0 0
R.G.S. 4-Valve Browning-Drake, in oak cabinet. Complete	30 0 0	19 0 0
Airzone 4-Valve Portable, with self-contained aerial and batteries and speaker. Complete	27 10 0	20 0 0
Radiokes All-Wave Screen Grid 4-Valve, less cabinet. Complete	25 0 0	20 0 0
Marwol 5-Valve, with built-in speaker. Complete	25 0 0	15 0 0
Crosley 5-Valve Model 5/38, in cabinet. Complete	22 10 0	15 0 0
Altona 5-Valve, in oak cabinet. Complete	28 15 0	17 10 0
Amrad 5-Valve, in mahogany cabinet. Complete	30 0 0	19 0 0
Amrad All-Electric 5-Valve, in mahogany cabinet. Complete	50 0 0	27 10 0

	List Price	Sale Price
	£ s. d.	£ s. d.
Trav-Ler 5-Valve Portable. Complete	27 10 0	19 0 0
Selectra 6-Valve Screen Grid. Complete	47 10 0	37 10 0
Crosley 6-Valve Model 6/60, in mahogany cabinet. Complete	34 10 0	22 0 0
Crosley 6-Valve Console, mahogany cabinet, Model RFL/90. Complete	45 0 0	25 0 0
Crosley All-Electric 6-Valve, in mahogany cabinet, Model AC7. Complete	40 0 0	25 10 0
Crosley Bandbox 6-Valve, in metal cabinet. Complete	31 0 0	24 10 0
Crosley All-Electric 6-Valve Bandbox, in metal cabinet. Complete	48 0 0	25 0 0
Akradyne 6-Valve, in mahogany cabinet. Complete	35 0 0	20 0 0
Amrad 7-Valve, in mahogany cabinet. Complete	40 0 0	25 0 0
Branston 7-Valve Super-Heterodyne in cabinet. Complete	45 0 0	22 10 0
Rauland Forte 7-Valve, in walnut cabinet, with door complete, with wet A and B batteries. Complete	75 0 0	42 10 0
Bremer-Tully Counterphase 8, in mahogany cabinet. Complete	80 0 0	42 10 0
Fada 8-Valve Model 480A, in walnut cabinet. Complete	115 0 0	50 0 0
Madison-Moore 8-Valve Super-Heterodyne Kit (partly assembled)	25 0 0	12 0 0

EASY TERMS.—We will arrange terms to suit your convenience. Write and tell us the model that attracts you, and the amount of deposit and monthly payments you can manage. We will endeavour to meet you. Any of the above sets will be quoted without equipment if desired.

CROSLEY SETS SUPPLIED TO NORTH ISLAND ORDERS ONLY.

ABEL, SMEETON LTD.,

27-29 CUSTOMS STREET EAST, AUCKLAND.

AT the recent Montreal radio show, an exhibit which attracted more attention than any other was that of a combination piano, radio set, and gramophone. When closed it has the appearance of an ordinary small piano, but there are doors on each side of the music stand, which when opened disclose a radio set on the right-hand side and a gramophone on the other. Not only are these three instruments contained in the one case, but they function together, for the strings of the piano are used as a short aerial for the receiver and the sound-board is a necessary part of the reproduction of natural tone by both the set and the gramophone. Below the revolving disc of the gramophone there are two dials, one for volume control, and the other for switching from one reproducing instrument to the other. Their presence does not in the least spoil the tone of the piano, which is rich and mellow.

A CLEVER adoption of radio for use in a music-hall thought-reading turn which was produced by the inventor and his wife, was recently revealed. The lady on the stage had concealed about her person a wireless receiver, and was thus able to "taste" messages in morse code from her husband by means of an electric current between her dental plates. Thus she was able to give a correct description of the articles which her husband, who was equipped with a hidden transmitter, borrowed at random from members of the audience.

JOHN L. REINARTZ, the short-wave radio expert, is negotiating with the Hudson's Bay Company for the erection of three radio stations in the Far North. The equipment will be built at the Reinartz laboratories in South Manchester if the necessary arrangements can be effected. The Hudson's Bay Company intends to establish the stations for effecting contact during the winter months between its trading posts and the company's headquarters at Montreal. One station will be situated on Ellesmere Island, 700 miles from the North Pole, but the location of the others has not yet been decided upon.

PRACTICALLY every phase of modern radio was discussed on the technical side at an international conference which was held at The Hague recently. It was composed of members of the International Technical Consultative Committee of Radio Communications. The principal matter on which recommendations were made, was that relating to wavelength distribution. Discussions also took place on recent engineering advances, radio nomenclature, and the use of frequency control devices to limit interference.

EXPERIMENTS have for some time been going on between KDKA (Pittsburgh) and Nauen, Germany, in order to find out whether two-way conversations between these two stations are practicable under varying weather and electrical conditions. The tests usually take place between 7 and 8 o'clock in the evening, and it has been reported that splendid signals have been received by KDKA from Nauen. For the purposes of this test, a new short-wave transmitter has recently been installed at the latter station.

AN enterprising member of the staff of PCJ, Hiversum was opening



the studio window to admit fresh air at the end of a recent programme, when he heard the full-throated song of a nightingale singing not far away. Taking in the situation immediately, he ran to the microphone and announced in six different languages that PCJ was about to broadcast the bird's song. The microphone was silently wheeled to the window, and for some time five continents heard the nightingale singing. It is to be hoped, however (comments "Popular Wireless") that this incident will not induce other announcers to break official programmes in order to broadcast odd "noises off" which may seem attractive to them. We might get: "You will now hear the janitor snoring," or "Stand by for the charlady having a few words with the oboeist about her asthma." It is interesting to note, however, that Mr. Sellens, our shortwave correspondent, heard this broadcast.

AMERICAN scientists predict that radio reception will be poorer during December of this year than it has been since the institution of broadcasting. This dire prediction is based upon the expectation that there will be more dark spots on the sun than at any other time between 1923 and 1934. These spots are supposed to be the cause of magnetic disturbances which weaken radio signals. This should prove a good healthy excuse in explaining to visitors why the new set fails to bring in the distant stations.

MR. SHAW DESMOND, the celebrated English author, in a recent imaginative article published in "Television," visualises a time when the intensive spread and development of radiovision and other methods of instantaneous communication will make time, as we know it and measure it, look ridiculous. The city of the future, he says, will be roofed in with flexible glass; artificial suns will abolish night; men will work throughout the twenty-four hours in eight-hour shifts; and by means of atomic energy, heat from the tropics will be pumped to the Polar regions, while cool air will be pumped back into the tropics, thus enabling future generations to manufacture their own climate.

RUMANIANS are taking more and more interest in broadcasting. Something like 225 receiving set permits are now being issued weekly by the Post Office Commission in order to authorise their owners to listen to the programmes being broadcast twice daily by the station newly established at Bucharest and to programmes coming from other countries. The Rumania station, equipment for which has been loaned by the British Marconi Company, began regular operation last November 1. Up to October, about 10,000 receiver permits had been issued, and it was reported that many more persons are operating sets with-

out permits. The licenses range from about threepence for crystal sets to six shillings and sixpence for four valves or more.

EQUIPMENT which will transmit the music of the great operas of the world all over the North American continent has been installed in the forty-five story building—the highest in Chicago—which houses Chicago's grand opera. The installation, which is owned by the Chicago Civic Opera Company, is to be used throughout the autumn and winter seasons by the National Broadcasting Company over a nation-wide chain of stations. Elaborate tests have been made to pick up practically every note of music that will come from the orchestra pit and the monster stage. There are four microphones in the footlights, four in the orchestra, and four on the stage itself. The new equipment was installed at a cost of approximately £3500, and includes twelve of the latest type of condenser microphones, and complete amplifying and control equipment in duplicate. The announcer and the control operator will be provided with sound-proof booths, one at the top and the other at the rear of the auditorium. Plate-glass windows will give each a full view of the stage.

ONE of the more or less unconsidered possibilities of radiovision is the transmission of kinema film to be recorded, and subsequently shown in

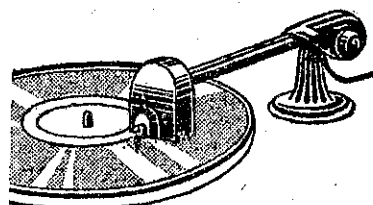
the ordinary way, the radio channel being used only for speed of transport (and incidentally to complicate the task of the Customs collectors). This applies principally to news films from other countries, and it is evident that secrecy of transmission is essential, in view of the keen competition in this line. With a fair choice in the number of scanning lines, and the enormous number of possible arrangements in the order of such lines, eavesdropping is almost impossible.

FOR some time there has obtained in Europe a system whereunder gramophone firms pay a musician to make a record, and then consider the artist's royalties as stopping short of radio reproduction of the record. The Third International Theatrical Congress has now launched a movement to end this practice. The musicians emphatically demand that all Governments recognise the broadcasting of records "as equivalent to a performance by the executants." "No broadcasting of records should be allowed without the executants' consent, and under proper remuneration, calculated by the range of the broadcasting station and the number of relay stations." The points raised are being referred to a committee associated with the League of Nations. Broadcasting is becoming daily more and more of an international concern, and most emphatically so when the question of securing royalties crops up.

WHEN an important branch of science has become popularised, the names of the pioneers are rather apt to be forgotten. The science of wireless would appear to be no exception. Count Arco, who celebrated his sixtieth birthday on August 30, is one of the pioneers of German wireless. Jointly with Professors Slaby and Braun, he worked out many problems and was greatly instrumental in developing the German wireless industry from its initial stages to its present high standard.

For PERFECT REPRODUCTION UNEQUALLED BY THE MOST EXPENSIVE PHONOGRAPH USE A PACENT Phonovox PICK-UP

Model 124A de Luxe, fitted with a counterbalanced tone-arm that ensures perfect reproduction. Special adaptor provided enables this model to be used for either A.C. or Battery Sets, with the utmost satisfaction, and on account of its special construction the Pacent Pick-up is the only attachment that will take fibre needles without loss of volume, and now just consider the extraordinary price of this Pick-up. **£3-0-0**



The above illustration is of Model 124A de Luxe, showing the counterbalanced Tone-arm. Ask your nearest Agent for a demonstration.

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AUCKLAND.

The New Zealand Radio Record

(Incorporating the "Canterbury Radio Journal.")

P.O. BOX, 1032, WELLINGTON.

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Advertisers are asked to note that alterations of advertisements should be in hand Friday of each week for insertion in the succeeding issue, printed Tuesday, bearing Friday's date. No responsibility is accepted for blocks remaining unclaimed three months after each insertion.

N.Z. RADIO PUBLISHING CO., LTD.,
P.O. Box 1032, WELLINGTON.

WELLINGTON, FRIDAY, DECEMBER 6, 1929.

RADIO TO MOULD HUMANITY.

DAY in and day out radio is demonstrating more and more effectively its supreme value to the human race. A number of diverse news items, emanating from widely-scattered sources, prompt the thought this week that radio is the one supreme invention of the world, which will lift humanity on to a higher plane. By its capacity to bridge distance and break down national barriers, it is plainly marked as the instrument for the promotion of international peace. Welcomed first as an amusing toy for its capacity to distribute music and entertainment, it, while still fulfilling those functions, is passing on to clearer recognition in the larger field of an international educator. Here in our own domestic circle in the past week the Rev. J. R. Blanchard, of St. John's Presbyterian Church, has paid eloquent tribute to the appreciation evoked in religious circles by the radio service. The cables tell of the contribution paid to permanent communication by the Beam service, following on the break of Atlantic cables by the Newfoundland earthquake. Another news item gives an impressive glimpse of mass education in music by means of radio. Through linking up the vast chain of stations now scattered throughout the United States, nearly 5,000,000 school children heard a special lecture-concert on "music appreciation." To do this more than 50,000 class-rooms and auditoriums in every State in America were linked by specially-installed receivers to the broadcast, which was given from 62 transmitters. This was the first of a series of similar educational lecture concerts. Such vigour and such a plan of campaign constitute a challenge to the imagination. They show how effective an impression can be made upon the mass mind of a nation through radio, and drive home the point that in radio humanity has a servant capable of transforming the face of the globe.

IN that impressive summary of moral forces, "The Christ of the English Road," which was recently published in Britain and received a marked welcome, the view is advanced that a special mission has been given the English race to promote the moral betterment of the world. The English character, it is pointed out, has evolved upon the moral teachings of Christ and their special appeal to the essential decencies of humanity. Without the aid of radio,

but by reason of their chance diffusion through innate wanderlust over the face of the earth, the English race has already made an indelible mark upon the course of history. With the development in recent years of that tremendous aggregation of population in the United States, a further factor is introduced which, if the same spirit be imparted to it, will enable, through radio, a very rapid influence to be exercised upon world character. Current history the world over records the growing appreciation of radio. It is becoming almost a commonplace to stress the point. It is mentioned again merely to illustrate the tremendous possibilities of the service in extending appreciation of the vital things of life.

IT is interesting to note that in this medium, as in others, the finer things gradually work to the top. When the printing press sprang into the mushroom growth demanded by universal education in Britain, the standard of education, it was thought, was universally lowered. Certainly the miasma of cheapness and tawdriness did overlay the democracy. From some points of view this may have been harmful. From another point of view it was but a natural evolution. From the mass of cheapness—even the mass of low taste—the underlying common sense of the people has gradually demanded a higher standard, until to-day the general average of intellectual appreciation of good things is higher than ever before. Somewhat the same process has obtained in radio. Radio was called upon first to blare forth cheap music. It provided a surfeit of jazz; it provided cheap wit. Those stages, however, are passing. Questionnaires conducted time and again of late months record a growing condemnation of jazz, and a demand for a higher quality of music and a fuller meeting of the demands for intellectual food and moral truth. This tendency will continue and expand, so that gradually the instrument of radio will be lifted on to a higher and higher plane, and in its reactions prove itself the most important moulding force of humanity.

Three-act Play for 1YA "Pioneers' Night"

"Pygmalion and Galatea" Special 4YA Programme

ON Friday evening listeners-in to 1YA will hear the radio presentation of Gilbert's fine three-act play, "Pygmalion and Galatea." It is the story of a statue which came to life, the statue being that of a beautiful girl.

The studio production will be under the direction of the well-known Auckland producer, Mr. J. Clark. Some of Auckland's best-known amateur actors and actresses will be cast, including Misses H. Kay, M. Earl, D. Dive, Mrs. Kinder, and Messrs. J. F. Mackle, Fryer-Raisher, and J. Clark.

Concert at Tonga

ANOTHER Island night entertainment has been arranged from 1YA. A few months ago a similar special programme was broadcast for the benefit of the Island people, and it was listened to with rapt attention by a large concourse of natives. At Nukulofa, on December 12, the Rev. R. C. Page, himself a radio enthusiast, will have gathered at his residence most of the native chiefs, who will then have the opportunity of hearing the voice of an old friend, Mr. J. D. Whitcombe, who was a resident of Rarotonga for nearly thirty years. Mr. Whitcomb will deliver a short talk from 1YA.

The programme for the evening will comprise mainly Maori, Hawaiian, and Tongan vocal and instrumental music.

4YA has in hand a programme which will prove a unique attraction for broadcasting on Saturday, December 21. It is a programme which will take listeners back to the early days of Otago. Into it will be introduced the manner of life on the emigrant sailing ships, the arrival in Otago and reception by the Maoris and the experiences of the old pioneers. Some very historical instruments will be played—the first piano and first organ brought to Otago and a set of pipes which played the Highlanders into Lucknow in the Indian Mutiny days. There will be sea chanteys sung by old sea captains, Maori songs and haka, and the singing of old Scottish songs. A number of old pioneers will speak, and there will be many interesting tales related.

Royal Show

4YA to Relay Invercargill

THE Royal Show is to be held this year at Invercargill, the opening ceremony taking place on Tuesday, December 10. 4YA is making preparations to relay this and also the attractions of the show.

WANTED AND FOR SALE.

For column of casual advertisements see page 32.

C. R. RUSSELL M.Sc.,
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CHARTERED ELECTRICAL
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CARRY SYDAL IN THE CAR.

When motoring, a jar of Sydal is very useful and convenient. Rub a small quantity into the hands before tackling the dirty job; it keeps the dirt out of the pores. Applied immediately to a scratch or cut, it prevents trouble. A little used before washing the hands will afford great comfort. Keep a jar in your motor.

Morrinsville Concert**Primary Production****Rapid Telegraphy****Value of Radio****To be Relayed by 1YA****4YA Committee****No Limit to Stations****Tribute by a Preacher**

ON Monday, December 16, a concert, organised by Mr. E. McGregor, is to be relayed and broadcast by 1YA.

A Successful Relay**Recent Ashburton Broadcast**

BROADCAST relays from many of the smaller towns of New Zealand are now proving more and more popular. These have been successfully accomplished from approximately 14 towns, and recently Ashburton was added to the list. The relay, which was successfully broadcast from 3YA, consisted for the first part of the programme of a church service, and for the second part, of a band concert rendered by the Ashburton Silver Band.

Mr. John Ball (editor-announcer of the Radio Broadcasting Company), when commenting recently on the seemingly miraculous character of radio, mentioned that to his mind there was something even more wonderful. "Radio," he continued, "has revealed the fact that the air about us is filled with inaudible sounds. This statement a few years ago would have been regarded as a senseless contradiction of terms affirming the seemingly impossible. Yet we know now that it is a statement of fact."

Mr. Ball added that provincial relays had been adopted as a cardinal feature of the Broadcasting Company's policy. Mr. A. R. Harris, the general manager, and his co-directors, had as their objective the extension of the transmitting system on lines designed to provide New Zealand with one of the most complete and efficient broadcast services in the world. This would involve the establishment of a carefully-planned chain of modern relay stations linked up with the four main broadcasting stations.

Meanwhile temporary relay lines were being used for provincial broadcasts as the occasion required. The company realised that the provinces were rich in talent, and it was with an earnest desire to encourage that talent and awaken a wider and keener interest in the musical and elocutionary arts that these relays were undertaken.

Mr. Ball concluded by stating that any centre which desired a broadcast and could provide an acceptable programme had only to make application to the company, and provided the necessary line facilities were available the applications would be favourably considered.

THE executive of this committee met at 4YA studio on November 21. There were present:—Mr. R. B. Tennent (Department of Agriculture) in the chair, Messrs. James Begg, S. P. Cameron, McCaskill, Mrs. Robin Allan (Department of Home Economics, University of Otago), Mr. John Ball (Broadcasting Company's headquarters staff), and Mr. J. McKenzie (station director).

The chairman stated that at the previous meeting of the committee he had been asked to convene this meeting in order to set out a series of lectures for the benefit of the men and women on the land. He mentioned that strong committees, rendering good service, were set up in other centres operated by the Broadcasting Company, and that it was the desire to establish a similar service here.

Mr. Tennent was unanimously elected chairman of the executive.

It was resolved that the lectures commence over the air from next Wednesday, November 27, at 7.40 p.m., and weekly thereafter, and that they should be approximately of fifteen minutes' duration. A representative of the Department of Agriculture would give the initial talk. The matter of drafting a syllabus of lectures was left in the hands of the chairman and Mr. McCaskill, to be submitted to the next meeting of the executive, which it was decided to hold on Thursday, November 28, at 3 p.m.

Mrs. R. Allan, representing the Home Science Department, University of Otago, outlined tentatively a list of talks especially designed to interest women on the farms. The meeting decided that the most appropriate time to put these on would be in the afternoon, that the initial talk be given by Mrs. Allan through the microphone on Wednesday, November 27, at 3.15 p.m., and that the talks be weekly thereafter.

Nearly Three Million Listeners

ACCORDING to figures given by the British Postmaster-General, Dr. H. B. Lees-Smith, the number of licensed listeners in Great Britain is approaching the 3,000,000 mark, being now recorded at 2,869,000. The present system is regarded as being quite satisfactory, and no change is contemplated. The finance provided by the license system is proving quite adequate to carry on the service given by the British Broadcasting Corporation—in fact it has enabled considerable reserves to be built, which are being drawn upon for the finance of the new high-power regional stations being erected to round out the service of the corporation. No difficulty in finance is therefore expected. At the same time there is no indication as to any reduction in fees being contemplated, but this fee is already so moderate in Britain, viz., 10/- per annum, that a variation is hardly necessary.

That the day is near at hand when Empire newspapers will be published simultaneously in London, Cape Town, Sydney, Montreal, and Calcutta was one of many amazing claims for the new invention of high speed telegraphy made by Colonel Adrian Simpson at a dinner in Hyde Park Hotel.

Colonel Simpson said, as everyone knows, that the stenote radiostat was invented by Dr. James Robinson, late chief wireless research officer in the Royal Air Force. Other claims are that it will enable an unlimited number of broadcasting stations to operate. Between the wavelengths of 300 and 600 metres 5000 stations can be employed, whereas at present the limit is twenty-five. Ten thousand words per minute could be telegraphed at a great reduction in cost of telegraphy and telephony, and ten times the amount of traffic can be carried over the existing lines. The whole contents of a large daily newspaper, letterpress and pictures, could be faithfully transmitted to any distance in a few minutes.

The Orchestrina**Question of Definition**

THIS word, which has lately become prominent in the programmes of 2YA, has excited quite a little controversy in the Wellington Press. One would-be wit consulted his dictionary on the question, and found, so he alleged, that the word was not correctly used, being applicable only to a certain musical instrument. He accordingly wrote to the Press attempting to ridicule the use of the word in the programmes and in its application to the combination of musicians organised under the baton of Signor A. P. Truda. Unfortunately for this individual, his dictionary did not carry him far enough back into musical history, and he was promptly corrected by a correspondent with more erudition, who pointed out that the word "orchestrina" was quite correctly used, as the diminutive of orchestra, just in the same way as "operetta" is the diminutive of opera, etc. The word "orchestrina" is of good Italian musical ancestry, dating from very early history, and has been revived quite correctly by Signor A. P. Truda, and applied to his combination of artists, whose services, by the way, are being greatly appreciated by listeners.

IN addressing a meeting of the congregation of St. John's Presbyterian Church on the evening of November 27, the Rev. J. R. Blanchard paid an interesting tribute to the value of the radio broadcasting of church services. Mr. Blanchard, it may be mentioned, came to New Zealand a year or two back from West Australia, where he had covered a wide field of pioneering work with acceptability. His preaching in Wellington has been characterised by marked vigour, and has proved a very welcome addition to the spiritual life of the community. In referring to broadcasting Mr. Blanchard said:—

"Widespread appreciation of the services broadcast from St. John's had also been expressed. Some years ago, when the broadcasting of church services was first mooted, many shook their heads and averred that it would keep people away from church. Wiser people agreed with what Bishop Well-don had said: 'If the clergy were to refuse or neglect such new means of communication as science affords, they would commit the same mistake as might have occurred many years ago had they failed to make use of the printing press or the steam-engine?'"

It was now an established fact, as Sir J. C. W. Reith, Director-General of British Broadcasting, had recently said, that no portion of broadcasting activity was more universally acceptable and appreciated than the religious service. It reached the bedridden in private homes and hospital wards, the isolated settlers of the backblocks, and for a vast number it was the only preaching they would allow themselves the chance of hearing. One was constantly hearing of listeners who actually joined in the singing of the hymns, and knelt to the prayers, while one knew of others who regularly dispatched a weekly contribution by way of an offering to some charity or church fund. It was true that people owed to God something more active than sitting before the fire with the headphones on, but he believed that something more would come from many. It was certain that the regular broadcasting of church services was doing a lot to disabuse many of the prejudices and misconceptions they had harboured concerning the church. In his experience it had not tended to smaller congregations, but if anything to larger ones. He felt that he ought to say a public "thank you" to the excellent service rendered by 2YA, Wellington in this matter.

WANTED AND FOR SALE.

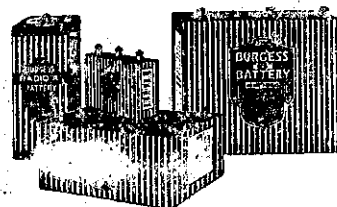
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THE POPULAR
Model 91
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There is a Majestic Radio dealer in every town, who will gladly arrange a FREE DEMONSTRATION IN YOUR OWN HOME

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USE THIS
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LEWIS FADY, LTD.
"The Box Office," Queen St., Auckland.
Please send me illustrated particulars of
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what you can allow me on my present
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Address
RR.2

Home Science

Movement for Instruction

COUNTRY women in particular will be interested in a movement that is about to start in Dunedin. Some time ago the Carnegie Trust Fund donated a sum of money to Otago University for expansion work in home science. It is now proposed that a tutor-organiser and an assistant-tutor, working to the direction of Professor Strong, shall commence a campaign of practical lecturing and demonstrating as from February next. The object of the scheme is to bring women together, in order that they may discuss their problems to mutual advantage, secure information to minimise the work in their homes, and give them more leisure to devote to other things. Through the aid of Station 4YA it is hoped to extend many beneficial aspects of the work to parts outside of Otago. On each Wednesday afternoon at 3.15 wireless talks on domestic affairs will be broadcast by 4YA. The first talk commenced on Wednesday last, November 27, at 3.15 p.m.

Devotion to Duty

Heroic Wireless Operator

HEAVY storms in the English Channel recently resulted in the total loss of the steamer Molesey, which was driven ashore and wrecked with the loss of eight lives.

The survivors, who were rescued after a weary night spent on the wreck with heavy seas crashing over the vessel, told an epic story of the devotion to duty of Wireless Operator E. King. At the height of the storm the ship's steering gear failed, and King immediately commenced sending out signals of distress to any vessels which happened to be in the vicinity. No response was received, but the messages were picked up by stations all over England. Millions of listeners heard appeals broadcast from the London stations asking any ship in the vicinity of the Molesey to send, if possible, visual or radio signals to the disabled steamer, which was rapidly drifting towards the rocks. No assistance was forthcoming, and as the vessel struck mountainous seas swept her from bow to stern.

Under the terrific impacts the wireless cabin rocked and started splitting. Undeterred, King stuck to his post and calmly continued sending out S.O.S. messages. The cabin, which was receiving a terrific battering from the huge seas, was fast breaking up. Suddenly the shore stations listening to the appeals were startled when the transmissions ceased in the middle of a message. The wireless cabin, with its heroic occupant, had been swept bodily overboard.

Towards dawn, a lifeboat which had been gallantly struggling with terrific seas throughout the night succeeded in reaching the wreck and rescuing the survivors.

Across the Tasman

Topical Broadcasting News

FIGURES have been recently made available showing the licenses issued by each Australian State to the end of October, 1929. The total number of licenses issued in the Commonwealth to that date is 309,822, an increase of 24,273 over the number in force a year previously. An increase over last year's numbers is shown by every State excepting Queensland, which has decreased by 1987. The latter State has been steadily dropping back, and the present licenses in force, 23,487, are less than the number existing as far back as 1927.

THE haunting tribal melodies which constitute one of the principal charms of Alfred Hill's Maori opera, "Teora," evidently hold a big fascination for the Australian musical public. Following the recent broadcast of this opera, the A.B.C. received so many letters of appreciation from listeners all over Australia that they consented to a repeat performance. In "Teora," Alfred Hill has not so much adapted Maori tribal melodies for the purpose of grand opera as written an opera to enshrine them. Alfred Hill, the composer, is well known in New Zealand as the composer and producer of "Hinemoa," a similar opera which was presented in this country recently.

A LAND-MARK, both literally and figuratively, in the history of Australian aviation was recently established in the erection of the Hinkler air beacon in Sydney. Mounted on a large steel tower, fifty feet in height, it towers 220 feet above the street level, and can be seen under conditions of average visibility at a distance of 80 miles. The Prime Minister of Australia, Mr. Scullin, who performed the opening ceremony, stated during the course of his remarks that the beacon was Australia's first contribution towards the safety of night flying. Other officials, including the president of the Australian Aero Club, spoke, and the whole proved a very interesting broadcast.

4YA is Popular

ALTHOUGH 4YA Dunedin has been in occupation of its new home only a matter of a few weeks, already some very fine appreciations are recorded on the pages of its visitors' book (says the "Dunedin Star"). One of the first to catch the eye is that of a Wellington visitor, "May you send forth light, joy, and truth." An enthusiastic citizen proclaims the station and studios "a credit to Dunedin"; another says, "A fine studio for a glorious city"; another, "Quite in keeping with our beautiful city"; while other true-blue Dunedinites credit Otago's capital with now having "the best of all" and "the best of the bunch." That these are not merely parochial imaginings is evidenced by the endorsement of visitors from other parts of the Dominion. An Oamaru tribute is couched in these words: "Beautiful and artistic"; similar praise comes from Wanganui.

Radio "At Last"

Appreciated in the Country

A CORRESPONDENT greatly interested in the advancement of radio sends an extract from a letter received by him from a soldier settler's wife in a backblock district. This letter records the installation of radio in a somewhat naive and pathetic way, and pays tribute to its value in removing their isolation.

The letter runs: "Well, we have at last one bit of pleasure up in this wild country, that is, a radio set. For a long time we have been saving odd shillings to get it, and now we have a five-valve set and loudspeaker, which we got cheap from a friend in Auckland. We hear the Wellington station clearly, and enjoy the music very much. On Sunday the church service brings back old memories. I sing the hymns with the congregation. Gwen and Joyce sit with hymn books in their hands, and the children are getting the Word of God, I am pleased to say. A few neighbours drop in and enjoy the service so much that ere long I think some of them will get sets of their own."

Topical Matters

"HANDY ANDY" (Wellington South) writes interestingly: "I do not believe that the advent of the a.c. set will ever decrease the howling valve nuisance, and I cannot share Mr. Blackwood's optimism in that respect. The a.c. system cannot supersede the one or two-valve set built by youths who cannot afford the cost of an a.c. power pack. The amateur builder of these sets can purchase his dry battery power for less than £2 10s., and there will never be a complete a.c. power pack (A, B, and C) available at anything like that price. It is these one or two-valve outfits which make listening hideous for other listeners. No, I cannot see any hope of relief from the growing popularity of the a.c. set."

A LISTENER who operates his set without obtaining a license is nothing less than a common thief. He is not only stealing from the Broadcasting Company and the Government, but he is perpetrating a dishonest act towards his fellow listeners. Let him consider for a moment that broadcast listeners have a community of interest, and that the more licenses there are the greater the amount of money available for the programmes. This is in reply to a correspondent who asks advice concerning his attitude towards a neighbour who is talking of avoiding payment of the license fee. The German Government terms these "pirates" "schwarzhorner," which means "black hearer"—an apt designation.

Our Mail Bag

Afternoon Weather Forecasts.

It occurs to me to ask whether the time of 3.30 is the most suitable for the broadcasting every afternoon of the special weather forecasts prepared by the Meteorological Office for the information of farmers. This special forecast is of very great value, and is greatly appreciated by myself amongst others. At that time, however, some farmers with large herds have already begun milking, and in these days of labour shortage that may involve the assistance of all members of the household. It occurs to me to suggest that half an hour earlier might meet general favour, and save some losing the value of the forecast under present conditions. Would it be possible for the forecast to be prepared and broadcast at 3 o'clock instead of 3.30?—Hayseed.

[This service is intended to meet the best needs of farmers, and the time now used was that suggested by a prominent officer of the Farmers' Union. We invite expression of views from farmers as to which hour is most acceptable to them. The aim of the service is to provide farmers with the best guidance for arranging sheep shearing, cutting of their hay, etc.—Ed.]

Rendering of Tchaikowsky Appreciated.

WILL you kindly convey our most hearty appreciation and compliments to the conductor and members of the 2YA Orchestra for their most wonderful rendering of Tchaikowsky" (Symphony Pathétique) last night. It was a revelation and delightful treat to listen to; never before have we heard such a peerless artistry and consummate musicianship as that rendered last night. It is a credit to the studio and New Zealand. Is it possible to give us the Orchestra often more than twice per week?—Music Lovers (Wellington).

[Note.—All letters must be signed even if name is not for publication.—Ed.]

4YA, Distortion.

I HAVE experienced exactly the same complaint as J. B. Murchison, who complains of distortion from 4YA. The opening night was excellent, but since then anything but. Can anything be done to remedy this?—"K.A.D." (Wellington)

Record Number Required.

STATION 2YA used to give the record catalogue number after each item during the afternoon session. It seems a pity that this has been dropped. Very often one does not hear the name of the item, or perhaps he is not taking much notice, but, on hearing an item, he wishes to know the name. The catalogue number gives it you.—"Grebe" (Waverley).

Radio News

MORE and more it is becoming recognised that the microphone demands special qualifications and training; indeed, in Germany, the service of that instrument—which represents something very much more than a piece of mechanism—is, it would appear, being elevated to the dignity of a diploma course. Some time ago the State Academy of Music at Berlin established a class for the study of speech before the microphone. This has proved so successful that, with the winter term which has just begun, the course will be extended, and in future will cover all the arts that are employed in broadcasting.

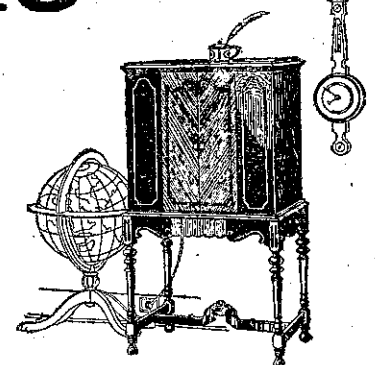
A VERY important development in broadcasting as it affects shipping is announced by the Board of Trade in the Half-Yearly Book recently published. It is intended to establish a service by which news of special or universal importance may be made to reach all ships in minimum time. For trial purposes it is proposed to put the scheme into operation in January and July of each year. Messages will be broadcast from Rugby Wireless Telegraph Station on 18,740 metres at midnight and noon (Greenwich mean time) immediately preceding the British Official Wireless News, from certain medium-power and high-power stations abroad on 2000 and 3000 metres, and from some commercial traffic stations operating on 600 metres.

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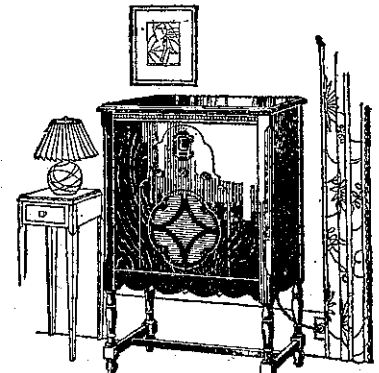
Rogers Sets are built in their entirety by the Empire's largest and oldest-established makers of Radio Receivers. The new 1930 Rogers are unsurpassed for range, purity, volume and artistic cabinet design.



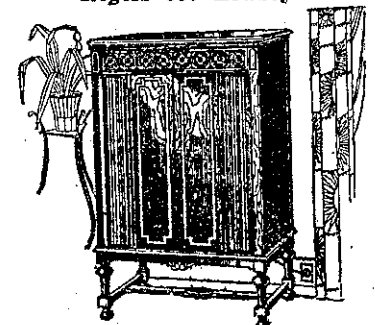
Rogers 550 Highboy.

Five Models to Choose from

Your local ROGERS dealer will gladly demonstrate. If unable to locate a Rogers Representative, kindly communicate with the sole N.Z. Distributors:



Rogers 530 Lowboy



Rogers 580 Phono-electro-Radio.

A. R. Harris Co.,
LTD.

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Applications are invited from responsible dealers where not represented.

Mullard
THE MASTER VALVE

Embodies all improvements
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Broadcasting in America



ANY different systems for controlling and financing broadcasting are in existence throughout the world to-day, ranging from that adopted by the B.B.C., who rigorously exclude advertising, to the system favoured in America. In the latter country the revenue necessary for the maintenance of the various broadcasting services is universally derived from advertising sources. No license fee for listeners is charged, and though this system may on the surface appear an almost ideal one, yet on consideration its numerous drawbacks are apparent. The following is the condensation of a striking article in "Modern Wireless" which very scathingly condemns the American system.

MOST countries throughout the world have adopted a system in which the listener pays directly for the programmes, which are then organised by some independent body, usually the State. In America, however, the average citizen has a horror of anything approaching a Government monopoly, and worships commercial competition. This characteristic, which seems to be peculiar to inhabitants of America, is probably the keynote of their unique system for establishing and maintaining broadcast stations.

Subject to fairly broad regulations, almost anybody can broadcast in the United States, and there are hundreds of stations, entirely lacking in uniformity of technique, power or purpose. Some are small affairs putting out only a few watts, others are much larger than even the high-power Daventry station in England.

Most large cities possess several. Some are municipal, some commercial, some philanthropic, and some religious.

Advertising as a Means of Revenue Condemned

As one might expect of America, the commercial stations predominate. As with many other enterprises, a too complete liberty led to something approaching chaos, and a few years ago a nearer approach to the unified system used in England was set up by the National Broadcasting Company, which now operates through two networks of stations stretching from Atlantic to Pacific.

Generally, one has the choice of two programmes, of N.B.C. standard, by listening to the nearest station on each network. There is also the Columbia Broadcasting Company, which works in a similar manner through a chain of high-power stations linked up by land-lines.

There is no license fee or tax of any kind on receiving sets, so at first sight it might appear that listeners do not contribute to the programmes they hear. Many of them probably imagine that they do not. But as broadcasting in America is run on a commercial basis, and as commerce is not a form of philanthropy expecting no reward for its labours, it is clear that somebody pays.

The broadcasting company is paid by concerns whose goods it advertises by means of the programmes. As a result of hearing the programmes the listener is fired with a desire to purchase these goods, and a proportion of the money he pays for them finances the programmes. As no firm would advertise merely to increase his sales to the point of paying for the advertising, it is clear that the listener

actually pays more for his programmes than they cost; the advertisers pocketing the difference.

Admittedly the enhanced sales lead to reduced prices, and it is a nice little problem which listeners must decide for themselves whether the things they buy cost more because they are advertised, or less.

APART from this question of who pays for the programmes, the advertising system shows itself in the nature of the programmes itself. The fact that broadcasting is advertising in America does not always mean that advertising is so obvious as in countries where it is not allowed. There are concerns who put on programmes and rely on the excellence of the entertainment to incline the listener favourably towards them.

There are also the other sort who are determined not to let even the most butterfly listener be in any doubt as to what they want to sell. There is the sandwich system, in which numbers by the Gaspar Orchestra alternate with the readings of letters from various movie stars and pugilists ascribing their success entirely to the smoking of Gaspar Cigarettes.

This method is so obvious that a switch-over to another station can be effected at an early stage of the proceedings. Then there is the more ingenious type of programme in which the items are chosen to bear some relation to the product which it is desired to put across. For example, the announcement of the number "Mighty Like a Rose" will be followed up with the information that Rose Leaf Soap, which, as all our listeners know, creates a complexion superior to that of any rose, may be obtained at all drug stores for a dime.

This type of propaganda may also be easily detected, and if necessary eliminated. There is, however, one class of entertainment in which advertising is incorporated so cleverly that it is necessary to hear the most of it before identifying it.

It consists of a cleverly worked out short play or sketch which appears quite genuine until near the end, when the climax is unexpectedly supplied by an application of the advertising medium. The great detective, for instance, unerringly unmasks the crim-

inal by observing on him a smudge of Peach Skin Face Powder ("there is a druggist in every block who supplies it for 75 cents") which the murdered heroine, being a woman of discrimination, used.

With all this advertising through the medium of the microphone, however, it must not be thought that most, or even a large proportion of it, is of a direct nature. The radio advertiser must consider the intimate personal relationship between the radio announcer and his hearers. The announcer is an invited guest in the home, and he must not transgress the social amenities by taking advantage of the listeners' hospitality. If he breaks the bounds of good taste with injection of direct sales argument he weakens his appeal. He then places himself on the level of the merchant who stands on the doorway and exhorts passers-by to purchase his goods.

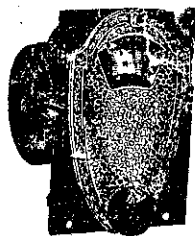
Perhaps the most serious drawback to American broadcasting is that programmes which are provided solely as a vehicle for advertisement must naturally be designed to reach the largest public, and that public is the one that listens negligently to the jingle of a popular fox-trot. The more special audiences, which are interested in literature, drama, classical music, symphony orchestras, and lectures, are neglected by the wise advertiser. Thus, from the very start, the advertisement type of programme is severely limited.

"We should do well to emulate the Americans' keenness on 'big business,' but we should at all costs keep it out of our radio entertainments. For us to give up our broadcasting licenses would be to sell our birthright for a mess of microphone pottage."

Unique Broadcast

AT the opening of the Lille Wireless Exhibition M. Plouviat, who is in charge of the Lille transmitter, made a balloon ascent, and when on the way to Belgium and at a height of 7500ft. spoke by telephone to M. Dehorter—"Le Parleur Inconnu"—at his home near Paris. The conversation was broadcast by the Lille station. Before the termination of this successful transmission M. Plouviat sang a song, the accompaniment of which being played by a studio orchestra in Paris.

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Price, Illuminated 28/-
Price, with 3 Condensers mounted on Chassis, Illuminated £4/4/-
Price, with 4 Condensers mounted on Chassis, Illuminated £5/5/-
Price, with 5 Condensers mounted on Chassis, Illuminated £6/6/-
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THE D.X. CLUB

Views and News.

Identification Wanted

AT 1 a.m. on November 23 I heard two foreign stations, one on about 420 metres (715 k.c.) and the other on about 430 metres (695 k.c.). Would this be one station testing or two conversing, as they were never on the air together?

About 8.50 p.m., Wednesday, November 27, on tuning in on 2ZQ's wavelength—254 metres (1180 k.c.)—I heard the announcement "Station CEN. broadcasting direct from Brunswick Buildings, New York." Is there such a station, or would it be a record from 2ZQ? An unmistakably American voice announced that the next item would be an impression of an evening at home with the radio. At 8.45 p.m., Wednesday, November 27, I heard a station testing round about 200 metres (1500 k.c.). Can any listener-in identify these stations?—"New Chum" (Morrinsville).

COULD anyone give me the address of an amateur transmitting station in Australia? Call sign 3YX, Victoria. Station heard on approximately 75 metres one night recently.—A. P. Morrison (Wellington).

(V.K., 3YX—B. Hardie, "Meelaan." Missouri Avenue, Garden Vale, Victoria.—Ed.)

WHAT station was it on top of Wellington on Monday, November 25, at 8.30 p.m. approximately? Heard the announcer giving out two items, "When You and I were Young, Maggie," and a violin solo, both of which came through very distinct and at about the same strength as 2YA, which came in very strongly.—J. D. McMillan (Rotomah).

ON Monday night, November 25, at 10.10 p.m., frequency about that of 3ZC, a station transmitting "Desert Song," "Ever So Goosey," "Golden Gate." They closed down at 11 p.m.—K.A.D. (Wellington).

COULD any listener give me some information regarding a short-wave station transmitting on 33 metres on November 18, at about 6.20 a.m.? A march was played by a band.—J. Mason (Dunedin).

I WISH to report reception of a station heard November 20, at 9 p.m. I listened to this station for a solid hour trying to locate this stranger who was broadcasting dance music with talk, asking how the station was coming through to some listener. The station was between 3LO and KGO's frequency, with heavy fading. It must be some Australian or else New Zealand station testing. Could any listeners help me in these columns to locate this stranger.—S. Ellis (Opato).

Stations Identified

"GRID" (North Otago), asks for the identification of a station on a frequency of approximately 1670 k.c. "I also heard a station rebroadcasting the Armistice Day celebrations on about 180 metres (1670 k.c.). I again picked up this station at a later date and found it was a harmonic of 2YA, Wellington. Perhaps this accounts for the seemingly low power of 2YA, as I believe a harmonic affects the power of a station.—"Grebe" (Waverley).

[This station cannot be 2YA, as the latter's nearest harmonic is 1440 k.c. (205 metres).—Ed.]

DX Topics

IN regard to station WLW, Cincinnati, I think Mr. Gowland cannot claim priority for the reception of this station as I find on examining my log book that I first heard this station on June 26, 1927. This transmission was specially for New Zealand, and the station was then operating on 422 metres, power 5 k.w. The programme was also rebroadcast by 1YA, Auckland, but my reception was direct from the station. What I regard as being a New Zealand record for distance reception on the broadcast band I made on Sunday morning, November 24, at 2.30 a.m. I had been listening to two New Zealand amateurs testing till a very late hour in the morning. After a little searching on the shorter wavelengths I thought I would try the broadcast band. At about 29 metres (4030 k.c.) I heard music at about strength R4. A little adjustment and signals were received at good 'phone strength. An announcement was made in a foreign language, but I could not distinguish the station call. After listening to musical items for some time further announcements were made which to me seemed to be in three languages, the last in broken English. The call was heard as Valenci Radio Corporation, Madrid, and what sounded to me like "Don Sabina, operator." Then the station call was given as EAJ19. Much more was said, but only a word here and there could be understood.

The station was listened to for three-quarters of an hour, when it gradually faded out until the carrier was just audible. The distance from New Zealand to Spain is approximately 11,000 miles. This was perhaps a freak reception because to span that distance on the broadcast band is something out of the ordinary. For this reception I was using a three-valve receiver. I am sending for verification.—A. P. Morrison (Wellington).

An Appreciation

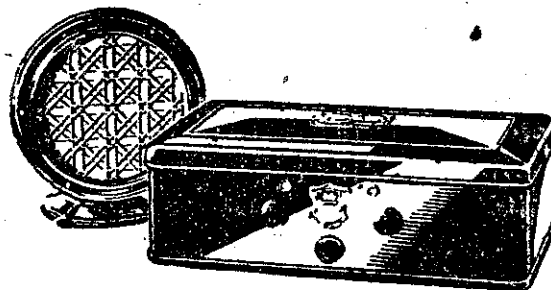
A MARLBOROUGH correspondent writes:—"According to letters in the 'Radio Record' there seem to be people who think that because they have bought a 30/- crystal set they are entitled to criticise the programmes and the announcer, and even

dictate the policy of the Radio Broadcasting Company. This may serve as an antidote. Our set has received 16 American stations, and of course we get New Zealand and Australian stuff fairly well. But the reception is so good and the programmes also—we find the forecast for sheepfarmers and the reports so excellent from Wellington that we rarely bother about anything else."

12 quick facts about

ATWATER KENT SCREEN-GRID RADIO

1. SPECIAL SCREEN-GRID CIRCUIT, perfected by Atwater Kent to make complete use of the new Screen-Grid tubes.
2. MANY TIMES GREATER AMPLIFICATION AND SENSITIVITY.
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9. ALL METAL PARTS PROTECTED by cadmium-nickel plating or lacquering. Power units hermetically sealed against moisture.
10. PRECISION WORKMANSHIP, with permissible variations as little as one-half of one-thousandth of an inch.
11. COMPLETELY SHIELDED.
12. CHOICE OF MODELS—in 2 or 3 stage Screen-Grid Table Models or Furniture Cabinets of exclusive design.



SCREEN-GRID TABLE RECEIVER, with Model F.1a Electro-Dynamic Speaker. Prices from £52 complete.

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Fading and Dead Spots

KDKA and Byrd

IMMEDIATELY following the musical numbers and messages constituting the regular broadcast programme to the Byrd Expedition at Little America which was transmitted recently by the Westinghouse Station KDKA, Pittsburgh, listeners heard a long-drawn-out "buzz," which was maintained for five minutes. This buzz constituted the first of a highly-important series of tests in which the radio experts of KDKA are co-operating with those of the Byrd Expedition.

The object of these tests is to secure a better understanding of one of radio's most mysterious phenomena—"blind spots," or "dead areas."

As most radio listeners are aware, there are many small areas where certain broadcasting stations can be heard only with difficulty, if at all, although the same stations come in clearly all around these areas. While some of these "dead spots" are caused by peculiarities of land configuration, others cannot be explained away so easily, and many scientists now believe that the trouble is chiefly due to the so-called "Heaviside layer."

The "Heaviside Layer."

THE "Heaviside layer," according to theory, is a stratum, possibly magnetic in character, which surrounds the earth. Radio waves cannot pass through it, but are reflected back to earth by it, just as light rays are reflected by a mirror. In some places waves thus reflected are the ones chiefly received, and this applies especially to long-distance broadcasting: at other places, the waves sent out directly by the transmitter are the ones that convey the messages; but in certain places, both sets of waves are received together, and it is due to the interference of these two sets that dead spots, and possibly fading, are thought to be caused. Tests indicate that the Heaviside layer encircles the earth at an average distance of 350 miles, but there is some reason to think that at either the North Pole or the South Pole, or both, this layer approaches close to the earth, or perhaps actually

touches it. Definite confirmation or refutation of this theory is the object of these tests.

These tests are sponsored by the U.S. Navy, not merely in the interest of pure science, but also of national defence, as dead spots occur at sea as well as on land, and naturally interfere with naval operations, so that it is most important to secure as much information on the subject as possible.

Osiso to Catch Echoes.

THE investigative work at Little America is in charge of Malcolm P. Hanson, radio engineer of the Byrd Expedition, and the most important instrument he will use is an ingenious and versatile instrument, known as the Osiso, which was invented by the late Joseph W. Legg, oscillograph engineer of the Westinghouse Electric and Manufacturing Company. The Osiso makes photographic records of radio signals and other electric waves, and is so sensitive that it will measure time-differences of only a few millionths of a second.

By means of the Osiso, Engineer Hanson can record the reception of both direct radio signals and their echoes, as reflected by the Heaviside layer, and by measuring the time difference between them he is able to determine the height of the Heaviside layer near the South Pole.

He has already done considerable experimental work along this line, and as reported by Russell Owen in the "New York Times" for July 25, took a trip for this purpose with two companions ten miles outside of camp in weather so cold that the dogs' noses froze. Hanson carried the Osiso on his back and packed the necessary dry batteries inside his shirt to keep them from freezing. On his return from this trip he radioed the company as follows:—

"Osiso giving splendid results in temperatures down to 70 below zero with ski and knapsack and dog-sled transportation. Suggest Westinghouse co-operate oscillographic study by sending special signals to us, co-operating with Dr. Taylor of Bellevue."

KDKA's radio experts, having received Dr. Taylor's suggestions, arranged with Hanson to send him a long, powerful signal on exactly 25.4 metres, which enabled him to make more accurate measurements than was possible with ordinary radio signals. This signal

Fashions of Filmland

MISS FLORA CORMACK—a prominent executive of one of Wellington's leading film exchanges, whose work brings her constantly in touch with news of the film stars of Hollywood—will shortly commence a series of lecturettes, "Fashions of Filmland," "Homes of Hollywood Stars" "Beauty Hints," "Care of the Hair and Eyes," and other topics of interest to the world of fashion to-day.

This series of lecturettes, which will be given during the afternoon session, once a week, should prove very interesting to our listeners-in of the fair sex, as the Fashion Talks, Beauty Hints and Home Furnishings, which will be presented are Fashion's latest decree, and many valuable hints to the home lover are contained therein.

Boosted in the States

THE incident which occurred several months ago when Commander Byrd sent a radio telegram to 2YA requesting a broadcast of the latest American song hit, entitled "Button Up Your Overcoat, You Belong to Me," has been made the subject of a good deal of publicity in the United States. It will be recollected that on that occasion a special programme was broadcast for the benefit of Little America in Antarctica, and the 2YA announcer conveyed a special message of greeting to the expedition marooned in the long Antarctic night. The "Christian Science Monitor," in a recent number, contained an interesting summary of the incident, which will still be fresh in the minds of 2YA listeners.

was also transmitted on KDKA's regular broadcasting wave so that it could be heard by listeners.

Al Jolson's Voice at Little America.

THE musical programme sent to Byrd included a programme arranged and produced by the Brunswick-Balke-Collender Company and consisted of electrical transcriptions especially prepared for this broadcasting. Among the participating artists were Al Jolson, Nick Lucas, Harry Richman, Belle Baker, Dick Robertson, Scrappy Lambert with his pianos, and other well-known Brunswick stars. Five orchestras were also heard. Hanson recorded parts of this programme on his Osiso as a check on his measurements of the main test signal.

Topical Notes

H.M.S. DUNEDIN, after a few weeks' stay in Wellington, has departed for the north. The interference from the cruiser's transmission of Morse while in port, which was a frequent source of annoyance to local listeners on the occasion of previous visits of the ship, was seldom heard during her recent stay at Wellington. The Dunedin's transmitter was heard, however, occasionally sending brief messages, and its note was unmistakable. Nevertheless the ship behaved very well on the whole, and there was less desire on the part of local listeners to wish the cruiser were elsewhere.

RECEPTION, in Wellington, of the Australian stations during the recent bad weather was down to zero, and not a few less experienced listeners have been blaming their receiving sets, valves, or batteries. "Switch" has been approached by some listeners who had first "tried to find fault" with their equipment before ascertaining the conditions of the ether. Listeners who find distant reception poor should ascertain from other listeners their experience before blaming their equipment. Though the trans-Tasman stations were a whisper only, the "YA" stations came in very well.

THE statement by the new Commonwealth Labour Prime Minister (Mr. Scullin) that in the review of the broadcasting position the Government would consider the advisability of charging higher fees for powerful receivers than for crystal sets has evoked a storm of opposition from country listeners, who, in letters to the editor of the "Sydney Morning Herald," vigorously protest against the change. They point out that in the country it is necessary to have powerful receivers if any station is to be tuned in at all, and contend that the three, four, or five-valve sets in the country areas give no better service to their owners than to crystal sets in the metropolitan area.

JOHN Philip Sousa, the great march composer, of America, whose latest items are heard from the "YA" stations, has been before the public for many years as a band conductor. By a coincidence, Sousa and the Marine Band were photographed, in 1882, beneath one of the first electric arcs ever used to light a band-stand. Sousa and his own band have lately been appearing before microphone in America, and by means of a network of stations, linked up together, their music has been heard by millions of listeners.

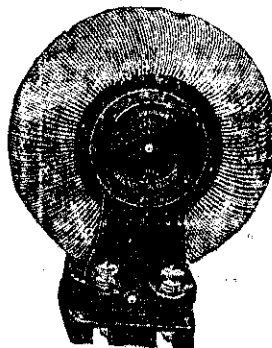
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Special Vernier Condenser 15/-
Ask for NEW PRICE LIST.

A. E. STRANGE
404 Worcester St., CHRISTCHURCH

ONE hears of some protracted periods of continuous broadcasting, including that of our own 2YA, Wellington, when the "Southern Cross" flew the Tasman, but the performance of station KMOX, St. Louis, probably will remain as a world's record for some years to come. KMOX was operated continuously for 186½ hours—nearly eight days, without a moment's interruption, during the continuous flight of the aeroplane "St. Louis Robin" a few weeks ago. The aeroplane established a new world's endurance record, remaining aloft for 420 hours, and refueling in the air.

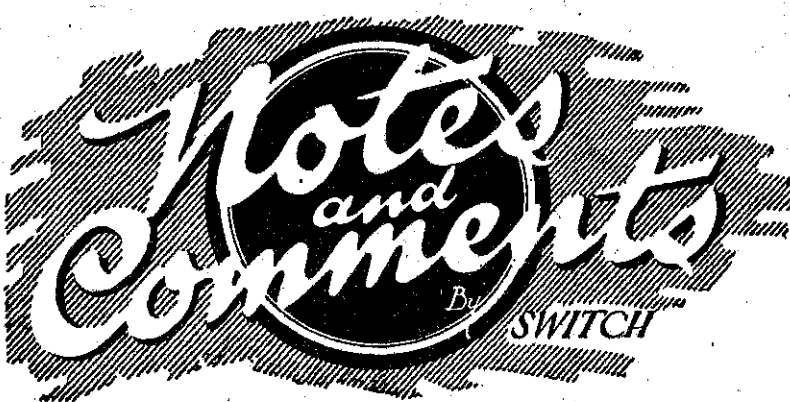
TO keep the public interested during the world's record flight of the aeroplane "St. Louis Robin," station KMOX, St. Louis, induced prominent airmen, visitors at the aerodrome, the respective wives of the flyers, members of the refueling crew, and officials, to speak into the microphone from time to time. During the 186½ hours KMOX was continuously on the air the batteries were changed every eight hours, and station operators worked in three shifts. About 40 miles of land wire connected the microphone at the air field with the transmitter in Kirkwood.

NOW that Wellington has a real aerodrome at the nearby suburb of Rongotai, opportunities should be offering later on for relaying from the aerodrome when any important event occurs. The next trans-Tasman flyers will have no need to seek a landing place other than at the capital city. There is already talk of passenger and mail services in New Zealand, and, Wellington being the commercial centre of the Dominion, the microphone of 2YA will not be far away when anything important is happening at Rongotai.

THE news sessions from 2YA, Wellington, have a distinct educative effect in at least one home in the capital city. A listener informs "Switch" that his family are generally at dinner in the evening when the news items are being broadcast. His children take a lively interest in all that is coming from the loudspeaker, and when an item is heard which the youngsters do not understand he is required to explain it to them. Like a devoted parent he "does his best" to elucidate such items.

A WELLINGTONIAN, recently returned from a visit to Sydney, stated to "Switch" that New Zealand listeners have a great deal to be thankful for because the broadcasting of advertising matter is not carried out by the "YA" stations. Sydney, he said, was suffering from an overdose of broadcast stations, and four of the six stations in Sydney were broadcasting advertisements every night. "Imagine," he said, "Wellington with six stations on the air simultaneously. Talk about interference, why, you Wellingtonians don't know what it means until you've been to Sydney."

LATELY "Switch" has received letters from listeners which are written in such a scrawling style as to be only partly decipherable. Handwriting with a little care can always be made readable, no matter how irregular it may be, but some correspondents dash off their letters with a carelessness lacking common courtesy to the recipient.



SHORTLY a radio telephone service between Australia and England is to be inaugurated. The plant has already been manufactured, and includes much new apparatus. New Zealand short-wave listeners who have already overheard oral conversations between Australia and England will be disappointed if they expect to eavesdrop on the new service, as secrecy will be ensured by a system which will probably be the "single side-band." This makes it impossible to receive intelligible speech without the aid of a specially designed receiving set. The charge for talking between Australia and England will be about £10 for three minutes' conversation.

IN the United States owners of the big broadcast stations are realising that the "pollution" of the ether with flagrant advertising matter is creating adverse reactions among listeners. The owners of WLW, Cincinnati, are seeking to restore the goodwill of listeners by reducing to the very minimum the commercial aspect of their programmes. The management announces: "The first interest of the owner of a station is to build up the goodwill of its audience. No one installation, even though it could afford to do so, should monopolise the air for its own aggrandisement." That station has, therefore, not descended to programmes in which advertising overpowers entertainment.

NEW ZEALAND listeners may complain at times of serious interference from electrical leakages originating in motors and other electrical appliances, but the trouble in the Dominion is incomparably less than that rife in Australia. So intense is this form of interference in some inland towns in the Commonwealth that listeners are writing to the Press complaining that it is not worth while owning a radio set. It is suggested that the Commonwealth Government should pass an Act making all electrical noise-creating gear come under the control of inspectors, who should make tests, and give the owners of interference-causing gear notice to fit filter chokes, under compulsion of a heavy penalty.

IN January next, the Australian Broadcasting Company will assume control of 4QG (Brisbane) and 5CL (Adelaide), and will then administer all the "A" broadcasting stations in the mainland. It is understood that promises have been given to the Post Office Department that there shall be a general improvement in the programmes of all stations as from January next. How great an improvement in the programmes can be effected on

lent announcers in Australia, but the average standard of efficiency is low.

AN aspiring young playwright has asked "Switch" to give some guidance with respect to the technique of a radio playlet. In the first place it must be clearly realised that the average stage sketch is quite unsuitable for broadcasting. The stage sketches rely considerably on action, and, of course, this is not visible to radio listeners. Sound is the mainspring of a radio play, whether it be sound solely in the nature of a dialogue or with "effects." The sentences spoken should be brief and essentially natural. The plot of a playlet by radio should be specious, and there should be a definite climax. The climax, generally, should have an exceedingly brief post-climax. Above all, the characters should be impersonated by performers with easily distinguishable differences in voice or accent or other characteristics, so that listeners can readily realise which person is speaking.

A RADIO playlet should be specious, for if not convincing it is doomed to failure as an entertainment for the majority of listeners. "Switch" recently listened to a radio playlet broadcast from a Sydney station. The theme was so far-fetched that it is highly probable that the generality of listeners would have tuned it out with disgust. It was of the sensational "Deadwood Dick" type, impossible in entirety, and undesirable owing to its crude pandering to the small minority who revel in cheap sensationalism.

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6	100	5 10 0

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Telegrams: "Japacot."

Next Week's Features

1YA Notes

THE service in St. David's Church will be broadcast on Sunday evening. The Rev. D. C. Herron will be the preacher. A studio concert will follow. There will be instrumental items by Miss Molly Wright ('celliste), Miss Ina Bosworth (violiniste), Mr. E. Waters (pianist), and the Studio Trio. Recorded vocal numbers will comprise solos by Dusolina Giannini (soprano), Sigrid Onegin (contralto), a duet by Glynne and Robertson, and a choral number.

AT 7.40 on Tuesday evening, Mr. J. J. Mackay, Commodore of the Takapuna Boating Club, will give a talk on "The Cornwell Cup." Contributing the major portion of the vocal programme on Tuesday evening will be the Clarion Trio, their items including trios, duets, and solos from the light operas "Bohemian Girl," "The Country Girl," "The Arcadians," "The Rebel Maid," "To-night's the Night," and "Maid of the Mountains." Mr. J. F. Montague will recite several humorous selections, while Miss Ina Bosworth will be heard in a violin solo. Also performing on the instrumental side of the programme will be the Studio Trio, and Miss Margot St. L. Toner, pianiste. Concluding the programme will be a gramophone lecture-recital by Mr. Karl Atkinson, entitled "The Sea in Music."

ON Wednesday evening the main vocalists will be the popular Olympians, Miss Dorothy Youd, Miss M. Williamson, Mr. Lambert Harvey, and Mr. Barry Coney, who will be heard in solos and quartets. Mr. A. B. Chappell will continue his instructive "Topical Talks," while instrumental selections will be played by the 1YA Orchestral Octet under Mr. E. Waters. Selected gramophone items will add further interest to the programme.

Kipling's famous ballad of the errant "Danny Deever," in the special musical arrangement by Walter Damrosch, will

be one of the songs to be sung by Mr. Barry Coney. Another will be "Grendon Fair." Mr. Lambert Harvey (tenor) will sing "Macushla" and "Edward Grey." Concerted numbers by the Olympians will be "Swansea Town" and "Sleep, Darling, Sleep."

ON Thursday evening a concert specially arranged for Rarotonga will be broadcast.



MISS GILBERTSON

A member of the Auckland Comedy Players.

—S. P. Andrew, photo.

A SPLENDID concert has been arranged for Saturday evening, when the Auckland Municipal Choir will present a carol concert. The choir will be under the baton of Mr. Maughan Barnett, who will also preside at the grand organ.

2YA Notes

ON Monday evening the last concert of the Hutt Valley Choral Society's 1929 season will be relayed from Lower Hutt. The outstanding feature of the programme will be Bach's "Peasant Cantata," this being the first time in New Zealand that this work has been broadcast. Further items by the Society will be a group of part songs



MISS EDNA LANGMUIR, F.T.C.L.

A very versatile 1YA performer—vocaliste, pianiste and elocutioniste

—S. P. Andrew, photo.

and a number of sea shanties. The soloists for the cantata will be Miss Phyllis Liddell and Mr. Ray Kemp, the latter will also be heard in a solo number. The Society will also be assisted by the 2YA Orchestra, under Signor A. P. Truda, and Miss Giesen, who will be heard in several pianoforte solos.

TUESDAY evening's programme will be given by the "Strollers' Radio Party," assisted by the Salon Orchestra. "The Strollers" have arranged a very attractive programme of vocal solos, humorous sketches, comic songs and piano novelty numbers, and the Salon Orchestra will furnish items in keeping with the programme.

THE Band of the 1st Battalion Wellington Regiment will give another of their entertaining programmes on Thursday evening. The band will be assisted by the Melodie Four, Miss Gwen Dalton, elocutionist, and Mrs. I. Glennie, soprano. The band items will include "Gems from 'William Tell,'" a cornet duet by Bandsmen Barke and Kay, a selection from "Our Miss Gibbs" and several march and waltz numbers.

ON Friday evening an operatic programme will be presented by the 2YA Orchestra, and the following artists, Miss Rene Goyder (contralto), Mrs. W. Fraser Morrish (soprano), Mr.

John Prouse (baritone), and Mr. Oliver Foote (tenor). Miss Gracie Kerr, the well-known elocutionist, will be heard in two humorous recitals.

SATURDAY evening's programme will be of a bright and happy nature, the artists being the Wellington Y.M.C.A. Optimists Club, who are not sparing themselves to see that their programmes lives up to its title—"A Programme of Optimism." Items in keeping with the programme will be given by the Salon Orchestra under Mr. M. T. Dixon.

THE service of the Terrace Congregational Church will be broadcast on Sunday evening. The preacher will be the Rev. C. W. Wickham, the organist and choirmaster Mr. H. E. Brusey. Following the service a performance of "The Messiah" by the Lower Hutt Methodist Church Choir will be relayed from the church. The choir, which will be augmented for the occasion, will be accompanied by an orchestra and organ. The soloists will be Mrs. W. G. Schmidt (soprano), Miss Constance Flamank (contralto), Mr. C. A. Williams (tenor) and Mr. John Prouse (bass). The conductor will be Mr. Ernest Dawson, and the organist Mr. C. R. Horman.

3YA Items

THE service, conducted by the Rev.

A. E. Tebay, in Moorhouse Avenue Church of Christ on Sunday evening will be broadcast by 3YA. The broadcast to follow will be a relay from Dunedin of a concert to be given by the St. Kilda Band.

A WELL-VARIED programme will be given by Derry's Military Band under Mr. J. M. Scott on Monday evening. Instrumental items will also be played by the Studio Trio. Miss Kathleen Chapple (soprano) will contribute to the vocal side of the programme, singing "Golden Dancing Days" and "The China Doll." Miss Belle Renant will sing "Off to Market, Johnny," and "Banjo Song." Baritone items by Mr. B. H. Collett will include "The Blind Ploughman." Two humorous elocutionary numbers will be given by Miss Mavis Ritchie.

EXCERPTS from "Merrie England," the most successful light opera written in England since Sullivan died, will be presented by the Salon Quartet on Wednesday evening. It is a tale of the spacious days of Good Queen Bess, when (as we like to believe) the English were a frolicsome folk and ready at any moment to "kick their heels or smoothly prance in rustic rout or courtly dance." All the principal vocal numbers of the opera will be sung. Miss Corrie Aslin will take the part of Bessie Throckmorton and Miss Dulcie Mitchell that of Jill All Alone and Queen Elizabeth. Mr. H. Blakeley will be Sir Walter Raleigh, and the role of the Earl of Sussex will be filled by Mr. J. Gra-

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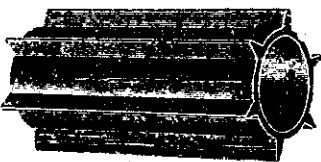
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ham Young. The Studio Octet under Mr. Harold Beck will supply the instrumental music, which will include the "Triumphal March" from "Aida," Ballet Music from "Le Cid," and MacDowell's "Woodland Sketches." Two fine elocutionary numbers will be given by Mr. R. R. Wills, "Britons Beyond the Seas" and extracts from Browning's "Pied Piper."

ON Thursday at 7.30 there will be a talk to farmers on "Weaning Lambs on Rape or Supplementary Feeds for Sheep."

Excerpts from Gounod's "Faust" will be featured on Thursday evening's programme, the vocalists being Madame Gower Burns, Miss Mavis Spiller, Mr. Ernest Rogers, and Mr. J. Filer. The supporting vocal programme will be of a miscellaneous and very interesting nature. Among the numbers to be sung will be "Shipmates o' Mine," "London Town," "Il Bacio," and "A Perfect Day." During the evening recitations will be given by Miss Lily Hughes, "A Broken Web" and "Crossing the Bar." An instrumental programme will be provided by the Studio Octet under Mr. Harold Beck.

THERE will be a "popular" type of programme on Friday evening, followed by a dance music session. The contributing artists will be Miss Maud Stringer (singing two Maori songs and "Three Fishers"), Miss Alma Finnerty (songs at the piano), Mr. J. Smyth (baritone solos), Mr. Geo. Titchener (humour), and Messrs. Norton Collins and George Bennet (violin and accordion).

A PROGRAMME of old favourite vocal numbers and old-time dances has been arranged for Saturday night. It will be a particularly enjoyable concert. The contributing artists will be Miss Nellie Lowe, Mr. Bernard Renell, M. Chas. Lawrence (mirth and melody), Mr. Jock Lockhart (Scottish humour), Mr. Hiram Dunford (humorous recitations), and the Williams Dance Orchestra. The old-time dances will continue till 11 p.m.

4YA Notes

ARCHDEACON FITCHETT will be the preacher at St. John's Anglican Church on Sunday evening, when the service will be broadcast by 4YA. A relay of the concert to be given by the St. Kilda Band at St. Kilda will follow.

A RADIO presentation of the principal excerpts from Mascagni's famous grand opera, "Cavalleria Rusticana," will be made on

AMATEUR RADIO SOCIETY OF WELLINGTON

THE Monthly General Meeting of the Society will be held in the Cambridge Terrace Congregational Church Hall, at 8.0 p.m. on Tuesday, December 10.

MR. D. N. KEITH,

of Metropolitan-Vickers, Ltd., will speak on

"The Early Days of Radio."

Mr. Keith was one of the earliest experimenters on wireless in the Old Country, and his lecture will be of great interest to all.

All listeners are cordially invited to be present.

A. G. H. LAWS, Hon. Secretary.

Monday evening and will comprise the first half of the programme. The vocalists will be the Majors Quartet—Miss Freda Elmes, Miss Dorothy Skinner, Mr. J. Montague and Mr. L. M. Cachemaille. The second half of the programme will be of a miscellaneous nature. The same vocalists will contribute and in addition there will be selections by the members of the Studio Trio—Mrs. Ernest Drake (pianiste), Mr. P. J. Palmer (cellist) and Mr. Frank Parsons (violin).

A VERY fine vocal programme will supplement the St. Kilda Band recital on Tuesday evening. Miss Winnie Collier (mezzo-soprano) will be singing, her numbers being "Dream o' Day Jill," "Somewhere a Voice is Calling" and "A Summer Night." Bass solos by Mr. Neil Black will be "Young Tom o' Devon," "The Grey North Sea" and "The Mountains of Mourne." Recitations will be given by Miss Mary Jolly. The band programme is one of the best presented by that popular combination.

ON Wednesday evening the programme will be presented by the Four Aces. A dance music session will continue from 9.30 till 11 p.m.

ON Friday Mr. Frank Drake and his instrumental quintet are providing the major portion of the programme. A pianiste, Miss Sybil Baker, is included in this combination and she will provide a piano solo, "Pocoato," by Saint-Saens. Miss Baker is a brilliant pianiste and her playing at the Savoy, Dunedin, during the afternoon has delighted many. This will be her first appearance at 4YA. The Trio, consisting of Miss Ethel Wallace (violinist), Miss Sybil Baker and Mr. Frank Drake, should provide most entertaining items for listeners.

A popular vocalist, Miss Olga Wynne, who has not been on the air for some considerable period, will make her return visit on the same programme. Her items include "Song of the Bride" (by Amy Woodforde-Finden), and "Tit for Tat" (by Panter). Miss Lorna Smith (contralto) will be singing again, also Mr. G. Crawford (tenor) and Mr. G. M. Salmond (baritone). Miss Anita Winkel, who is already so well known to 4YA listeners, will provide further evidence of her versatility by giving a child impersonation in addition to reciting "In An Indian Garden."

ON Saturday evening 4YA will relay 3YA's programme.

Children's Sessions

AT 1YA

TUESDAY, DECEMBER 10.—Sketches from Cousin Hilda, and, sad to relate, radio stories for the last time from Uncle Charles, who is leaving for his new home in Australia. Uncle George will be present, of course, with birthday greetings and jokes.

WEDNESDAY.—A jolly dialogue from Shirley, Joyce and Joan, to help Uncle Tom make his hour happy and bright.

THURSDAY.—Puzzles, catches, and jokes from Peter Pan and Cinderella. Cousins assisting with songs.

FRIDAY.—The Happy Hour to be spent with Nod and Aunt Jean once again. Listen for Aunt Jean's verses that she composes each week, and for Nod's quaint stories.

SATURDAY.—Mrs. Arthur Griffiths is bringing her Christmas Entertainers to assist Cinderella this evening, so be ready at 5 o'clock sharp and don't miss any of the fun.

SUNDAY.—Children's Song Service, conducted by Uncle Leo, assisted by Beresford Street Sunday School.

AT 2YA.

MONDAY, DECEMBER 9.—The Sunshine Club are coming this evening to sing you sunshiney songs. Miss Marjorie Buckeridge is their teacher. Uncle Jeff will be here, too, with many greetings and a puzzling puzzle and his good-night song.

TUESDAY.—Miss Hilda Gorrie and Elsie Phillips are bringing their pupils along to-night. Uncle Jim will send out messages for birthdays.

THURSDAY.—The Y.M.C.A. Optimists are coming this evening with Uncle Len to give you a nursery evening. There will be a wonderful trip to somewhere. Uncle George will be here, too, with birthday greetings.

FRIDAY.—Some old friends to-night, the pupils of Miss Rose Carte, also Cousin Ailsa. Brother Jack will be here of course, and good old Robinson.

SATURDAY.—Cousin Eva will sing bed time songs, and the pupils of Mrs. Bernasconi will play cheery music. Uncle Toby and Aunt Gwen will have fun with the aeroplane, and have their usual little talk.

SUNDAY.—The Children's Song Service will be conducted by Uncle George, assisted by the Brooklyn Methodist Sunday School Choir under Mr. A. Gittings.

AT 3YA.

MONDAY, DECEMBER 9.—Who is fond of gardening? To-night "Scatterjoy" invites the little listeners to join in making a garden of flowers, out of all the flowers mentioned by Shakespeare. Music and songs to suit the picture.

WEDNESDAY.—Mother Hubbard and Uncle Frank with some new folk-songs and choruses for you to learn—and some of the songs we know, to sing. Who will join us?

THURSDAY.—Mr. Vernon Griffith's choir of boys giving us a little operetta to-night called "The New Schoolmaster." So a very jolly and bright hour we will have, with Uncle John's stories to help us along.

FRIDAY.—Storyman telling his stories so well, and the Elmwood School choir singing choruses and part songs.

SATURDAY.—To-day "Aunt Pat" is entertaining at a garden party the

Gigantic Studio

Planned for Chicago

WHAT will probably be the largest and most pretentious radio studio in the world will shortly be erected at Chicago. This gigantic radio theatre will be seventy-five feet long, fifty-one in width, and will have a twenty-six foot ceiling. It will provide accommodation for more than one thousand persons, if necessary. There will be six studios in all, and they will be equipped with the most modern broadcasting apparatus available.

The main studio will have a large number of innovations in equipment. Instead of the conventional draping of velvet or monk's cloth to regulate acoustical effects, it will be walled with adjustable narrow panels. These strips will be adjustable in such a manner as to prevent refraction, neutral, or absorbing surfaces to the varied sounds produced in the studio. This invention, which is the outcome of years of research work connected with studio acoustics, is regarded as a distinct improvement. A huge pipe-organ and organ loft, specially adapted for radio presentations of varied character, will be installed. A raised stage, for use in productions permitting the presence of an immediate audience, and also useful in balancing and placing of large orchestras, will occupy one end of the studio.

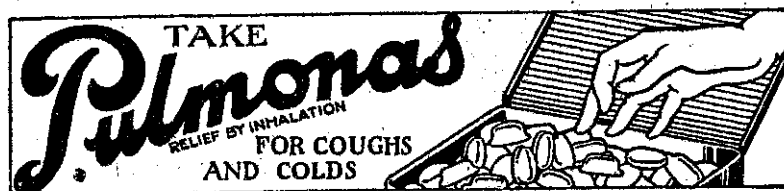
Each studio will have a sound-proof, glass-enclosed balcony to enable invited guests to see the performance in the studio and hear it through loud-speakers as the radio audience hears it. All studio units will be thoroughly sound-proofed through the medium of floating walls and floors. The studios will be without windows. Ventilation will be regulated through modern equipment maintaining a constant flow of pure air at a regulated temperature and with a uniform degree of humidity.

Distance Communication

A REMARKABLE achievement in short-wave communication was made recently when the Tenth Signal Company of the U.S. Army established connection with the Byrd Antarctic Expedition from a station at Panama only 9 degrees from the Equator, the Byrd Expedition being within a short distance of the South Pole.

Little folk who have helped her during the year. The little listeners will hear all about it, for we are broadcasting the party over a relay line. Now listen-in, and hear how a party "over the air" goes.

SUNDAY.—The Children's Song Service, conducted by the Anglican Sunday School.



Full Programmes for Next

[Copyright.—These programmes are copyright, but individual daily programmes may be published on day of performance.]

Sunday, December 8

1YA, AUCKLAND (900 KILOCYCLES)—SUNDAY, DECEMBER 8.

- 3.0 : Afternoon session—selected studio items.
 4.0 : Literary selection by the Announcer.
 4.8 : Studio items.
 5.0 : Children's session, conducted by Uncle Leo.
 6.55 : Relay of service from St. David's Church:—Preacher: Rev. D. C. Heron. Organist: Mr. E. S. Craston.
 8.30 (approx.): Studio Concert:
 Choral—Royal Opera Chorus, "Boris Godounov—Polonaise, Act 3" (Moussorgsky) (H.M.V. C1568).
 Instrumental—Studio Trio, "Andante Religioso" (Thome).
 Contralto—Sigrid Onegin, "Che Faro Senza Euridice" (Gluck).
 Pianoforte—Mr. E. Waters, "Rustling Woods" (Liszt).
 Tenor—Joseph Hislop, "Addio Alla Madre" ("Cavalleria Rusticana") (Mascagni) (H.M.V. DB1280).
 Cello—Miss Molly Wright, "Adagio" (Bargiel).
 Soprano—Dusolina Giannini, "Margaret at the Spinning Wheel" (Schubert) (H.M.V. DB1265).
 Violin—Miss Ina Bosworth, "Melodie" (Tschaiakowsky).
 Vocal duet—Walter Glynn and Stuart Robertson, "The Moon Hath Raised Her Lamp Above" (Benedict) (H.M.V. B2979).
 Instrumental—Studio Trio, "Reve Angelique" (Rubinstein).
 Selection—Eighteenth Century Orchestra, "The Beggar's Opera" (Gay-Austin) (H.M.V. D699).
 9.30 : Close down.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, DECEMBER 8.

- 3.0 : Afternoon session—selected studio items.
 6.0 : Children's song service, conducted by Uncle George.
 7.0 : Relay of service from St. Paul's Pro-Cathedral, Wellington: Preacher: Canon Percival James. Organist and Choirmaster: Mr. Robert Parker.
 8.15 (approx.): Studio concert by the Wellington Municipal Tramways Band under the conductorship of Mr. E. Franklin, and assisting artists:
 Hymn—Band, "Nearer My God to Thee" (trdtl.).
 March—Band, "R.B. and C.F." (Ord Hume).
 Soprano—Miss Nora Gray, "Sing, Break Into Song" (Mallinson).
 Baritone—Mr. C. Wilkie, "The Lord is My Light" (Speaks).
 Vocal duet—Mrs. A. Murie and Miss Hilda Chudley, "Greeting" (Mendelssohn).
 Cornet solo with band accompaniment, Bandsman W. Stevenson, "Tintania" (Rimmer).
 Contralto—Miss Hilda Chudley, Negro Spiritual, "There's a Little Wheel A-Turning" (arrgd. Burleigh).
 Chorus—Band, "Hallelujah Chorus" (Handel).
 Weather report.
 Soprano—Miss Nora Gray, "On Wings of Song" (Mendelssohn).
 Instrumental trio—De Groot, Bor and Calve, (a) "Londonderry Air" (arrgd. Coleman); (b) "Le Cygne" (Saint-Saens) (B2943).
 Baritone—Mr. C. Wilkie, (a) "With Myrtle and Roses" (Schumann); (b) "Thou'rt Lovely as a Flower" (Rubinstein).
 Selection—Band, "William Tell" (Rimmer).
 Vocal duet—Mrs. A. Murie and Miss Hilda Chudley, "I Would That My Love" (Mendelssohn).
 Violin—Marjorie Hayward, (a) "Meditation" ("Thais") (Massenet); (b) "Poem" (Fibich) (H.M.V. B2988).
 Contralto—Miss Hilda Chudley, "Slumber, Dear Maid" (Handel).
 Waltz—Band, "Thoughts" (Alford).
 March—Band, "Australasian" (Rimmer).
 Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, DECEMBER 8.

- 3.0 : Afternoon session—Selected studio items.
 3.30 : Children's song service (Children of the Church of Christ Sunday Schools).
 6.15 : Hymn tunes from studio.
 8.30 : Studio concert:
 Piano and orchestra—Alfred Cortot and London Symphony Orchestra, "Variations Symphoniques" (Cesar Franck) (H.M.V. DB1069/70).
 Negro Spirituals—(a) Paul Robeson, "Scandalize My Name" (arrgd. Burleigh); (b) Paul Robeson and Lawrence Brown, "Hear de Lambs A-Crying" (arrgd. Brown) (H.M.V. B2771).
 Grand organ and orchestra—Victor Symphony Orchestra, (a) "Kamenoi Ostrow" (Cloister Scene) (Rubinstein); (b) "Liebestraum" (Liszt) (H.M.V. EB10).

7.0 : Relay of service from Church of Christ, Moorhouse Avenue—Preacher: Rev. A. M. Tebay; Organist: Miss E. Hepburn; Choirmaster: Mr. H. Ames.

8.15 (approx.): Rebroadcast of 4YA Dunedin (Relay from St. Kilda Band Rotunda of Concert by the St. Kilda Band.
 Close down.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, DECEMBER 8.

- 3.0 : Town Hall chimes.
 3.1 : Selected gramophone items.
 5.30 : Children's song service, conducted by Big Brother Bill.
 6.30 : Relay of service from St. John's Anglican Church. Preacher, A. deacon Fitchett.
 7.55 : Weather report.
 8.5 : Relay from St. Kilda of concert by the St. Kilda Band, under the conductorship of Mr. James Dixon.
 9.15 : Close down.

Monday, December 9

1YA, AUCKLAND (900 KILOCYCLES)—MONDAY, DECEMBER 9.

SILENT DAY.

2YA, WELLINGTON (720 KILOCYCLES)—MONDAY, DECEMBER 9.

- 3.0 : Chimes of the G.P.O. clock.
 3.1 : Selected gramophone items.
 4.30 and 4.50 : Sports results to hand.
 5.0 : Children's session conducted by Uncle Jeff.
 6.0 : Dinner session—"His Master's Voice" Hour:
 Reginald King's Orchestra, (a) "Garden in the Rain" (Gibbons), (b) "The Song I Love" (De Sylva) (B2903).
 Waltz—International Concert Orchestra, "Gold and Silver" (Lehar) (Zonophone EF22).
 Victor Olof Sextet, "Cherry Ripe" (Scott) (B2697).
 6.12 : Tacet.
 6.15 : Waltz—International Concert Orchestra, "The Spanish Dancer" (Di Chiara) (Zonophone EF15).
 Victor Concert Orchestra, "Romance" (Tschaiakowsky) (Zono. EF7).
 Violin—Isolde Menges, "Salut d'Amour" (Elgar) (D1313).
 6.26 : Tacet.
 6.30 : Piccadilly Orchestra, (a) "Friend o' Mine" (Sanderson), (b) "None but the Weary Heart" (Tschaiakowsky) (B2857).
 Orchestra and grand organ—International Concert Orchestra, "My Treasure" (Becucci) (Zonophone EF15).
 Victor Olof Sextet, "Minuet" (Boccherini) (B2697).
 6.42 : Tacet.
 6.45 : Jack Hylton's Orchestra, "Melodious Memories" (Finck) (C1575).
 Waltz—International Novelty Orchestra, "Emperor" (Strauss) (Zonophone EF22).
 6.57 : Tacet.
 7.0 : News session, market reports and sports results.
 7.40 : Lecturette—Mr. Walter F. Dudson, "Our Natural Foods."
 8.0 : Chimes of the G.P.O. clock.
 8.1 : Relay from Lower Hutt of Hutt Valley Choral Society's last concert of the 1929 season:
 Overture—2YA Orchestra under the conductorship of Signor A. P. Truda, "Raymond" (Thomas).
 Cantata—Hutt Valley Choral Society, assisted by the 2YA Orchestra, "The Peasant" Cantata (J. S. Bach). (Soloists: Soprano, Miss Phyllis Liddell; bass, Mr. Ray Kemp. Conductor, Mr. Ernest Jenner, A.R.C.M.).
 Pianoforte—Miss Judith Giesen, "Scherzo in B Sharp Minor," Op. 31 (Chopin).
 Weather report.
 Instrumental—2YA Orchestra, "Hungarian Rhapsody" No. 2 (Liszt).
 Bass—Mr. Ray Kemp, "My Song is of the Sturdy North" (German).
 Orchestra—Selection.
 Part-songs—Hutt Valley Choral Society, (a) "Sleep, Wayward Thoughts" (Dowland), (b) "In Praise of Neptune" (Campion), (c) "Christ had a Garden" (Tschaiakowsky).
 Pianoforte—Miss Judith Giesen, "Berceuse," Op. 37 (Chopin).
 Sea Shanties—Hutt Valley Choral Society:
 (a) "Haul on the Bowlin'" (Bradford and Fagge),
 (b) "Sally Brown" (Bradford and Fagge).
 (c) "Rio Grande" (Bradford and Fagge).

Week-all Stations-to Dec. 15

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- (d) "The Capstan Bar" (Bradford and Fagge).
- (e) "Blow the Man Down" (Bradford and Fagge).
- (f) "Blow, My Bully Boys, Blow" (Bradford and Fagge).
- (g) "Shenandoah" (Bradford and Fagge).
- (h) "Whisky Johnny" (Bradford and Fagge).

Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—MONDAY, DECEMBER 9.

- 3.0 : Afternoon session—Selected studio items.
- 5.0 : Children's session conducted by "Scatterjoy."
- 6.0 : Dinner session—"His Master's Voice" Hour:
 - Royal Opera Orchestra, "Praeludium" (Jarnfeldt) (B2618).
 - Cello—Pablo Casals, "Melody in F" (Rubinstein) (DA833).
 - Waltz—Royal Opera Orchestra, "Bugin Onegin" (Tchaikowsky).
 - Balalaika Orchestra, "Shining Moon" (Russian folk-song) (EA48).
- 6.12 : Tacet.
- 6.15 : Suite—Paul Whiteman's Orchestra, "Suite of Serenades" (Herbert):
 - (1) Spanish, (2) Chinese, (3) Cuban, (4) Oriental (EB26).
 - Waltz—Philadelphia Symphony Orchestra, "Tales from the Vienna Woods" (Strauss) (ED2).
- 6.27 : Tacet.
- 6.30 : Royal Opera Orchestra—"Berceuse" (Jarnfeldt) (B2618).
- Cello—Pablo Casals, "Traumerei" (Schumann) (DA833).
- Male quartet—The Rounders, "Chlo-e" (Kahn) (EA402).
- San Francisco Symphony Orchestra, (a) "Serenade" (Colkman), (b) "Flight of the Bumble Bee" (Rimsky-Korsakov) (ED9).
- 6.42 : Tacet.
- 6.45 : Chicago Symphony Orchestra, (a) "Valse Triste" (Sibelius), (b) "Funeral March of a Marionette" (Gounod) (ED5).
- March—San Francisco Symphony Orchestra, "Marche Militaire" (Schubert) (ED9).
- 6.57 : Tacet.
- 7.0 : News session.
- 7.30 : Canterbury Chamber of Commerce Agricultural Bulletin No. 6—"Minerals in Stock Feeds: Research Applied to Practice." Prepared in conjunction with Canterbury Agricultural College, Lincoln, and the Economics Department, Canterbury College. Broadcast arranged by 3YA Primary Productions Committee.
- 7.15 : Talk—Mr. E. J. Bell, Book Reviews.
- 8.0 : Chimes.
- Studio concert by Derry's Military Band under the conductorship of Mr. J. M. Scott, and assisting artists:
 - 8.1 : Overture—Band, "Martial Moments" (Winter).
 - 8.11 : Soprano—Miss Kathleen Chapple, "Golden Dancing Days" (Coningsby Clarke).
 - 8.16 : Selection—Al Goodman's Orchestra, "Hold Everything" (Medley) (De Sylva) (Brunswick 20090).
 - 8.20 : Baritone—Mr. B. H. Collett, "The Blind Ploughman" (Hall).
 - 8.25 : Instrumental—Christchurch Broadcasting Trio, "Trio in G" (Bohm).
 - 8.35 : Recital—Miss Mavis Ritchie, "At the Photographer's" (Leacock).
 - 8.40 : March—Band, "Dunroon" (Code).
 - Foxtrot—Band, "Wedding of the Painted Doll" (Brown).
 - 8.50 : Contralto—Miss Belle Renaut, "Off to Market Johnny" (Humphries).
 - 8.54 : Violin—Freddie Fradkin, (a) "Nola" (Arndt), (b) "A Kiss in the Dark" (De Sylva) (Brunswick 4318).
 - 9.0 : Weather report.
 - 9.2 : March—Band, "Inauguration" (Herbert).
 - Selection—Band, "Bedouin Love Song" (Pinsuti).
 - 9.12 : Soprano—Miss Kathleen Chapple, "The China Doll" (Rolt).
 - 9.16 : Instrumental—Christchurch Broadcasting Trio, "Four Spanish Dances" (Moszkowski).
 - 9.24 : Baritone—Mr. B. H. Collett, (a) "Omaha" (Nichols), (b) "Always" (Berlin).
 - 9.30 : Instrumental—Band, "First Suite in E Flat" (Holst): (1) Chaconne, (2) Intermezzo, (3) March.
 - 9.40 : Contralto—Miss Belle Renaut, "Banjo Song" (Phillips).
 - 9.45 : Castlewood Marimba Band, "In a Little Love Canoe" (Fond) (Brunswick 4403).
 - 9.48 : Humour—Miss Mavis Ritchie, "Keeping a Seat at the Matinee" (West).
 - 9.53 : Foxtrots—Band, (a) "Forty-Seven Ginger-Headed Sailors" (Sarony), (b) "Was it a Dream?" (Coslow).
 - 10.3 : Close down.

4YA, DUNEDIN (650 KILOCYCLES)—MONDAY, DECEMBER 9.

- 3.0 : Town Hall chimes.
- 3.1 : Selected gramophone items.
- 4.25 : Sports results to hand.
- 5.0 : Children's session conducted by Uncle Allan.
- 6.0 : Dinner session—"Columbia" Hour:
 - Ketelbey's Concert Orchestra, "In a Persian Market" (Ketelbey).
 - Violin—Efrem Zimbalist, "Liebeslied—Old Vienna Waltz" (Kreisler).

- 6.12 : Tacet.
- 6.15 : Morceau—Plaza Theatre Orchestra, "The Busy Bee" (Bendix) (01438).
- Dance—Plaza Theatre Orchestra, "My Lady Dainty" (Hesse) (01438).
- J. H. Squire's Celeste Octet, "La Serenata" (Braga) (9116).
- Cinema organ—G. T. Pattman, "Firefly" (Nicholls) (01348).
- 6.27 : Tacet.
- 6.30 : Columbia Symphony Orchestra, "March of the Toys" (Herbert) (02651).
- Columbia Symphony Orchestra, "Spring Song" (Mendelssohn) (01076).
- Pianoforte—Wm. Murdoch, "Liebestraume" (Liszt) (02568).
- 6.42 : Tacet.
- 6.45 : Waltz—New Concert Orchestra, "Jolly Fellows" (Bruder) (02672).
- J. H. Squire's Celeste Octet, "Serenade" (Titt) (9116).
- Waltz—Eddie Thomas's Collegians, "Beautiful Ohio" (Earl) (02651).
- 6.56 : Tacet.
- 7.0 : News session.
- 8.0 : Town Hall chimes.
- 8.1 : Overture—Edith Lorand Orchestra, "Cavalleria Rusticana" (Mascagni) (Parlophone E10569).
- 8.9 : Presentation of vocal excerpts from "Cavalleria Rusticana" (Mascagni) by the Majors Quartet (Soprano, Miss Freda Elmes; Contralto, Miss Dorothy Skinner; Baritone, Mr. L. M. Cachemaille; Tenor, Mr. J. Montague).
- 8.29 : Instrumental—4YA Broadcasting Trio, "Trio in F Major—First Movement" (Schumann).
- 8.39 : Continuation of the presentation of vocal excerpts from "Cavalleria Rusticana" (Mascagni) by the Majors Quartet.
- 9.0 : Weather report.
- 9.2 : Fantasia—Dajos Bela Orchestra, "La Traviata" (Verdi) (Parl. A4027).
- 9.10 : Baritone—Mr. L. M. Cachemaille, "Rosamond" (Forster).
- 9.14 : Cello—Mr. P. J. Palmer, "Serenade" (Pierne).
- 9.20 : Cembalo solos—Anna Linde, (a) "Le Coucou" (Daquin), (b) "Le Tambourine" (Rameau) (Parlophone E10514).
- 9.24 : Soprano—Miss F. Elmes, "Come Unto Him" ("Messiah"—Handel).
- 9.28 : Pianoforte—Mrs. Ernest Drake, (a) "Prelude—Schult" (Simrock), (b) "Refrain de Berceau" (Palmgren).
- 9.33 : Tenor—Mr. J. Montague, "Only the River Running By" (Hopkins).
- 9.36 : Cello—Mr. P. J. Palmer, "Harlequinade" (Squire).
- 9.41 : Chorus—Opera Comique, Paris, "Carmen—March and Chorus" (Bizet) (Parlophone A4028).
- 9.45 : Instrumental—4YA Broadcasting Trio, "Autumn and Winter" (Glazounov).
- 9.55 : Contralto—Miss D. Skinner, "Gretchen am Spinnrade" (Schubert).
- 9.59 : Instrumental—Edith Lorand Orchestra, "Rustle of Spring" (Sinding) (Parlophone E10591).
- 10.3 : Close down.

REPLACE

all at one time



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Amalgamated  Wireless
(Australasia) Ltd.
BOX 830, WELLINGTON.

Tuesday, December 10

1YA, AUCKLAND (900 KILOCYCLES)—TUESDAY, DECEMBER 10.

- 3.0 : Afternoon session—selected studio items.
 4.0 : Literary selection by the Announcer.
 4.8 : Studio items.
 4.25 : Sports results to hand.
 5.0 : Children's session, conducted by Uncle George.
 6.0 : Dinner Session—"His Master's Voice" Hour:
 Selection—Band of H.M. Coldstream Guards, "Faust" (Gounod).
 Chorus and Orchestra, Royal Opera Chorus and Covent Garden Orchestra, "Pilgrims' Chorus" ("Boris Godounov") (Moussorgsky).
 Waring's Concert Orchestra, "Ah, Sweet Mystery of Life" (Herbert).
 6.12 : Tacet.
 6.15 : New Mayfair Orchestra, "This Year of Grace" selection (Coward).
 Organ—Herbert Dawson, "Prayer and Cradle Song" (Gullmant).
 La Scala Orchestra, "The Secret of Susanna" (Wolf) (D1488).
 6.27 : Tacet.
 6.30 : Symphony Orchestra, "The Planets—Jupiter" (Holst) (D1129).
 Orchestral—"Song of the Nightingale" (Napraynik) (D1488).
 6.42 : Tacet.
 6.45 : Chorus and Orchestra—Royal Opera Chorus and Orchestra, Opening Chorus, Act 1, "Boris Godounov" (Moussorgsky) (C1567).
 Symphony Orchestra, "Salome—Dance of the Seven Veils" (Strauss).
 6.57 : Tacet.
 7.0 : News and market reports.
 7.40 : Talk—Mr. J. J. Mackay (Commodore Takapuna Boating Club), "The Cornwell Cup."
 8.0 : Chimes.
 8.1 : Vocal trio—Clarion Trio, "Sally" (Parks).
 8.5 : Instrumental—Studio Trio, (a) "Moorish Night Song" (Rasch); (b) "Serenade" (Gounod).
 8.14 : Tenor—Mr. James Simpson, "When Other Lips" ("Bohemian Girl") (Balfe).
 8.18 : Piano—Miss M. Toner, selected.
 8.34 : Soprano—Miss Alma McGruer, "Pipes of Pan" ("Arcadians") (Monekton).
 8.38 : Violin—Miss Ina Bosworth, "Minuet" (Porpora).
 8.42 : Bass solo—Duncan Black, "The Fishermen of England" ("Rebel Maid") (Phillips).
 8.46 : Solo and chorus—Clarion Trio, "When the Boys Come Home to Tea" ("To-night's the Night" (Rubens).
 8.50 : Miss M. Toner, selected.
 8.57 : Weather report.
 9.0 : Vocal duet—Miss A. McGruer and Mr. J. Simpson, "A Paradise for Two" ("Maid of the Mountains" (Fraser-Simson).
 9.4 : Humour—Mr. J. F. Montagne, (a) "Hoffenstein Proposes a Toast" (Anon); (b) "What Do the Ladies Talk About?" (Herbert).
 9.13 : Instrumental—Studio Trio, selection from the opera "Etienne Marcel" (Saint-Saens).
 9.22 : Vocal trio—Clarion Trio, "Gipsies' Chorus" ("Bohemian Girl") (Balfe).
 9.26 : Gramophone Lecture—Recital—Mr. Karl Atkinson, "The Sea in Music":
 Instrumental—St. Louis Symphony Orchestra, "Fingal's Cave" (Mendelssohn) (D1299).
 Tenor—Richard Tauber, "To the Sea" (Schubert) (Parlophone 1015).
 Philadelphia Symphony Orchestra, "The Sea and the Vessel of Sinbad" ("Scheherazade") (Rimsky-Korsakov) (H.M.V. D1436).
 Baritone—Peter Dawson, "The Glory of the Sea" (Sanderson).
 Plaza Theatre Orchestra, "Plymouth Hoe" (Ansell) (Columbia 9167).
 Mixed Chorus—"Sea Songs" (H.M.V. BB25).
 10.0 : Close down.

2YA, WELLINGTON (720 KILOCYCLES)—TUESDAY, DECEMBER 10.

- 3.0 : Afternoon session, selected studio items.
 4.30 and 4.50 : Sports results to hand.
 5.0 : Children's session conducted by Uncle Jim.
 6.0 : Dinner session—"His Master's Voice" Hour:
 New Light Symphony Orchestra, "Merry Wives of Windsor" (Nicolai).
 Waltz—Marek Weber's Orchestra, "Moonlight on the Alster" (Petras).
 6.12 : Tacet.
 6.15 : Intermezzo—New Light Symphony Orchestra, "Hearts and Flowers" (Tobani) (Zonophone BF20).
 Waltz—Marek Weber's Orchestra, "Wine, Women, and Song" (Weber).
 Wurlitzer organ—Reginald Foort, "By the Blue Hawaiian Waters" (Ketelbey) (C1459).
 6.26 : Tacet.
 6.30 : New Light Symphony Orchestra, "The Glow-Worm Idyll" (Lincke) (Zonophone BF20).
 Victor Salon Orchestra, (a) "Indian Love Call" ("Rose Marie"—Friml). (b) "The World is Waiting for the Sunrise" (Lockhart).
 Novelty—Balalaika Orchestra, "Song of the Volga Boatmen" (Russian folksong) (EA48).
 6.43 : Tacet.
 6.45 : Jack Hylton's Orchestra, "Old-Time Songs" (C1681).
 Wurlitzer organ solos—Reginald Foort, (a) "Leave Me Alone," (b) "Songs My Mother Taught Me" (Dvorak) (C1459).
 6.59 : Tacet.
 7.0 : News session, market reports and sports results.

- 7.40 : Lecture—Representative of the Agricultural Department, "For the Man on the Land."
 8.0 : Chimes of the G.P.O. clock.
 8.1 : Overture—2YA Salon Orchestra under the conductorship of Mr. Mat Dixon, "Slavonic Rhapsody" (Friedman).
 8.9 : Entertainment by "The Strollers" Radio Party:
 Tenor solo, "A Love Nest for Two" (Lohr).
 Soubrette, "He Did" (Pardol).
 Pianoforte medley of the latest musical comedy numbers.
 Humour—"Richard I." (Manning).
 Soprano solo, "When Daisies Pled" (Arne).
 8.24 : Instrumental trios—Messrs. W. Haydock, S. Chapman, and M. Dixon, (a) "Poupee Valsante" (Dancing Doll) (Poldini), (b) "Wiegeliend" (Burmeister).
 8.34 : Further numbers by "The Strollers":
 Soprano solo, "Cigarette" (Fraser Simpson).
 Humorous duo, "Bridget O'Flynn" (King).
 Latest popular pianoforte numbers.
 Tenor solo, "The Little White House" (Hanley).
 Patter.
 8.55 : Selection—2YA Salon Orchestra, "Pastoral Sketches" (Mayerl).
 9.3 : Weather report.
 9.5 : Entertainment by "The Strollers":
 Soubrette, "You Always Have to Pay a Little More" (Cooper).
 Vocal duet, "Very Own Pierrot" (Allingham).
 Humour, "I Need Love" (Bennett).
 Further popular pianoforte numbers.
 Finale, "Going Up" (Hirsch).
 Musical comedy selection—2YA Salon Orchestra, "The Student Prince" (Romberg).
 9.30 : "Brunswick" Dance Programme:
 Foxtrot—Cotton-Pickers, "He's a Good Man to Have Around" (Yellen).
 Foxtrot—Ray Miller's Orchestra, "Someone's Falling in Love" (Little).
 Foxtrot—Cotton-Pickers, "Shoo Shoo Boogie Boo" (Robin) (4447).
 Foxtrot—Ray Miller's Orchestra, "If You Want Lovin'" (Spier) (4425).
 9.42 : Vocal duet—"The Inspiration Boys, "On the Alamo" (Kahn) (4436).
 Foxtrot—Gerunovich's Roof Garden Orchestra, "There's Sugar Cane Around My Door" (Leonard) (4430).
 Foxtrot—Mount Royal Hotel Orchestra, "Finding the Long Way Home" (Kahn) (4406).
 Waltz—Regent Club Orchestra, "Mistakes" (Leslie) (4473).
 Waltz—Carter's Orchestra, "Three o'Clock in the Morning" (Terriss).
 9.57 : Organ and xylophone—Lew White, "You Were Meant for Me" (Freed).
 Foxtrot—Mount Royal Hotel Orchestra, "The Land of Sleepy Water" (Higman) (4406).
 Foxtrot—Biltmore Hotel Orchestra, "That's What I Call Sweet Music" (Meskill) (4413).
 Foxtrot—Red Nicholl's Five Pennies, "Alice Blue Gown" (Tierney).
 Foxtrot—Biltmore Hotel Orchestra, "Now I'm in Love" (Yellen) (4413).
 10.12 : Comedienne—June Pursell, "I'm Walking Around in a Dream" (Lewis).
 Foxtrot—Arnold Johnson's Orchestra, "Don't Hang Your Dreams on a Rainbow" (Kahal).
 Foxtrot—Al Goodman's Orchestra, "Or What Have You?" (Henry).
 Foxtrot—Colonial Club Orchestra, "Song of the Moonbeams" (Tobias).
 Foxtrot—Al Goodman's Orchestra, "I've Made a Habit Out of You" (Dietz) (4383).
 Waltz—Regent Club Orchestra, "If We Should Never Meet Again" (Leslie) (4473).
 10.30 : Organ with xylophone—Lew White, "Wedding of the Painted Doll" (Freed) (4416).
 Foxtrot—Oriole Orchestra, "An Old Italian Love Song" (Harrison).
 Foxtrot—Lyman's California Orchestra, "Ain't Misbehavin'" (Razaf).
 Foxtrot—Oriole Orchestra, "Why Did You?" (Lombardo) (4439).
 Foxtrot—Red Nicholl's Five Pennies, "A Pretty Girl is Like a Melody" (Berlin) (4456).
 10.45 : Vocal duet—"The Inspiration Boys," "The Moonlight March" (Newman) (4436).
 Foxtrot—Hotel Astor Orchestra, "Every Moon's a Honeymoon" (Wimbrow) (4410).
 Foxtrot—Lyman's California Orchestra, "Bashful Baby" (Friend).
 Foxtrot—Hotel Astor Orchestra, "An Eye-full of You" (Gilbert) (4410).
 Waltz—Carter's Orchestra, "That Naughty Waltz" (Stanley) (4433).
 11.0 : Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—TUESDAY, DECEMBER 10.

SILENT DAY.

4YA, DUNEDIN (650 KILOCYCLES)—TUESDAY, DECEMBER 10.

- 1.30 : Relay from Invercargill of opening ceremony of New Zealand Royal Show.
 5.0 : Children's session conducted by Uncle George.
 6.0 : Dinner session:
 Royal Albert Hall Orchestra, (a) "Song of Morning" (Elgar), (b) "Song of Night" (Elgar) (H.M.V. D1236).
 Cello—Gaspar Cassado, "Mennett" (Haydn) (Columbia 03595).
 6.12 : Tacet.
 6.15 : Selection—La Scala Orchestra, "Song of the Nightingale" (Napraynik) (H.M.V. D1488).

Instrumental trio—Kreisler, Kreisler, and Raucheisen, "L'Arlésienne—Intermezzo" (Bizet, arrgd. Kreisler) (H.M.V. DB1166).

Male choir—Sheffield Orpheus Choir, "Hymn Before Action" (Kipling-Walford Davies) (Regal G30008).

6.27: Tacet.

6.30: Halle Orchestra, "Rosamunde Ballet Music" (Schubert): (1) Andantino, (2) Allegro Moderato, (3) Andante un poco assai (Col. 04200)

Cello—Gaspar Cassado, "Chanson Villageoise No. 2" (Popper) (Col.)

6.41: Tacet.

6.45: Instrumental trio—Kreisler, Kreisler, and Raucheisen, "Sanctissima" (Corelli, arrgd. Kreisler) (H.M.V. DB1166).

Columbia Symphony Orchestra, "The Flatterer" (Chaminade) (Col.).

Male choir—Sheffield Orpheus Choir, "The Long Day Closes" (Chorley) (Regal G30008).

6.57: Tacet.

7.0: News session.

8.0: Town Hall chimes.

Studio concert by the St. Kilda Band under the conductorship of Mr. James Dixon, and assisting artists:

8.1: Concert march—Band, "Entry of the Gladiators" (Fuick).

8.8: Bass—Mr. Neil Black, "Young Tom o' Devon" (Russell).

8.12: Novelty—Norman Long, "Overture 1929" (Carlton, arrgd. Long) (Col.).

8.15: Mezzo-soprano—Miss Winnie Collier, (a) "Dream o' Day Jill" ("Tom Jones"—German), (b) "Somewhere a Voice is Calling" (Tate).

8.22: Intermezzo—Band, "Crown of Love" (Tipping).

8.29: Male choruses—Prudhoe Gleemen, (a) "Soldier's Farewell" (Kinkel), (b) "Border Ballad" (Mauder) (Regal G20429).

8.35: Selection—Band, "Unfinished Symphony—First Movement" (Schubert)

8.46: Recitals—Miss Mary Jolly, (a) "Comfort" (Service), (b) "The Woman at the Wheel" (Constanduros).

8.53: Paul Whiteman's Orchestra, "Gipsy" (Gilbert) (Columbia 07505).

9.0: Weather report.

9.2: Selection—Band, "Gems of Irish Melody" (Hume).

9.14: Bass—Mr. Neil Black, (a) "The Grey North Sea" (Hewitt), (b) "The Mountains o' Mourne" (Collison).

9.21: Mandolin Band, "Stephanie Gavotte" (Czibulka) (Columbia 01210).

9.24: Mezzo-soprano—Miss Winnie Collier, "A Summer Night" (Goring-Thomas).

9.28: Song waltz—Band, "Was it a Dream?" (Coslow).

9.35: Recital—Miss Mary Jolly, Extract from "Romeo and Juliet" (Shakespeare).

9.42: Humorous selection—Band, "Musical Fragments" (Rimmer).

9.52: Humour—Norman Long, "What did the Village Blacksmith Say?" (Squires) (Columbia 01533).

9.55: March—Band, "The Crusader" (Anderson).

10.0: Close down.

9.3: Contralto—Miss Martha Williamson, (a) "Without Thee" (Gounod); (b) "Ingrid's Song" (Kjerulf).

9.10: Selection—Band of H.M. Coldstream Guards, "Leslie Stuart's Songs" (arrgd. Hume) (H.M.V. C1628).

9.18: Tenor—Mr. Lambert Harvey, "Edward Gray" (Sullivan).

9.22: Instrumental—1YA Orchestral Octet, "Two Old French Dances" (Bom-bic): 1. Minuet à la Princesse; 2. Petit Coeur."

9.32: Soprano—Miss Dorothy Yond, "My Heart is Singing" (Grant).

9.36: Violin—Fritz Kreisler, "Humoreske" (Dvorak) (H.M.V. DB1091).

9.40: Baritone—Mr. Barry Coney, "Danny Deever" (Damasch).

9.44: Band of H.M. Coldstream Guards, "Les Cloches De Corneville" (Planquette) (H.M.V. C129).

9.47: Vocal quartet—Olympians, "Sleep, Darling, Sleep" (Martin).

9.51: Instrumental—1YA Orchestral Octet, "William Tell" ballet music (Rossini, arrgd. Godfrey).

10.0: Close down.

2YA, WELLINGTON (720 KILOCYCLES)—WEDNESDAY, DECEMBER 11

SILENT DAY.

3YA, CHRISTCHURCH (980 KILOCYCLES)—WEDNESDAY, DEC. 11.

3.0: Afternoon session—Selected studio items.

5.0: Children's session, conducted by Mother Hubbard and Uncle Frank.

6.0: Dinner session—"Parlophone" Hour:

Overture—Berlin State Opera Orchestra, "Mignon" (Thomas).

Grand Symphony Orchestra, "Tales of Hoffman—Barcarolle" (Offenbach) (A4061).

6.12: Tacet.

6.15: Fantasia—Edith Lorand Orchestra, "Faust" (Gounod) (E10579).

Pianoforte—Karol Szreter, "Fledermaus" (Strauss) (A4082).

6.27: Tacet.

6.30: Selection—Dajos Bela Orchestra, "La Tosca" (Verdi) (A4045).

Violincello—Oradio de Castro, "Nocturne in E Flat" (Chopin).

6.42: Tacet.

6.45: Overture—Grand Symphony Orchestra, "Fra Diavolo" (Auber).

Grand Symphony Orchestra, "Tales of Hoffman—Entr'acte and Minuet" (Offenbach) (A4061).

6.57: Tacet.

7.0: News session.

7.30: Addingdon market reports.

8.0: Chimes.

8.1: Special presentation of vocal excerpts from "Merrie England" (German) by the Salon Quartet:

Cast.

Bessie Throchmorton	Miss Corrie Aslin
Jill All-Alone	Miss Dulcie Mitchell
Queen Elizabeth	Mr. H. Blakeley
Sir Walter Raleigh	Mr. J. Graham Young
Earl of Essex	

Overture—Band of H.M. Grenadier Guards, "Merrie England" Selection (German) (Columbia 01535).

8.9: Contralto with chorus—"Oh, Where the Deer do Lie" (German).

Tenor with chorus—"I Do Counsel that Your Playtime" (German).

8.15: Studio Instrumental Octet under the conductorship of Mr. Harold Beck, (a) "Triumphal March" ("Aida") (Verdi); (b) "Nocturne in E Flat" (Chopin)

8.23: Tenor with chorus—"That Every Jack Should Have a Jill" (German).

Vocal quartet—"Love is Meant to Make Us Glad" (German).

8.30: Recital—Mr. Richard R. Wills, extracts from "The Pied Piper" (Browning).

8.34: Studio Instrumental Octet, "Ballet Music from 'Le Cid'" (Massenet): (1) Castillane, (2) Andalous, (3) Aragonaise, (4) Aubade, (5) Navaraine.

8.46: Soprano—"She Had a Letter from Her Love" (German).

Soprano and tenor duet—"When True Love has Found a Man" (German).

8.53: Violin and organ—Manuello, (a) "Once" (Sanders); (b) "Evening in the Desert" (Hermite) (Regal G20420).

8.59: Weather report.

9.1: Studio Instrumental Octet, (a) "Pas de Amphores" (Chaminade); (b) "Mazurka" (Saint-Saens)

9.8: Baritone with chorus—"Who Were the Yoemen?" (German).

Contralto with chorus—"O Peaceful England" (German).

9.15: Band of H.M. Grenadier Guards, "Nell Gwynn Dances" (German): (1) Country Dance, (2) Pastoral Dance (Columbia 01329).

9.19: Recital—Mr. R. R. Wills, "Britons Beyond the Seas" (Begbie).

9.25: Studio Instrumental Octet, "Woodland Sketches" (MacDowell): (1) To a Wild Rose, (2) Will o' the Wisp, (3) From an Indian Lodge, (4) To a Water Lily.

9.37: Soprano—"It is a Tale of Robin Hood" (German).

Vocal quartet—"In England, Merrie England" (German).

9.42: Band of H.M. Grenadier Guards, "Nell Gwynn Dances" (German): Merry-makers' Dance (Columbia 01330).

9.46: Soprano—"O Who Shall Say that Love is Cruel?" (German).

Baritone with chorus—"When Cupid First This Old World Trod" (German).

Vocal quartet—"Now Who'll Come? Said Robin Hood" (German).

Wednesday, December 11

1YA, AUCKLAND (900 KILOCYCLES)—WEDNESDAY, DECEMBER 11.

3.0: Afternoon session—selected studio items.

4.0: Literary selection by the Announcer.

4.8: Studio items.

4.25: Sports results to hand.

5.0: Children's session, conducted by Uncle Tom.

6.0: Dinner Session—"Parlophone" Hour:

Orchestra of the Concerts Colonne, Paris, "Mother Goose" Suite (Ravel): 1. Laideronette; 2. Hop o' My Thumb; 3. The Fairy Garden (L024-5).

6.12: Tacet.

6.15: Grand Symphony Orchestra, "Caliph of Bagdad" overture (Boldieu).

Pianoforte—Josef Pembauer, "Forest Murmurs" (Liszt) (4048).

6.27: Tacet.

6.30: Capitol Theatre Instrumental Trio, (a) "Valse Bleue" (Drigo); (b) "To a Wild Rose" (Macdowell) (2063).

Cello—Gregor Piatagorsky, "Guitarre" (Moszkowski) (2628).

Edith Lorand Orchestra, "Siren Magic" (Waldtenfel) (2050).

6.42: Tacet.

6.45: Grand Symphony Orchestra, "L'Arlésienne Suite" No. 2 (Bizet): 1. Intermezzo; 2. Farandole (10598).

Grand Symphony Orchestra, "Hungarian Dances" Nos. 5 and 6 (Brahms) (4089).

6.57: Tacet.

7.0: News and market reports.

7.30: Talk—Madame Mabel Milne, "Health and Diet."

8.0: Chimes.

8.1: Selection—1YA Orchestral Octet, "Maritana" (Wallace, arrgd. Ritter).

8.11: Vocal quartet—The Olympians, "Swansea Town" (Holst).

8.15: Tenor—Mr. Lambert Harvey, "Macushla" (McMurrough).

8.19: Pianoforte—Wilhelm Backhaus, "Bohemian Dance" (Smetana).

8.23: Soprano—Miss Dorothy Yond, "The Sweetest Song" (James).

8.27: Organ—Jesse Crawford, (a) "O Promise Me" (De Koven); (b) "Be-cause" (D'Hardelot) (H.M.V. EA209).

8.33: Baritone—Mr. H. Barry Coney, "Grendon Fair" (Marie).

8.37: Instrumental—1YA Orchestral Octet, (a) "The Mouse and the Clock" (Whitney); (b) "Musical Jigsaw" (Aston).

8.46: Talk—Mr. A. B. Chappell, M.A., Topical Talk.

9.1: Weather report.

- 4.56: Stud'o Instrumental Octet, "Woodland Sketches" (MacDowell): (1) A Deserted Farm, (2) By a Meadow Brook, (3) Told at Sunset.
- 10.1: Close down.
- 4YA, DUNEDIN (650 KILOCYCLES)—WEDNESDAY, DECEMBER 11.**
- 3.0: Town Hall chimes.
- 8.1: Selected gramophone items.
- 4.25: Sports results to hand.
- 5.0: Children's session, conducted by Aunt Anita.
- 6.0: Dinner Session:
- Selection—Debroy Somers' Band, "The Desert Song" (Romberg).
- Waltz—Eddie Thomas' Collegians, "Moments With You" (Shilkret).
- International Concert Orchestra, "Parade of the Wooden Soldiers" (Jessel) (Zonophone 5221).
- 6.12: Tacet.
- 6.15: Waltzes—International Concert Orchestra, (a) "Over the Waves" (Rosas); (b) "Danube Waves" (Ivanovic) (Zonophone EP3).
- Hilo Hawaiian Orchestra, (a) "Kawaihau Waltz" (Kealakui); (b) "My Hula Love" (H.M.V. B2790).
- 6.27: Tacet.
- 6.30: Wurlitzer organ—"Merchant of Venice" Suite (Rosse): 1. Prelude; 2. Intermezzo; 3. Oriental March (Columbia 02796).
- Murek Weber's Orchestra, "Vienna by Night" (Komzak).
- 6.42: Tacet.
- 6.45: Waltz—International Concert Orchestra, "Gipsy Love" (Lehar).
- New Light Symphony Orchestra, (a) "Barcarolle" ("Tales of Hoffman" (Offenbach); (b) "Intermezzo" ("Cavalleria Rusticana" (Mascagni) (H.M.V. B2377).
- Waltz—International Concert Orchestra, "Sweetheart" (Strauss).
- 6.59: Tacet.
- 7.8: News session.
- 8.1: Town Hall chimes.
- 8.1: Selection—Paul Whiteman's Orchestra, "Mississippi Suite" (Grove).
- 8.1: Entertainment by the "Four Aces" Concert Party.
- 9.1: Weather report.
- 9.2: International Novelty Orchestra, "Jolly Fellows" waltz (Volstedt).
- 9.6: Continuation of entertainment by the "Four Aces" Concert Party.
- 9.30: "His Master's Voice" Dance Programme:
- Foxtrot—Arcadians Dance Orchestra, "Fascinating Eyes" (Snyder).
- Foxtrot—Jack Pettis and his Pets, "A Bag of Blues" (Goering).
- Waltz—Arcadians Dance Orchestra, "Ah! Sweet Mystery of Life" (Herbert) (Zonophone 5249).
- Foxtrot—Ambrose's Orchestra, "Try to Learn to Love" (Coward).
- Foxtrot—Jack Pettis and his Pets, "Freshman Hop" (Goering).
- 9.45: "Amour—Leonard Henry, "The Tale of the Talkies" (Henry).
- Foxtrot—Arcadians Dance Orchestra, "Our Canary" (Butler).
- Foxtrot—Ambrose's Orchestra, "Dance, Little Lady" (Coward).
- Foxtrot—Arcadians Dance Orchestra, "Dreaming of To-morrow" (Pole) (Zonophone 5251).
- 9.57: Baritone—Noel Coward, "Dance, Little Lady" (Coward) (B2720).
- Foxtrot—Geo. Olsen's Music, "Old Man Sunshine" (Dixon) (EA422).
- Foxtrot—Park Central Orchestra, "Then Came the Dawn" (Dubin).
- Waltz—The Troubadours, "Diane" (Rapee) (EA269).
- 10.9: Wurlitzer organ—Leslie James, (a) "Just Imagine" (de Sylva); (b) "Lily of Laguna" (Stuart) (B2902).
- Foxtrot—Arcadians Dance Orchestra, "The Man I Love" (Gershwin).
- Foxtrot—"Sentimental Baby" (Palmer) (Zonophone EE144).
- Foxtrot—Arcadians Dance Orchestra, "A Room With a View" (Coward) (Zonophone 5167).
- 10.24: Humour—Leonard Henry, "General Post" (Henry) (B2916).
- Community Lancers—Bert Firman's Dance Orchestra.
- 10.39: Baritone—Maurice Elwin, "Don't Keep Me in the Dark, Brighteyes" (Wendling) (Zonophone 5243).
- Foxtrot—Nat Shilkret's Orchestra, "Nagasaki" (Dixon) (EA412).
- Foxtrot—Geo. Olsen's Music, "Doin' the Raccoon" (Klages) (EA422).
- 10.48: Baritone—Maurice Elwin, "The First Kiss" (Dubin).
- Foxtrot—Statler Pennsylvanians, "It Goes Like This" (Caesar).
- Waltz—Nat Shilkret's Orchestra, "Till We Meet Again" (Egan).
- Foxtrot—Nat Shilkret's Orchestra, "What's the Reason?" (Atteridge).
- Foxtrot—Coom Sanders' Orchestra, "Ready for the River" (Kalm).
- 11.0: Close down.

Thursday, December 12

1YA, AUCKLAND (900 KILOCYCLES), THURSDAY, DECEMBER 12.

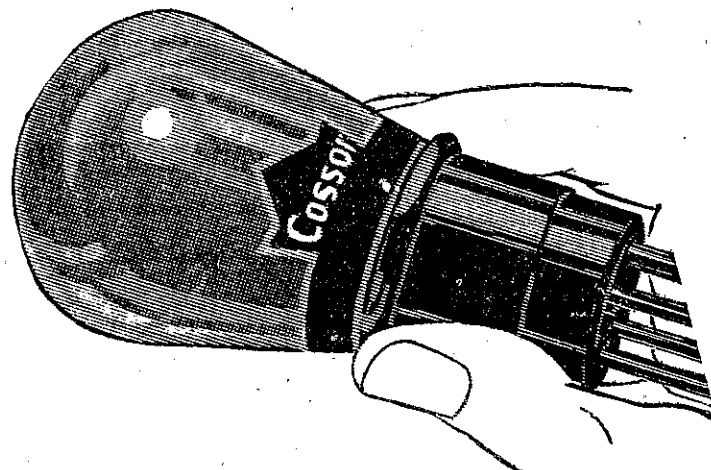
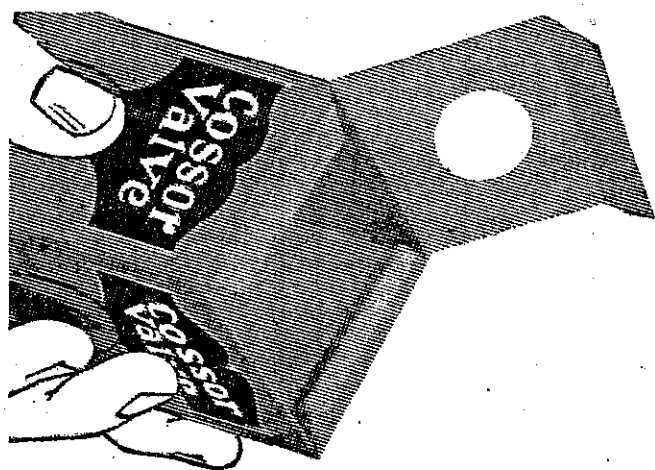
- 3 p.m.: Afternoon session: Programme arranged by Messrs. Lewis Eady, Limited.
- 5.0: Children's session, conducted by Peter Pan.
- 6.0: Dinner session—"Columbia" hour:
- Band of the Royal Air Force, "Under the Double Eagle" (Wagner).
- Zyfrid's Gipsy Orchestra, (a) "Kasbek" (arr. Ferraris), (b) "Gipsy Idyll" (arr. Ferraris), (Regal G20485).
- 6.13: Tacet.
- 6.15: Instrumental septet—Foveau, Cantrelle, Bellanger, Vieux, Marneff and Nanny, "Septet" Op. 65 (Saint-Saens); (1) Preamble; (2) Minuet; (3) Intermezzo (02844/5).
- 6.27: Tacet.
- 6.30: Instrumental septet—Foveau, Cantrelle, Bellanger, Vieux, Marneff and Nanny, "Septet" Op. 65 (Saint-Saens): (1) Gavotte; (2) Finale.
- Male quartet—Salisbury Singers, "Sleep, Gentle Lady" (Bishop).
- Organ—Terence Casey, "I'm Lonely" (Contes) (01501).

- Royal Serbian Tambouritzna Orchestra, "Ne Kalythe Valcas" (Serbian Melody), (01490).
- 6.43: Tacet.
- 6.45: Ketelbey's Concert Orchestra, "In a Fairy Realm" Suite: (Ketelbey): (1) The Moonlit Glade; (2) The Queen Fairy Dances; (3) Gnomes' March (0264/5).
- 6.57: Tacet.
- 7.0: News and market reports.
- 7.40: Talk—Dr. T. Harold Pettit, "Life Saving: The Local Branch of the Royal Life Saving Society and its Activities."
- 8.0: Chimes.
- Special programme for listeners in Tonga.
- 8.1: Overture—1YA Orchestral Octet, under the conductorship of Mr. Eric Waters, (a) "Miss Johnny" (Hawaiian Waltz), (Leoser); (b) "By the Blue Hawaiian Waters" (Ketelbey).
- 8.11: Talk—Mr. J. D. Whitcombe, "A Message to Tonga from Auckland."
- 8.21: Instrumental—Ingall's Hawaiian Orchestra, (a) "Hawaiian Nights" (Roberts); (b) "Wreath of Princess" (Hopkins).
- 8.29: Vocal duo—Bohemian Duo, "Maori Melodies."
- 8.37: Instrumental—1YA Orchestral Octet, (a) "Hawaiian Sunshine" (Douglas); (b) "Kilanea" (Stewart).
- 8.44: Chorus—Tongan Vocal Music, arranged by Mr. J. D. Whitcombe.
- 8.50: Instrumental—Ingall's Hawaiian Orchestra, (a) "My Rosary" (Nevins); (b) "Repas Band March" (Sweeley).
- 8.57: Weather report.
- 9.0: Suite—1YA Orchestral Octet, "From the Samoan Isles" (Geehl): (1) By Coral Reef; (2) Savaii Long Song; (3) Festal Dance.
- 9.10: Vocal duo—Bohemian Duo, "Maori Melodies."
- 9.17: Instrumental—Ingall's Hawaiian Orchestra, (a) "Pua Carnation" (Kawai); (b) "Kawaihau Waltz" (Kawai).
- 9.24: Chorus—Tongan Vocal Music, arranged by Mr. J. D. Whitcombe.
- 9.30: Instrumental—1YA Orchestral Octet, (a) "Ua Like no a Like" (arr. Lake); (b) "Aloha-oe" (arr. Lake).
- 9.37: "Columbia" dance programme:
- Foxtrot—Broadway Nitelites, "You Were Meant For Me" (Brown).
- Foxtrot—The Knickerbockers, "That's the Good Old Sunny South" (Ager), (01544).
- Foxtrot—Ipapa Troubadours, "Deep Night" (Henderson), (01539).
- Waltz—Paul Whiteman's Orchestra, "Blue Hawaii" (Baer).
- Waltz—Kil Dech's Syncopators, "I'll Always be in Love With You" (Ruby), (01520).
- Whispering pianist—Art Gillham, "Tell Me There's Hope for Me" (Johnson), (01542).
- Polka—Besses o' the Barn, "Dot and Currie" (Regal G8563).
- Schottische—Concertina, "Blue Bonnets" (Regal G7003).
- Foxtrot—Milt Shaw's Orchestra, "Walking with Susie" (Gottler).
- Foxtrot—Paul Whiteman's Orchestra, "Nola" (Arndt), (07022).
- Foxtrot—Lombardo's Royal Canadians, "This is Heaven" (Yellen).
- Comedian—Will Fyfe, "The Engineer" (Fyffe), (9108).
- Waltz—Paul Whiteman's Orchestra, "My Angeline" (Wayne).
- Waltz—Paul Whiteman's Orchestra, "Roses of Yesterday" (Berlin).
- Foxtrot—Debroy Somers Band, "The Egg Song" (Salisbury).
- Foxtrot—Royal Canadians, "I'm Still Caring" (Vallee), (01560).
- Contralto—Clara Serena, "I'm a-Longing for You" (Fuhrmann).
- Tango—Mark Hopkin's Orchestra, "Senorita" (Weeks), (01584).
- Foxtrot—Ted Lewis' Band, "Glad Rag Doll" (Ager), (01440).
- Foxtrot—Milt Shaw's Orchestra, "Breakaway" (Gottler).
- Foxtrot—Paul Whiteman's Orchestra, "Chinese Lullaby" (Bowers).
- Vocal duet—Layton and Johnstone, "Someday, Somewhere" (Polack), (51493).
- Waltz—Jacque Jacobs' Ensemble, "España" (Waldteufel), (01560).
- Waltz—Piccadilly Players, "Lisette" (Major), (01508).
- Foxtrot—Willie Creager's Orchestra, "On Top of the World Alone" (Whiting), (Regal G20527).
- Foxtrot—Piccadilly Players, "I Found You Out When I Found You In" (O'Flynn), (01568).
- Comedian—Will Fyfe, "Dr. McGregor" (Fyffe), (9108).
- Foxtrot—Ben Selvin's Orchestra, "He, She, and Me" (Lombardo).
- Foxtrot—Piccadilly Players, "Make Believe" (Kearn), (01408).
- Foxtrot—Jan Garber's Orchestra, "Guess Who" (Davison), (01489).
- 11.0: Close down.

2YA, WELLINGTON (720 KILOCYCLES)—THURSDAY, DECEMBER 12.

- 3.0: Chimes of the G.P.O. clock.
- 3.1: Selected gramophone items.
- 3.30: Lecturette—Miss Flora Cormack, "The Homes of the Hollywood Film Stars."
- 4.30 and 4.50: Sports results to hand.
- 5.0: Children's session, conducted by Uncle Len.
- 6.0: Dinner Session—"Columbia" Hour:
- Selection—B.B.C. Wireless Symphony Orchestra, "La Bontique Fantastique" (Respighi, arrgd. Carr) (Regal G30018).
- Cello—W. H. Squire, "Humoresque" (Dunkler-Squire) (01492).
- 6.12: Tacet.
- 6.15: J. H. Squire Celeste Octet, "Chant Sans Paroles" (Tschaiakowsky).
- Suite—Plaza Theatre Orchestra, "Gipsy Suite—1. Valse, Lonely Life; 2. Allegro, The Dance (German) (02537).
- 6.27: Tacet.
- 6.30: Suite—Plaza Theatre Orchestra, "Gipsy Suite—1. Menuetto, Love Duet; 2. Tarantella—The Revel (German) (02538).
- Madrid Symphony Orchestra, "Dance of the Neighbours" (de Falla).
- 6.42: Tacet.

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- 6.45: Venetian Players String Quintet, (a) "Romanza" (Mozart), (b) "Allegro" (Mozart) (Regal G20467).
Pianoforte—Ignaz Friedman, "Romance in E Flat" (Rubinstein).
Basil Symphony Orchestra, "Rosamunde—Entr'acte" No. 2 (Schubert).
6.57: Tacet.
7.0 : News session, market reports and sports results.
7.40: Lecturette—Mr. A. E. Wilson of the Tourist Department—"Tourist and Holiday Resorts."
8.0 : Chimes of the G.P.O. clock.
Studio concert by the Band of the 1st. Battalion Wellington Regiment, under the conductorship of Lieut. B. J. Shardlow, and assisting artists:
8.1 : March—Band, "Joy of Life" (Moorehouse).
Selection—Band, "Gems from 'William Tell'" (Rossini).
8.16: Vocal quartet—Melodie Four, "The Battle Eve" (Bouheur).
8.20: Tenor—Mr. Frank Bryant, (a) "Brown Eyes I Love" (Coates); (b) "Can't Remember" (Goatley).
8.27: Instrumental trio—De Groot, David Bor and H.M. Calve, "London-derry Air" (arrgd. Coleman) (H.M.V. B2943).
8.30: Recital—Miss Gwen Dalton, "The Death of Minnehaha" (Longfellow).
8.37: Corner duet—Bandmen Barke and Kay, "Ida and Dot" (Losey).
8.43: Bass—Mr. W. W. Marshall, "The Lute Player" (Allitson).
8.47: Soprano—Mrs. I. Glennie, "One Fine Day" ("Madame Butterfly") (Puccini).
8.51: Waltz—Band, "Tesoro Mio" (My Treasure) (Becucci).
8.59: Weather report.
9.1 : Vocal quartet—Melodie Four, "In the Shadows" (Finck).
9.5 : Instrumental trio—De Groot, David Bor and H.M. Calve, "Le Cygne" (Saint-Saens) (H.M.V. B2943).
9.8 : Tenor—Mr. Sam Duncan, "Macushla" (McMurrough).
9.12: Selection—Band, "Our Miss Gibbs" (Caryll).
9.22: Humour—Miss Gwen Dalton, "Paddy's Courtin'" (Anon).
9.28: Baritone—Mr. R. S. Allwright, "Sombre Woods" (Lully).
9.32: Waltz—Band, "River of Pearls" (Rimmer).
9.42: Soprano—Mrs. I. Glennie, (a) "Wait" (d'Hardelot), (b) "Barque of Dreams" (Coningsby Clarke).
9.49: Humour—Leonard Henry, "What Did the Village Blacksmith Say?" (Henry) (H.M.V. B3013).
9.52: Vocal quartet—Melodie Four, "Travesty on Comin' Thro' the Rye" (O'Hara).
9.56: March—Band, "On Tour" (Whitehouse).
10.1 : Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—THURSDAY, DECEMBER 12

- 3.0 : Afternoon session—Selected studio items.
5.0 : Children's session, conducted by Uncle John.
6.0 : Dinner session—"His Master's Voice" Hour:
Suite—London Symphony Orchestra, "Czar Sultan" Suite No. 3 (Rimsky-Korsakov) (D1491).
Waltz—International Concert Orchestra, "Waltz Dream" (Strauss).
6.12: Tacet.
6.15: Suite—New Light Symphony Orchestra, "Peer Gynt Suite" No. 2 (Greig): (1) Ingrid's Lament, (2) Arabian Dance (C1571).
New Light Symphony Orchestra, "Prelude in G Minor" (Rachmaninoff).
6.27: Tacet.
6.30: Suite—New Light Symphony Orchestra, "Peer Gynt Suite" No. 2 (Grieg): (1) Return of Peer Gynt, (2) Solveig's Song (C1572).
New Light Symphony Orchestra, "Prelude in C Sharp Minor" (Rachmaninoff) (Zonophone EF24).
6.42: Tacet.
6.45: Philadelphia Symphony Orchestra, "Danse Orientale" (Glazounov).
Waltz—International Concert Orchestra, "Sari" (Kalman) (Zono.).
March—Philadelphia Symphony Orchestra, "March of the Caucasian Chief" (Ippolitoff-Iwanoff) (E521).
6.57: Tacet.
7.0 : News session.
7.30: Lecturette, arranged by 3YA Primary Productions Committee, "Weaning of Lambs on Rape or Supplementary Feeds for Sheep," by a member of the staff of the Canterbury Agricultural College, Lincoln.
8.0 : Chimes.
8.1 : Overture—Philadelphia Symphony Orchestra, "Rienzi" (Wagner).
8.8 : Bass aria—Mr. James Filer, "The Song of the Golden Calf" ("Faust") (Gounod).
Contralto—Miss Mavis Spiller, "The Flower Song" (Gounod).
8.15: Studio Instrumental Octet under the conductorship of Mr. Harold Beck, (a) "Humoresque" (Dvorak); (b) "Gavotte" (Rameau).
8.23: Tenor aria, followed by soprano recitative and aria—Mr. Ernest Rogers and Madame Gower-Burns, (a) "All Hail, Thou Dwelling Pure and Holy" ("Faust") (Gounod); (b) "The King of Thule" ("Faust") (Gounod); (c) "Jewel Song" ("Faust") (Gounod).
8.33: Recital—Miss Lily Hughes, "A Broken Web" (Ogilvie).
8.39: Studio Instrumental Octet, "Gressenhall Suite" (Woods): (1) Pre-ambles, (2) Norfolk Folk Tune, (3) Slow Air, (4) Jig and Finale.
8.49: Soprano and tenor duet—Madame Gower-Burns and Mr. T. G. Rogers, "The Hour is Late" ("Faust") (Gounod).
Vocal quartet—Grand Opera Quartet, "When the Book Shall be Unsealed" ("Faust") (Gounod).
9.0 : Weather report.
9.2 : Studio Instrumental Octet, (a) "Meditation" (Glazounov); (b) "La Fenetre D'Amour" (de Severae) (violin soloist, Miss Irene Morris).

- 9.10: Vocal trio—Madame Gower-Burns, Mr. T. G. Rogers and Mr. J. Filer, "Then Leave Her" ("Faust") (Gounod).
9.14: Cello—Lauri Kennedy, "Old Scotch Melody" (arrgd. Kennedy).
9.18: Bass—Mr. J. Filer, "Shipmates of Mine" (Sanderson).
Vocal quartet—Grand Opera Quartet, "London Town" (German).
9.26: Studio Instrumental Octet, (a) "Tempo di Minuetto" (Beethoven); (b) "Spanish Dance" (Moszkowski).
9.34: Recital—Miss Lily Hughes, "Crossing the Bar" (Tennyson).
9.43: Organ—Arthur Meale, "The Pilgrim's Song of Hope" (Batiste).
9.47: Soprano—Madame Gower-Burns, "Il Bacio" (Arditi).
9.51: Vocal quartet—Grand Opera Quartet, "A Perfect Day" (Jacobs Bond).
9.55: Studio Instrumental Octet, (a) "Waltz" (Scott); (b) "Intermezzo" (Scott); (c) "Passaglia" (Scott).
10.2 : Close down.

4YA, DUNEDIN (650 KILOCYCLES)—THURSDAY, DECEMBER 12.

SILENT DAY.

Friday, December 13

1YA, AUCKLAND (900 KILOCYCLES)—FRIDAY, DECEMBER 13.

- 3.0 : Afternoon session—Selected studio items.
4.0 : Literary selection by the Announcer.
4.8 : Studio items.
4.25: Sports results to hand.
5.0 : Children's session conducted by Nod and Aunt Jean.
6.0 : Dinner session—"Columbia" Hour:
Menorah Symphony Orchestra, "Shulamith" (Goldfaden) (02921).
Pianoforte—Ignaz Friedman, "Berceuse" (Chopin) (04346).
6.13: Tacet.
6.15: Orchestre de la Societe des Concerts du Conservatoire, Paris, "Le Rouet d'Omphale" (Saint-Saens) (02926).
Violin—Yovanovitch Bratza, "Pisen Lasky" (Suk, arrgd. Marak).
6.27: Tacet.
6.30: Organ—Edouard Committe, "Scherzo" (Commette) (01567).
Pianoforte—William Murdoch, "Minstreis" (Debussy) (01443).
Royal Philharmonic Orchestra, "Le Prince Iger" Dance, No. 17 (Borodine) (L1811-2).
6.57: Tacet.
7.0 : News and market reports.
7.40: Talk—Mr. A. J. C. Fisher, "Art Training."
8.0 : Chimes.
8.1 : Relay of concert from Lewis Eady Hall.
8.30: Presentation of the three-act play "Pygmalion and Galatea" (Gilbert) by the Auckland Dramatic Players under the direction of Mr. J. Clark:
Overture—Minneapolis Symphony Orchestra, "Czardas" (Strauss) (Brunswick 15199).
Act 1—"Pygmalion and Galatea" (Gilbert).
Entr'acte—Heerman's Popular Concert Orchestra, (a) "Dalvisa" (Sandby), (b) "Pierette" (Chaminade) (Brunswick 4228).
Act 2—"Pygmalion and Galatea" (Gilbert).
Entr'acte—Cleveland Orchestra, "Coppelia Ballet" (Delibes) (Brunswick 15189).
Act 3—"Pygmalion and Galatea" (Gilbert).
Edith Lorand Orchestra, "Vienna by Night" (Komzak) (Parl. 4093).
10.0 (approx.): Close down.

2YA, WELLINGTON (720 KILOCYCLES)—FRIDAY, DECEMBER 13.

- 3.0 : Chimes of the G.P.O. clock.
3.1 : Selected gramophone items interspersed with description of the Wellington versus England cricket match being played at Basin Reserve.
4.30 and 4.50: Sports results to hand.
5.0 : Children's session conducted by Big Brother Jack.
6.0 : Dinner session—"Columbia" Hour:
Selection—H.M. Grenadier Guards Band, "New Sullivan Selection" (arrgd. Godfrey) (02731).
Waltz—Court Symphony Orchestra, "Destiny Waltz" (Baynes) (564).
6.12: Tacet.
6.15: Columbia Symphony Orchestra, "Idilio" (Lack) (01076).
Suite—New Queen's Hall Light Orchestra, "Petite Suite de Concert" (Coleridge-Taylor): (1) La Caprice de Nanette; (2) Demande et Reponse (02588).
6.26: Tacet.
6.30: Suite—New Queen's Hall Light Orchestra, "Petite Suite de Concert" (Coleridge-Taylor): (1) Un Sonnet de Amour; (2) La Tarantelle Fretillante (02589).
Wurlitzer organ—Terence Casey, "I'm Lonely" (Coates) (01501).
6.42: Tacet.
6.45: Dance suite—H.M. Grenadier Guards Band, "Nell Gwynn Dances" (German): (1) Country Dance; (2) Pastoral Dance (01329).
Columbia Symphony Orchestra, "Spring Song" (Mendelssohn) (01076).
Waltz—Symphony Orchestra, "Morgen Blatter" (Strauss) (9218).
6.58: Tacet.
7.0 : News session, market reports and sports results.
7.40: Lecturette—Mr. R. Howard Taylor, "Care of the Feet."
8.0 : Chimes of the G.P.O. clock.

- 8.1 : Overture—2YA Orchestra under the conductorship of Signor A. P. Truda; "Romantique" (Keler Bela).
 8.9 : Soprano—Mrs. W. Fraser Morrish, "Dove So No" ("Marriage of Figaro") (Mozart).
 8.13 : Pianoforte—Miss Eileen Bradley, "Alceste" (Gluck-Saint-Saens).
 8.20 : Baritone solo with orchestral accompaniment—Mr. John Prouse, recitative and aria, "I Rage, I Melt, I Burn" and "O Rudder than the Cherry" ("Acis and Galatea"—Handel).
 8.25 : Recital—Miss Gracie Kerr, "Singers and Talkers" (Kent).
 8.32 : Selection—2YA Orchestra, "Faust" (Gounod).
 8.40 : Contralto—Miss Rene Goyder, "Softly Awakes My Heart" ("Samson et Delilah") (Saint-Saens).
 8.44 : Vocal duet with chorus—Metropolitan Opera House Chorus, "Miserere d'un' alma gio vicina" (Miserere Scene, "Il Trovatore"—Verdi).
 8.48 : Tenor—Mr. Oliver Foote, "Bily Mavoureen" ("Lily of Killarney" (Benedict)).
 8.52 : Selection—2YA Orchestra, "Sally" (Kern).
 9.0 : Weather report.
 9.2 : Soprano—Mrs. W. Fraser Morrish, "The King of Thule" ("Faust"—Gounod).
 9.6 : Baritone solo with orchestral accompaniment—Mr. John Prouse, "Vulcan's Song" ("Philemon et Baucis"—Gounod).
 9.14 : Violin—Jascha Heifetz, "Hebrew Melody" (Achron) (H.M.V. DB1048).
 9.18 : Recital—Miss Gracie Kerr, "Her First Attempt" (Leacock).
 9.22 : Selection—2YA Orchestra, "The Gondoliers" (Sullivan).
 9.32 : Contralto—Miss Rene Goyder, "Habanera" ("Carmen"—Bizet).
 9.36 : Vocal quartet with chorus—Mirian Licette, Madame Clara Serena, Francis Russell, and Harold Williams, Vocal Gems from "Faust" (Gounod) (Columbia 02820).
 9.44 : Waltz—2YA Orchestra, "Nalla" (Delibes).
 9.50 : Tenor—Mr. Oliver Foote, "When Other Lips and Other Hearts" ("Bohemian Girl"—Balfe).
 9.54 : March—2YA Orchestra, "Coronation March" ("The Prophet"—Meyerheer).
 10.0 : Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—FRIDAY, DECEMBER 13.

- 3.0 : Afternoon session—Selected studio items.
 4.25 : Sports results to hand.
 5.0 : Children's session conducted by "Storyman."
 6.0 : Dinner session—"Columbia" Hour:
 Suite—Ketelbey's Concert Orchestra, "In a Fairy Realm" (Ketelbey):
 (1) The Moonlit Glade, (2) The Queen Fairy Dances, (3) Gnomes' March (02694-5).
 6.12 : Tacet.
 6.15 : Columbia Symphony Orchestra, "March of the Bojaren" (Halvorsen).
 Cello—Gaspar Cassado, "Melodie Arabe" (Glazounov) (03579).
 New Queen's Hall Light Orchestra, "Wood Nymphs" (Coates) (02591).
 6.26 : Tacet.
 6.30 : New Queen's Hall Light Orchestra, "Summer Days Suite" (Coates):
 (1) In a Country Lane, (2) On the Edge of the Lake, (3) At the Dance (02590-1).
 6.42 : Tacet.
 6.45 : J. H. Squire's Celeste Octet, "Memories of Mendelssohn" (arrgd. Sear).
 Columbia Symphony Orchestra, "Bridal Procession" (Grieg) (02622).
 6.57 : Tacet.
 7.0 : News session.
 8.0 : Chimes.
 8.1 : Overture—Jack Hylton's Orchestra, "The Selfish Giant" (Coates) (H.M.V. C1253).
 8.9 : Baritone—Mr. J. Smyth, (a) "The Old Sundowner" (Coney). (b) "Was I a Fool?" (Harris).
 8.15 : Songs at piano—Miss Alma Finnerty, (a) "You'd Be Surprised" (Berlin), (b) "That's a Good Girl" (Berlin).
 8.21 : Male quartet—The Revellers, "Wake Up, Chill'un, Wake Up!" (Robinson) (H.M.V. EA609).
 Organ—Jesse Crawford, "Hawaiian Sandman" (Klickman) (EA585).
 8.27 : Humorous recital—Mr. Geo. Titchener, "Would You Mind Passing the Salt?" (Brooks).
 8.33 : Violin and accordion—Messrs. Norton Collins and George Bennett, (a) "Casova Waltz" (arrgd. Bennett), (b) "Epworth Memories" (arrgd. Collins), (c) "Off in the Stilly Night" (arrgd. Moffat).
 8.43 : Contralto—Miss Maud Stringer, (a) "Maori Slumber Song" (Te Rangipai), (b) "Maori Lullaby" (James).
 8.49 : Selection—Band of H.M. Coldstream Guards, "Teddy Bears' Picnic" (Bratton) (H.M.V. B2084).
 8.54 : Baritone—Mr. J. Smyth, "A Toast to Dear Old Erin" (Doone).
 9.0 : Weather report.
 9.2 : Selection—Jack Hylton's Orchestra, "Melodious Memories" (Finck). (H.M.V. C1575).
 9.8 : Song at piano—Miss Alma Finnerty, "Pucker Up and Whistle" (Vincent).
 9.13 : Violin and accordion—Messrs. Norton Collins and George Bennett, (a) "Fitzroy" (One-step) (Bennett), (b) "Grandfather's Clock" (Bennett), (c) "Old-Time Medley" (Bennett).
 9.21 : Humour—Mr. Geo. Titchener, "Shake, Shake, Shakespeare" (Brooks).
 9.26 : Organ—Jesse Crawford, "I Love to Hear You Singing" (H.M.V. RA585).
 9.30 : Contralto—Miss Maud Stringer, "Three Fishers" (Hullah).
 9.34 : "Columbia" Dance Programme:
 Foxtrot—Milt. Shaw's Orchestra, "Walking with Susie" (Gottler)

- Foxtrot—Fred Rich's Orchestra, "Used to You" (De Sylva) (01565).
 Foxtrot—Milt. Shaw's Orchestra, "Breakaway" (Gottler) (01553).
 Foxtrot—Fred Rich's Orchestra, "Why Can't You?" (De Sylva) (01565).
 9.42 : Hawaiian—Lizzie Alohikey and chorus, "Nani Kauai" (Alohikey).
 Foxtrot—Debroy Somers' Band, "The Egg Song" (Salisbury) (01523).
 Foxtrot—Reser's Syncopators, "I'm Wild About Horns on Automobiles" (Gaskill) (01543).
 Foxtrot—Wallace's Campus Boys, "Jericho" (Meyers) (01586).
 One-step—Debroy Somers' Band, "Shinaniki Da" (Carlton) (01523).
 Waltz—Cavaliers, "Lady Divine" (Shilkret) (01543).
 10.0 : Organ—Milton Charles, "Love's Old Sweet Song" (Molloy) (01161).
 Foxtrot—Don Vorhee's Orchestra, "Ol' Man River" (Kern) (01406).
 Foxtrot—Wallace's Campus Boys, "I've Got a Feeling I'm Falling" (Link) (01586).
 Foxtrot—Don Vorhees' Orchestra, "Can't Help Lovin' Dat Man" (Kern).
 Foxtrot—Sanella's All-Star Trio, "Perfume of Roses" (Donovan) (Regal G20493).
 10.15 : Vocal duet—Layton and Johnstone, "Carolina Moon" (Davis) (01550).
 Foxtrot—Golden's Orchestra, "She's Got Great Ideas" (Tobias) (01559).
 Foxtrot—Piccadilly Players, "I Life Up My Finger and say 'Tweet, Tweet'" (Sarony) (01595).
 Foxtrot—Ernie Golden's Orchestra, "That's Her Now" (Ager) (01559).
 Waltz—The Cavaliers, "Underneath the Russian Moon" (Gusman).
 10.30 : Organ solos—Milton Charles, (a) "From the Land of the Sky-Blue Water" (Cadman), (b) "At Dawning" (Cadman).
 Foxtrot—Ambassadors Band, "Wake Up, Chill'un, Wake up" (Trent).
 Foxtrot—Cafe Royal Band, "Me and the Man in the Moon" (Leslie) (Regal G20492).
 Foxtrot—Sanella's All-Star Trio, "I'll See You Thru" (Kassel) (Regal).
 Waltz—Eddie Thomas's Collegians, "Billie" (Henderson) (01584).
 10.45 : Hawaiian—Lizzie Alohikey and chorus, "Liliu E" (Kaula) (01282).
 Tango—Anson Weeks' Orchestra, "Senorita" (Weeks) (01584).
 Foxtrot—Paul Whiteman's Orchestra, "Get Out and Get Under the Moon" (Shay) (07001).
 Foxtrot—Corona Dance Band, "I Faw Down an' Go Boom" (Brockman) (Regal G20492).
 Foxtrot—Paul Whiteman's Orchestra, "Evening Star" (Turk) (07001).
 Waltz—The Cavaliers, "By-and-By, Sweetheart" (Valentine) (01546).
 Reel—O'Leary's Irish Minstrels, "Turkey in the Straw" (Regal G20454).
 11.0 : Close down.

4YA, DUNEDIN (650 KILOCYCLES)—FRIDAY, DECEMBER 13.

- 3.0 : Town Hall chimes.
 3.1 : Selected gramophone items.
 4.25 : Sports results to hand.
 5.0 : Children's session, conducted by Aunt Sheila.
 6.0 : Dinner Session—"Columbia" Hour:
 Waltz—Symphony Orchestra, "Artists Life" (Strauss) (02577).
 Columbia Symphony Orchestra, "Al Fresco" (Herbert) (01092).
 Foxtrot—La Nuova Orchestra, "Di Napoli" (Romani) (3066).
 Band of H.M. Grenadier Guards, "La Paloma" (Yradier) (0987).
 6.13 : Tacet.
 6.15 : Ketelbey's Orchestra, "In a Monastery Garden" (Ketelbey) (02688).
 Waltz—Jacque Jacobs Ensemble, "Over the Waves" (Rosas) (02556).
 6.27 : Tacet.
 6.30 : Columbia Symphony Orchestra, "Badinage" (Herbert) (01092).
 Waltz—Royal Serbian Tambouritzza Orchestra, "Kosovo" (3066).
 Waltz—Symphony Orchestra, "Tales From the Vienna Woods" (Strauss) (02577).
 March—H.M. Grenadier Guards Band, "Twist and Twirl" (Kottfaun).
 6.43 : Tacet.
 6.45 : Waltz—Royal Philharmonic Orchestra, "Blue Danube" (Strauss).
 Waltz—Jacque Jacobs Ensemble, "España" (Waldteufel) (02560).
 6.57 : Tacet.
 7.0 : News session.
 8.0 : Town Hall chimes.
 8.1 : Instrumental Quintet, "Sunny Spain" Suite (Fletcher).
 8.11 : Contralto—Miss Lorna Smith, "None But an Aching Heart" (Tschalkowsky).
 8.15 : Pianoforte—Miss Sybil Baker, "Toccato" (Saint-Saens).
 8.20 : Tenor—Mr. G. Crawford, (a) "Hymn to Aviators" (Parry); (b) "Fát Lili Feller With His Mammy's Eyes" (Gordon).
 8.27 : Recital—Miss Anita Winkel, "In an Indian Garden" (Anon).
 8.31 : Virtuoso Instrumental Trio, (a) "Scherzo in B Flat" (Beethoven); (b) "Melody in F" (Rubinstein).
 8.41 : Soprano—Miss Olga Wynne, (a) "Song of the Bride" (Woodford Finden), (b) "Lovers in the Lane" (Lehmann).
 8.48 : Suite—Band of H.M. Coldstream Guards, "Suite Francaise" (Foulds).
 8.56 : Weather report.
 9.2 : Baritone—Mr. G. M. Salmond, "The Sailor's Prayer" (Clark).
 9.6 : Instrumental Quintet—(a) "Spring's Message" (Fueik), (b) "By the Blue Hawaii Waters" (Ketelbey).
 9.18 : Contralto—Miss Lorna Smith, "When All Was Young" ("Faust") (Gounod).
 9.28 : Recitals—Miss Anita Winkel, (a) "Little Mary Fawcett" (Witty); (b) Child Impersonation "Dirty Face" (Green).
 9.31 : Tenor—Mr. G. Crawford, "Goodnight, Dear Heart" (Brooke).
 9.35 : Virtuoso String Trio—(a) "Serenade" Op. 29 (Chaminade); (b) "Be cause" (Ijinsky).
 9.41 : Soprano—Miss Olga Wynne, "Tit For Tat" (Panter).

- 9.47: Instrumental Quintet—(a) "Midsummer Night's Dream" (Finck); (b) "Jungle Drums" Patrol (Ketelbey).
 9.57: Bass—Mr. G. Salmund (a) "Give Me Youth and a Day" (Drummond), (b) "The Old Clock" (Drummond).
 10.1: Close down.

Saturday, December 14

1YA, AUCKLAND (900 KILOCYCLES)—SATURDAY, DECEMBER 14.

- 3.0: Afternoon session—selected studio items.
 4.0: Literary selection by the Announcer.
 4.8: Studio items.
 4.25: Sports results to hand.
 5.0: Children's session conducted by Cinderella.
 6.0: Dinner session—"His Master's Voice" Hour:
 Piccadilly Orchestra, (a) "Serenade Neapolitaine" (Drigo), (b) "The Dansant" (Fletcher) (B2397).
 Organ—Jesse Crawford, "Little Pal" (Jolson) (EA594).
 Salon Orchestra, "Estrellita" (Ponce) (B2415).
 6.12: Tacet.
 6.15: Salon Orchestra, "Un Peu d'Amour" (Slesu) (B2415).
 New Symphony Orchestra, "Nell Gwynn Dances" (German): (1) Country Dance; (2) Pastoral Dance (B2987).
 Organ—Jesse Crawford, "Why Can't You?" (Jolson) (EA594).
 6.27: Tacet.
 6.30: Piccadilly Orchestra, "The Waltz Dream" Selection (Strauss) (B2684).
 Violin—Mischa Elman, "Orientale" (Cui) (DA1010).
 Male trio with orchestra—Melody Three, "Pals Forever" (Adam).
 6.42: Tacet.
 6.45: Chicago Symphony Orchestra, "Slavonic Dance in G Minor" (Dvorak).
 Paul Whiteman's Concert Orchestra, "Mississippi Suite" (Grove).
 6.57: Tacet.
 7.0: News and market reports.
 7.40: Talk—Mr. A. E. McMahon, "The Flower Garden."
 8.1: Relay from Auckland Town Hall of concert by the Auckland Municipal Choir under the conductorship of Mr. Maughan Barnett.
 10.0: "Brunswick" Dance Programme:
 Foxtrot—Bennie Goodman's Boys, "Blue" (3975).
 Foxtrot—Gerunovich's Orchestra, "Sincerely I Do" (Davis) (4047).
 Foxtrot—The Clevelanders, "Why?" (4068).
 Waltz—Gerunovich's Orchestra, "You Tell Me Your Dreams" (Kahn).
 Waltz—Regent Club Orchestra, "Where is the Song of Songs for Me?" (Berlin) (4257).
 10.15: Tenor—Eddy Thomas, "My Little Dream Boat" (Davis) (3950).
 Foxtrot—Joe Rivers' Orchestra, "The Song I Love" (De Sylva) (4146).
 Foxtrot—Lyman's Californian Orchestra, "I Can't Give You Anything But Love" (Fields) (4145).
 Waltz—Johnson's Orchestra, "Was It Love?" (Casar) (4084).
 Waltz—Regent Club Orchestra, "Marie" (Berlin) (4257).
 10.30: Vocal duet—Luther and Robison, "Blue Lagoon" (Robison) (4222).
 Foxtrot—The Clevelanders, "What a Girl! What a Night!" (Sanders).
 Foxtrot—Brunswick Orchestra, "My Man" (Willemetz) (4213).
 Foxtrot—Colonial Club Orchestra, "There's a Four-leaf Clover in My Pocket" (Calwell) (4247).
 Foxtrot—The Clevelanders, "Honey" (Simons) (4205).
 10.45: Hawaiian—Royal Hawaiians, "Honolulu Sweetheart of Mine" (Davis).
 Waltz—Joe Rines' Orchestra, "Carolina Moon" (Davis) (4146).
 Waltz—Blackstone Trio, "I Love You" (Reiner) (4201).
 Foxtrot—Bennie Goodman's Boys, "Shirt-Tail Stomp" (3975).
 Foxtrot—Californian Orchestra, "Notre Dame Victory March" (Shea).
 11.0: Close down.

2YA, WELLINGTON (720 KILOCYCLES)—SATURDAY, DECEMBER 14.

- 2.30: Selected gramophone items interspersed with description of the Wellington versus England cricket match being played at Basin Reserve.
 5.0: Children's session conducted by Uncle Toby and Aunt Gwen.
 6.0: Dinner session—"Columbia" Hour:
 Royal Italian Band, "Marcia Reale" (Gabetti) (01182).
 Court Symphony Orchestra, "In Venice" (Sellars) (896).
 Cinema organ—Stanley MacDonald, "Was it a Dream?"—(Coslow) (Regal G20401).
 Royal Italian Band—"Garibaldi's Hymn" (Oliveri) (01182).
 6.12: Tacet.
 6.15: Ketelbey's Concert Orchestra, "Sanctuary of the Heart" (Ketelbey).
 Cello—W. H. Squire, "Melody in F" (Popper) (04178).
 6.26: Tacet.
 6.30: W. H. Squire's Celeste Octet, "Mignon"—(1) Introduction and Romance, (2) Polonaise" (Thomas) (02749).
 Cello—W. H. Squire, "Silver Threads Among the Gold" (Danks, arrgd. Squire) (04178).
 6.42: Tacet.
 6.45: H.M. Grenadier Guards Band, "Turkish Patrol" (Michaelis) (4111).
 Cinema organ—Stanley MacDonald, "Nicolette" (Batten) (Regal).
 Waltz—Jacque Jacobs' Ensemble, "Vienna Life" (Strauss) (02556).
 Idyll—H.M. Grenadier Guards Band, "Smithy in the Woods" (Michaelis) (4111).
 6.58: Tacet.

- 7.0: News session, market reports and sports results.
 7.40: Lecturette—Mr. W. M. Jackson, Gladioli Expert, "The History of the Gladioli, and Some Hints on its Progressive Cultivation."
 8.0: Chimes of the G.P.O. clock.
 8.1: A Programme of Optimism by the Wellington Y.M.C.A. Optimists, assisted by 2YA Salon Orchestra:
 Overture—2YA Salon Orchestra under the conductorship of Mr. M. T. Dixon, "Musical Switch" (Alford).
 "The Optimists' Greeting"—The Company.
 Songs at the piano by Optimist No. 1.
 Optimistic Suggestions by Optimist No. 2.
 An old English Air—All the Optimists, "Drink to Me Only with Thine Eyes" (traditional).
 Vocal solo by Optimist No. 3.
 Some Nonsense by the Company.
 Elocutionary number by Optimist No. 4.
 Instrumental—2YA Salon Orchestra, request number.
 Weather report.
 Piccolo solo with orchestral accompaniment—"Yankee Doodle" (arrgd. Godfrey).
 Cornet solo with orchestral accompaniment, "Cloze Props" (Child).
 Optimistic Greetings—The Company.
 Vocal solo by Optimist No. 5.
 Plantation melodies—The Optimists, (a) "Carry Me Back to Old Virginia" (Bland), (b) "My Old Kentucky Home" (Foster).
 Some Humour by Optimist No. 6.
 Musical comedy selection—2YA Salon Orchestra, "The Girl Behind the Counter" (Ketelbey).
 Some More Nonsense by the Optimists.
 Vocal solo by Optimist No. 7.
 Elocutionary number by Optimist No. 8.
 "The Optimists' Smile Song" by the Company.
 Dance Novelties—2YA Salon Orchestra.
 10.0 (approx.) "His Master's Voice" Dance Programme:
 Foxtrot—Connecticut Yankees, "Where are You, Dream Girl?" (Davis).
 Foxtrot—Ted Weem's Orchestra, "Here We Are" (Warren) (EA602).
 Foxtrot—Connecticut Yankees, "Pretending" (Porter) (EA605).
 Foxtrot—Ten Weem's Orchestra, "Piccolo Pete" (Baxter) (EA602).
 10.12: Vocal duet—Gladys Rice and Franklin Baur, "You're the Cream in My Coffee" (De Sylva) (EA616).
 Foxtrot—Gus Arnheim's Orchestra, "Now I'm in Love" (Shapiro).
 Foxtrot—Jack Hylton's Orchestra, "Ever So Goosey" (Butler) (EA578).
 Foxtrot—Ted Weem's Orchestra, "Am I a Passing Fancy?" (Silver).
 Waltz—Connecticut Yankees, "Underneath the Russian Moon" (Kendis).
 Waltz—Hilo Hawaiian Orchestra, "Sparkling Waters of Waikiki" (Davis) (EA574).
 10.30: Tenor—Morton Downey, "The World is Yours and Mine" (Green).
 Foxtrot—Ted Weem's Orchestra, "What a Day!" (Woods) (EA606).
 Foxtrot—Connecticut Yankees, "The One that I Love Loves Me" (Turk).
 Foxtrot—Coon Sanders' Orchestra, "The Flippity Flop" (Coslow).
 Foxtrot—Jack Hylton's Orchestra, "The Toymaker's Dream" (Golden).
 10.45: Vocal duet—Billy Murray and Walter Scanton, "Oh, Baby, What a Night" (Brown) (EA613).
 Foxtrot—Gus Arnheim's Orchestra, "This is Heaven" (Yellen) (EA583).
 Foxtrot—Gus Arnheim's Orchestra, "One Sweet Kiss" (Jolson).
 Foxtrot—Park Central Orchestra—"True Blue Lou" (Robin) (EA610).
 Waltz—Gus Arnheim's Orchestra, "Sleepy Valley" (Sterling) (EA583).
 11.0: Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SATURDAY, DECEMBER 14.

- 3.0: Afternoon session—Selected studio items.
 4.25: Sports results to hand.
 5.0: Children's session, conducted by Aunt Pat.
 6.0: Dinner session—"Columbia" Hour:
 Orchestre Symphonique de Paris, "L'Arlesienne Suite" (Bizet): (1) Prelude, (2) Entr'acte, (3) Chorus (01324/5).
 6.12: Tacet.
 6.15: Selection—Columbia Symphony Orchestra, "Faust" (Gounod).
 Violin—Tascha Seidel, "Chanson Arabe" (Rimsky-Korsakov) (09505).
 6.27: Tacet.
 6.30: Orchestre Symphonique de Paris, "L'Arlesienne" (Bizet): (1) La Cuisine de Castelet, (2) Minuetto, (3) Le Carillon, (4) Adagietto.
 6.42: Tacet.
 6.45: Orchestre Symphonique de Paris, "Farandole" (L'Arlesienne) (Bizet).
 Band Garde Republicaine de France, "Carmen" Entr'acte (Bizet).
 6.56: Tacet.
 7.0: News session.
 8.0: Chimes.
 "Old-Time" Programme:
 8.1: Overture—Basle Symphony Orchestra, "Der Freischutz" (Weber).
 8.11: Baritone—Mr. Bernard Rennell, "Will o' the Wisp" (Cherry).
 8.16: Song and story—Mr. Jock Lockhart, "In the Good Old Summer Time" (Shield-Evans).
 8.21: Saxophone solo—Rudy Wiedoeft, "Sax-o-Phun" (Wiedoeft).
 8.24: Contralto—Miss Nellie Lowe, "Kathleen Mavourneen" (Crouch).
 8.29: Mandolin band, "Turn to Surriento" (de Curtis) (Columbia 01210).
 8.33: Mirth and melody—Mr. Charles Lawrence, (a) "If Those Lips Could Only Speak"; (b) "In the Shade of the Old Apple Tree."
 8.48: Waltz—Williams Dance Orchestra, "Mighty Lak' a Rose" (Nevin).

- 8.50: Recital—Mr. Hiram Dunford, "The Yarn of the Nancy Bell" (Gilbert).
 8.55: Chorus—Columbia Vocal Gem Chorus, "No, No, Nanette" (Youmans).
 9.3 : Weather report.
 9.5 : Mandolin band—"Stephanie Gavotte" (Czibulka) (Columbia 01210).
 9.10: Baritone—Mr. Bernard Rennell, (a) "Old Folks at Home" (Foster);
 (b) "I'll Take You Home Again, Kathleen" (Westendorph).
 9.24: Schottische—Willyams Dance Orchestra, "I Would Still Love You" (Murphy).
 9.31: Old-time mirth and melody—Mr. Charles Lawrence, Medley of Old-Time Choruses (MS.).
 9.41: Contralto—Miss Nellie Lowe, (a) "On the Banks of Allan Water" (Traditional); (b) "Loch Lomond" (Traditional).
 9.45: Boston two-step—Willyams Dance Band, "Lights Out" (McCoy).
 9.52: Old-time humour—Mr. Jack Lockhart, "Ma Bonnie Maggie" (Lauder).
 9.56: Humour—Mr. Hiram Dunford, "The Little Hatchet Story" (MS.).
 10.0 : Mazurka—Willyams Dance Orchestra, "Vistula" (Mullen).
 10.7 : Lancers—Willyams Dance Orchestra, "The Girl on the Film" (Higgs).
 10.27: Barn dance—Willyams Dance Orchestra, "Let's Make Love While the Moon Shines" (arrgd. Alford).
 10.34: Quadrilles—Willyams Dance Orchestra, "Harry Lauder's Songs" (arrgd. Kaps).
 10.49: Highland schottische—Willyams Dance Orchestra, "Inverness" (Mackie).
 10.54: Alberts—Willyams Dance Orchestra, "O Sole Mio" (Di Capua).
 10.19: Waltz—Willyams Dance Orchestra, "Lehen en Trawn" (Vale-Lane).
 10.26: Old-time dance music until 11 p.m.
 11.0 : Close down.

4YA, DUNEDIN (650 KILOCYCLES)—SATURDAY, DECEMBER 14.

- 3.0 : Town Hall chimes.
 3.1 : Selected gramophone items.
 4.25: Sports results to hand.
 5.0 : Children's session conducted by Big Brother Bill.
 6.0 : Dinner session—"His Master's Voice" Hour:
 March—United States Army Band, "Army and Marine" (Starke) (Zonophone EE145).
 Selection—Piccadilly Orchestra, "The Waltz Dream" (Strauss) (B2684).
 Jack Hylton's Orchestra, "My Inspiration IS You" (Nicholls) (C1577).
 6.12: Tacet.
 6.15: Royal Opera Orchestra, "Sylvia Ballet—Prelude" (Delibes) (C1417).
 Royal Opera Orchestra, "Sylvia Ballet—Intermezzo" (Delibes) (C1417).
 Salon Orchestra, "Chanson Bohemienne" (Boidi) (B2581).
 6.27: Tacet.
 6.30: Jack Hylton's Orchestra, "A Room with a View" (Coward) (C1577).
 Salon Orchestra, "Aloha Sunset Land" (Kawelo) (B2581).
 March—San Francisco Symphony Orchestra, "Marche Militaire" (Schubert) (ED9).
 6.42: Tacet.
 6.45: Detroit Symphony Orchestra, "Spanish Rhapsody" (Chabrier) (E522).
 Balalaika Orchestra, "Shining Moon" (Russian folk-song) (EA48).
 March—United States Army Band, "American Spirit" (Buglione) (Zonophone EE145).
 6.57: Tacet.
 7.0 : News session.
 8.0 : Relay from Christchurch of vaudeville programme presented by 3YA.
 10.0 : "Brunswick" Dance Programme:
 Foxtrot—Brunswick Orchestra, "I'd Rather Be Blue" (Rose) (4213).
 Foxtrot—Red Nicholls' Five Pennies, "I Never Knew" (Kahn) (4243).
 Foxtrot—Brunswick Orchestra, "My Man" (Pollack) (4213).
 10.10: Vocal solo—Nick Lucas, "Heart o' Mine" (Rose) (4215).
 Foxtrot—Biltmore Hotel Orchestra, "Wedding of the Painted Doll" (Brown) (4232).
 Foxtrot—Biltmore Hotel Orchestra, "Broadway Melody" (Brown).
 Waltz—Biltmore Hotel Orchestra, "Love Boat" (Brown) (4232).
 10.22: Vocal solo—Nick Lucas, "Old-Timer" (Rose) (4215).
 Foxtrot—Los Angeles Biltmore Hotel Orchestra, "You Were Meant for Me" (Brown) (4231).
 Foxtrot—Jungle Band, "Tiger Rag" (La Rocca) (4238).
 10.34: Tenor—William O'Neal, "Softly, as in a Morning Sunrise" (Romberg).
 Foxtrot—Barnes' Royal Creolians, "It's Tight Like That" (Dorsey).
 Foxtrot—Paramount Hotel Orchestra, "I'll Never Ask for More" (Turk) (4203).
 Foxtrot—Hotel Roosevelt Orchestra, "I Want to be Bad" (De Sylva).
 One-step—Rhythm Aces, "Jazz Battle" (Smith) (4244).
 10.49: Tenor—William O'Neal, "Stout-Hearted Men" (Romberg) (4208).
 Foxtrot—Paramount Hotel Orchestra, "When the World is At Rest" (Davis) (4203).
 Foxtrot—Hotel Roosevelt Orchestra, "Button Up Your Overcoat" (De Sylva) (4204).
 Foxtrot—Red Nicholls' Five Pennies, "Who's Sorry Now?" (Kulmar).
 11.6 : Close down.

- 4.8 : Studio items.
 6.0 : Children's session, conducted by Uncle Leo.
 6.55: Relay of service from Strand Methodist Mission: Preacher: Rev. Scrimgeour. Song Leader: Mr. T. T. Garland.
 8.30: (approx.) Relay from Town Hall of concert by the Auckland Municipal Band, under the conductorship of Mr. Christopher Smith.
 9.45: Close down.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, DECEMBER 15.

- 3.0 : Afternoon song service, conducted by Uncle George.
 7.0 : Relay of service from The Terrace Congregational Church—Preacher: Rev. C. W. Wickham. Organist and Choirmaster: Mr. H. E. Brusey.
 8.15 (approx.): Relay from the Methodist Church, Lower Hutt, of the Cantata "The Messiah" (Handel), rendered by the Church Choir (augmented) and orchestra:
 Soloists:
 Soprano: Mrs. W. G. Schmidt.
 Contralto: Miss Constance Flamank.
 Tenor: Mr. C. A. Williams.
 Bass: Mr. John Prouse.
 Conductor: Mr. Ernest Dawson.
 Organist: Mr. C. R. Horman.
 Close down.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, DECEMBER 15.

- 3.0 : Afternoon session—Selected gramophone items.
 5.30: Children's song service (children of the Anglican Sunday Schools).
 6.15: Chimes from studio.
 6.30: Studio concert.
 Choir and orchestra—Grand Irmeler Choir, "Netherland Hymn" (Kremsner) (Parlophone A5001).
 Christchurch Broadcasting Trio, "Trio" (Bremner).
 Male choirs—Don Cossacks Choir, "How Greatly Our Lord is Magnified" (Bortnjarsky) (Columbia 02712).
 7.0 : Relay of service from St. Mary's Anglican Church, Merivale. Preacher, Rev. J. Rich (Subject—"Boy Scouts"). Organist and Musical Director, Mr. Alfred Worsley.
 8.15: (approx.) Relay from Dunedin of concert by the St. Kilda Band, under the conductorship of Mr. James Dixon.
 Close down.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, DECEMBER 15.

- 3.0 : Town Hall chimes.
 3.1 : Selected gramophone items.
 5.30: Children's song service, conducted by Big Brother Bill.
 6.30: Relay of service from Congregational Church, Moray Place: Preacher: Rev. Albert Mead. Choirmaster: Mr. Towns. Organist: Mr. McMillan.
 7.55: Weather report.
 8.5 : Relay from St. Kilda Band Rotunda of concert by the St. Kilda Band, under the conductorship of Mr. James Dixon.
 9.15: Close down.

Hurrah for the Holidays ---and the Holiday Train!

"All aboard"—and away she goes—carrying hosts of happy holiday makers on their way—city folk to the country and country folk to the city.

Cheap tickets are available for all—young and old—between any stations from 13th December to 11th January, for return to 8th February.

**Make SURE of your Seat on the Holiday Train
by Reserving Ahead**

Sunday, December 15

1YA, AUCKLAND (900 KILOCYCLES)—SUNDAY, DECEMBER 15.

- 3.0 : Afternoon session—selected studio items.
 4.0 : Literary selection by the Announcer.

Cone Speaker Construction

Useful Hints for Prospective Builders

(By "MEGOHM")



GOOD dynamic cone (or moving coil) is undoubtedly the best type of loudspeaker at the present time, especially where great volume is required. But there are many listeners who will have to be content with a reproducer less expensive both in initial outlay and in running cost. Those who study economy will still find in the magnetic type of speaker a faithful friend that will give good service, and quality according to its particular design and capabilities.

There was a time when cone speakers were less sensitive than the horn type, but with the rapid improvement in the design of units during the last two years, the cone has come to the front, leaving the horn speaker well in the shade. These remarks are not intended to apply to the exponential horn of lengthy dimensions, but to the ordinary small metal horn. Large exponential horns give good reproduction, but their size makes them unsuitable for general use. To reproduce the lowest note of the piano, 26 cycles, an exponential horn must be 31 feet long, with a mouth over 9 feet square! But 26 cycles per second is a very low rate

of vibration, and very good reproduction is obtained in actual practice with a speaker that will respond to 50 cycles as its lowest note.

Deficiencies of Loudspeakers.

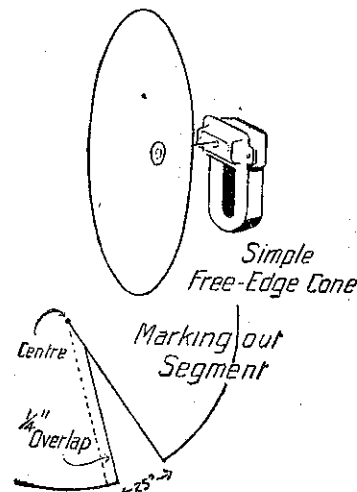
GOOD reproduction of broadcast musical items should contain all the notes, high, middle, and low, just as they are played at the studio; yet very many listeners never hear many of the lower notes as they are played. This is because their loudspeaker will not respond sufficiently well to notes below a certain audio-frequency to allow of their being audible. In the smallest horn speakers this deficiency is at its maximum, and the "cut-off" may be at 200 cycles, or even higher. The melody or "air" of the tune is present clear enough, but the accompanying bass notes are either much weakened or entirely lost, according to the slowness of their rate of vibration.

The worst feature of such speakers is that some of the notes that are only partially reproduced serve to form a background of "mush" which greatly detracts from the quality of the high-pitched notes that are strongly brought out.

The foregoing briefly illustrates the kind of musical struggle that is going on in any speaker doing its best to handle notes that are not within its range. This is of course apart from any deficiencies that may be present in the audio amplifier, where poor

less there is a piercing shrillness, which may possibly be developed in the amplifier, or by a particular crystal detector emphasising the high frequencies so that they are obtrusive when amplified. A fixed condenser of small value across the speaker leads will often subdue any tendency to "scratchiness," and some units are provided with such a condenser built in, as in the well-known "66" units.

In order that bass notes may be reproduced with reasonable volume, the diameter of the cone should not be too small. From 24 to 27 inches diameter is good and will give all that is required. The double cone as described on page 89 of the "Listeners' Guide" is a very satisfactory form and looks well when hanging on the wall, as there is no cabinetwork showing if the back of the cone is glued to a small square frame as described in this column on June 28, 1929. This frame holds the unit securely and also allows its adjustment in any direction, so that tension on the spindle is reduced to the desired minimum. The diagrams show the 66A unit in position, but if the 66K is used, a hole will be made in the wooden support, through which the adjusting knob may pass. The same applies also to the 66P unit, which also has an adjusting knob, and will attach to the support in a slightly different way, owing to the altered shape of the frame. It would be clamped by two strips of wood, one running through the magnet and the other behind the support. The two strips would then be bolted together at each end with a suitable thin bolt.



The "Linen-Diaphragm."

THE "Linen-Diaphragm" speaker was described on July 12 last, and on October 11 a different method of construction was described, using silk for the diaphragm, and suspending the unit instead of fixing it rigidly. This method suits any unit, and simplifies construction. This is the "top dog" of home-built magnetic speakers, though the two-foot cone is a near approach. The absence of the paper diaphragm seems to impart to the tone just that little extra touch of pleasing quality that we all desire. Volume obtained is limited chiefly by the amount the unit will carry without rattling. The 66P is a new unit now obtainable, working with a fully neutralised balanced armature, and capable of giving good volume and quality reproduction.

transformers and other conditions may also tend towards the loss of low notes.

Range of Reproduction.

WHAT is most desired is a speaker that will reproduce at least every note or audio-frequency that the amplifier, especially its last stage, is capable of handling. On account of its limitations the ordinary horn-speaker is not capable of giving reproduction throughout the musical range in general use, but a cone speaker with a well-constructed balanced-armature unit will give a faithful rendition, provided that the size and texture of the cone is suited to the requirements of bass-note reproduction. There is usually little trouble with the high notes un-

For all things in Radio

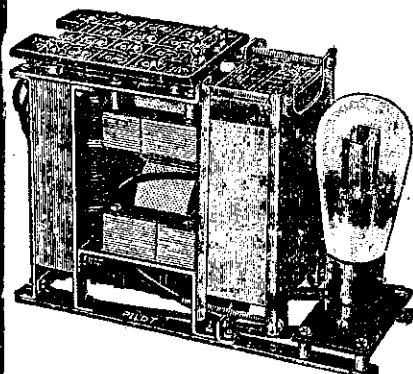
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Inside view of K.111A Power Pack, showing 280 Rectifier Valve in place.

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tion, combined with sensitivity. With a given input, the linen-diaphragm will give rather more volume than will a paper cone. The units will, of course, work well from a larger amplifier than just mentioned, but whilst not giving the full possible volume, it will be more than ample for any ordinary house.

When it becomes necessary to supply dance music to fill a hall, a dynamic cone speaker is the most suitable, as heavy volume is required for dancing, for which an exceptionally heavy unit would be required in a linen-diaphragm speaker. The latter speaker with an ordinary good unit will be found suitable for dancing in the home.

Nothing is gained by increasing the dimensions of the linen-diaphragm speaker over those given. Increased size only means more tension on the diaphragms to get the right effect, and the extra tension may be risky. The speaker as described will reproduce notes well below 50 cycles—as deep as

the baffle to the thickness of the battens. This method of mounting preserves the deep notes and gives them necessary prominence.

Free-edge Cone.

THIS, the simplest form of cone-speaker, is quickly made, and gives good results. A 12-inch circle of heavy paper is cut out, a small segment removed, and the two edges glued together. A hole is then made in the centre, through which the spindle is passed, one of the felt-covered washers on either side of the cone. When the nuts are tightened up, the speaker is ready for use if the unit is laid flat on the table. The spindle will hold the cone in place. Suitable means may be devised for hanging the unit on the wall or upon a stand. It may be attached to the ceiling with the cone downwards in a horizontal position. This is a handy method of trying out the unit before the construction of a more complete speaker, but does not bring out the full capabilities of a unit.

A segment of 25 degrees is sufficient to cut from any cone to get the "dished" effect. This is about 30 degrees when overlapped and glued. One cut runs to the centre, but the second cut runs slightly to one side, so that an overlap for glueing continues to the centre. See diagram.

Material for Cones.

SHEETS of paper suitable for cones may be purchased, but very few dealers keep it in stock, and it requires careful packing for postage.

Suitable paper, known as "cover paper," may often be obtained from a printer, and if not sufficiently heavy, two sheets may be pasted together. The correct thickness for a large cone would be equal to two thicknesses of the "Listeners' Guide" cover. Dark browns or similar colours are the most suitable. An important point is to choose a "soft" paper rather than one with a hard finish—judge it by shaking a sheet—it should not have much "rattle."

Heavy brown paper is fairly good for the purpose.

When sheets are pasted together they will remain flat if allowed to dry for 24 hours under flat pressure. Drying at a fire or without pressure will result in buckling. A small table turned upsidedown on a larger one makes a good press, but a few sheets of newspaper must be used as a pad to take up unevenness. Have clean paper next to the cone, as the dampness may cause newspaper print to transfer and spoil the appearance.

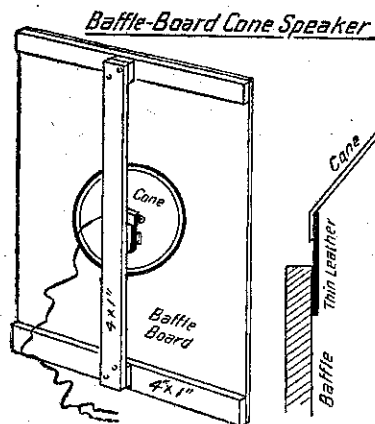
Two or three sheets of newspaper faced up with thin brown or a fancy paper will make good cone material.

The main thing to avoid in cone construction is unsound joints, as these are liable to rattle and give annoyance. If the edges are glued together with secotine as directed in the "Guide," no trouble will be experienced.

General.

IT might be said that the manufacture of a loudspeaker as outlined above is the simplest of all radio construction work, especially when the great amount of satisfaction to be derived is taken into consideration. With a good unit ready for use, it is only a matter of a little time and careful hand-work to produce an article that will please the eye as well as the ear.

(Concluded on page 28.)



any pedal organ notes that the writer has encountered on a gramophone record.

It is just as well to mention here that the application of celluloid solution to the linen or silk diaphragm is not intended to result in a celluloid diaphragm in which the fabric is embedded. The dope is only intended to stiffen the fabric sufficiently to take away the "deadness" which it has when used without stiffening. Three coats of thin solution are ample, and thus treated, the diaphragms will give pleasingly mellow reproduction.

Baffle-Board Speakers.

ANOTHER successful cone speaker is that in which a cone of small diameter is mounted with a flexible edging or "surround" in a circular hole in the centre of a sheet of heavy three-ply or building-board not less than 2ft. square. A cone 9 inches in diameter is suitable, and the hole in the baffle may be $\frac{1}{2}$ to $\frac{3}{4}$ in. larger in diameter. The cone is then connected to the baffle by a one-inch circle of thin chamois leather, or the nearest suitable material procurable—thin india-rubber sheet is good, but perishes in time; a strip of thin serge cut "on the bias," that is diagonally; waterproofed silk is also used. The material must be thin, pliable, and free from "grain." The construction of this type of speaker was described on May 3 last. A one-inch batten is attached to two opposite ends of the baffle; and the unit is supported upon a stout cross-piece joining the two, but standing away from the back of

RADIO DIRECTORY

What to Buy and Where

CITIES

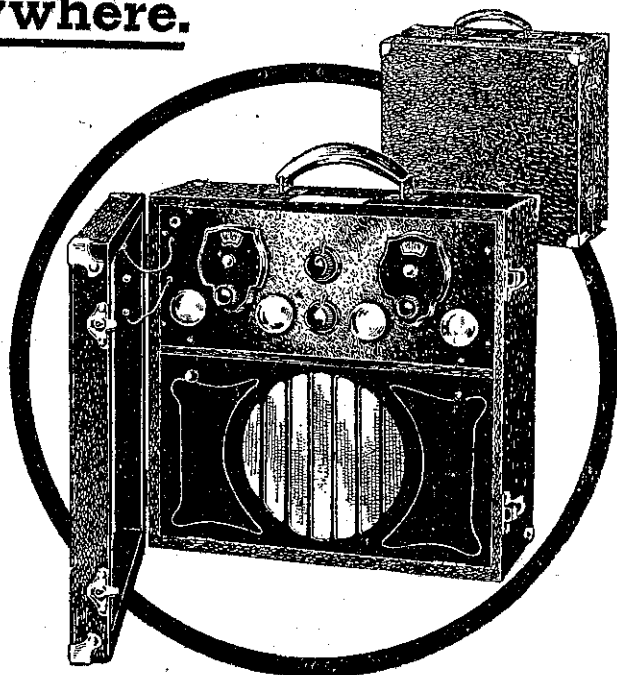
- | | |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| AERIAL MASTS | Domestic Radio Co., Ltd.,
300 Queen Street, Auckland. |
| ALTONA & HAMMARLUND-ROBERTS SETS. | Johns, Ltd.
Chancery Street, Auckland. |
| AMPLION LOUDSPEAKERS | All Radio Dealers. |
| BURGESS RADIO BATTERIES, | All Radio Dealers. |
| CROSLEY RADIO | Abel, Smeeton, Ltd.,
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| CROSLEY RADIO RECEIVERS | G. G. Macquarrie, Ltd.,
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| CROSLEY RADIO | Abel, Smeeton, Ltd. Rep.: G. MOSES,
James Street, Bangalore. |
| DAYTON All-Electric Radio ... | Superadio, Ltd.,
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| EMMCO RADIO PRODUCTS | Johns, Ltd.,
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| EMMCO RADIO PRODUCTS | Thos. Ballinger & Co., Ltd.,
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| EMMCO RADIO PRODUCTS | L. B. Scott, Ltd.,
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| KING RADIO RECEIVERS ... | F. J. W. Fear & Co.,
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| LOUDSPEAKER AND TRANSFORMER REPAIRS | A. E. Strange,
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| MULLARD VALVES | All Radio Dealers. |
| PILOT 1930 PARTS AND KITS, ETC. | Abel, Smeeton, Ltd.,
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| PILOT 1930 PARTS—PILOT SUPER WASP KITS, GILFILLAN, KELLOGG and ATWATER KENT SETS | Harrington's, N.Z., Ltd.,
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| RADIOLA RECEIVERS and Expert Radiola Service. | Farmers' Trading Co., Ltd.,
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| RADIO REPAIRS AND SERVICE | E. G. Shipley,
185 Manchester Street, Christchurch. |
| COUNTRY TOWNS | |
| CROSLEY RADIO | J. C. Davidson,
Main Street Pahiatua. |
| CROSLEY SETS | Abel, Smeeton, Ltd. Rep.: C. Ruscoe,
409 Devon Street, New Plymouth. |
| CROSLEY RADIO | D. A. Morrison & Co.,
Victoria Avenue Wanganui. |
| MAJESTIC ELECTRIC RADIO | Berryman's, The Home of Music,
Palmerston North. |
| MAJESTIC, ATWATER-KENT AND RADIOLA ELECTRIC SETS | Radio House, Hamilton.
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Loop Antenna

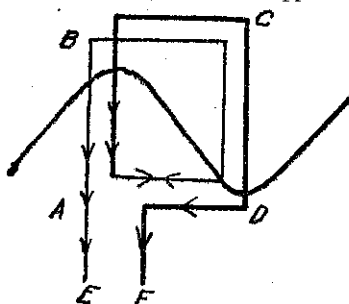
(Concluded from page 1.)

The approximate ratio between the signal strength from a loop and from an outdoor aerial is shown by the following formula:—
Signal strength =

$$\text{loop area} \times \text{No. of turns}$$

$$\text{Antenna height} \times \text{wave length in metres} \times 0.1593.$$

Thus assume a loop with an area of 3 sq. feet and with 15 turns to be compared with an aerial 30ft. high both operating at a wave length of 300 metres. The upper part of the ratio will = $3 \times 15 = 45$ as representing the strength of the loop signal. The lower part of the ratio = $30 \times 300 \times 0.1593 = 1333.7$ as representing the strength of the aerial signal. The ratio of loop signal to aerial signal is then $45/1333.7$ or approxi-



mately 1/13th in strength. This divergence into simple mathematics shows conclusively that a loop antenna can be nowhere as efficient as good aerial.

Types of Loop Antenna.

THERE are mainly two types of loop antenna—the box and the spiral. The box loop is built up of a number of turns wound as though inside a box. They are all upon the same plane and each loop is of the same length. This is the type that is usually employed when wound round the frame of portable receivers.

The other type is the spiral, which in appearance is flat, each turn being less in diameter than the preceding one. This type is shown in the diagram. Either of these loops may be operated with or without a ground connection. As a rule the loop alone is insufficient to furnish signal energy to a receiver, but very frequently the introduction of the aerial and the earth will strengthen signals. The aerial may be brought in at a tap in the loop and the ground taken off from its filament end. It is thus possible to use a loop and an aerial at the same time. Used in this manner the portable set or loop-using receiver is equal to an ordinary set.

Another method is to wind two or three additional turns on the loop frame, passing them near to the end, or side of the loop that connects with the low potential end of the receiver. The extra coils can now be regarded as an aerial coil loosely coupled to the grid coil. This, however, while increasing the sensitivity of the receiver, reduced both selectivity and directional effect.

There are other methods of increasing the signal strength resulting from a loop aerial, and these, with the constructional details of a loop, will be described in next week's "Radio Record."

Tips and Jottings

Soldering Stranded Wires.

A TASK which constructors often find troublesome is the making of a satisfactory soldered connection between the shank of a terminal and a piece of flex wire. Actually it is very easy when undertaken in the proper way. When the end of the flex has been bared, it is necessary to make sure that the strands are clean. Sometimes, especially if the flex is old, the strands become dull and discoloured, due to oxidation. Should the wire be dirty, untwist it, spread the strands out flat, and draw them once or twice lightly over a sheet of the finest emery cloth. Twist them together again, and apply a very little flux. With a hot iron run a little solder into the strands so as to bind them together. Tin the shank of the terminal, and it will be found that no difficulty will be experienced in making a neat, firm joint.

A Vice Precaution.

NEITHER ebonite nor brass should ever be gripped between the bare jaws of a metal vice. Both are comparatively soft substances and, as the jaws are roughened, deep marks will be made which are most difficult to remove. The best tip is to obtain a piece of sheet lead of the same width as the jaws of the vice and to cut the two pieces about 4in. in length. These are bent to fit the jaws so that they remain in position when the vice is opened. If for any reason sheet lead is not available, thick cardboard can be used quite well in an emergency. When it is desired to hold the shank of a terminal or a screw in the vice, bend a thin strip of lead into a V-shape and push the threaded part into it. The lead can now be screwed up tightly and it will grip the threads without injuring them in any way. When a brass nut has to be gripped, always place a screw in it first of all, otherwise it may be crushed out of shape by the jaws of the vice. The screw serves to prevent it from being distorted.

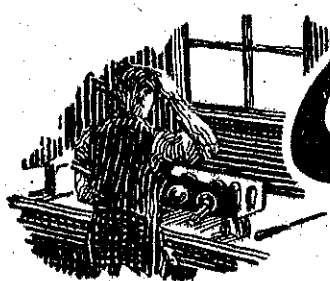
Panel Protection.

WIRELESS sets with highly-polished panels have a great attraction for some constructors. But if there are any scratches, however slight, the effect is completely spoilt, and it would be better if a matted panel had been used. Most of these scratches are made when the panel is being marked out and drilled. They can be avoided by laying the panel on several thicknesses of soft tissue paper while marking out drilling. With ordinary care scratches can be prevented during the rest of the constructional work, and the result will be a set which looks quite professional, due to the faultless polish on its panel.

Cone Speakers

(Continued from page 27.)

The units now available are capable of giving high quality reproduction by any of the methods mentioned, but the volume and exact range of frequencies depends to a certain extent upon the method selected and the manner in which construction is carried out. A little patience will conquer many difficulties and ensure success.



Questions and Answers



Aerial Efficiency.

I AM using a crystal set and a bar amplifier with a 100ft. aerial, approximately 30 feet high. Would reception be improved if I erected another aerial, so that the two formed the sides of a triangle having a 50ft. base, the leads-in being at the apex. The height would in both cases be the same.—A.P.G. (Silverstream).

A.: When using a crystal set every addition to aerial efficiency affects materially the output of the set so that the improvement should have a beneficial effect upon the strength of your set.

Screen Grid Detector Two.

WOULD you supply me with the name and issue of the overseas magazine containing the description of the screen grid detector two?—L.H. (Christchurch).

A.: It was published in "Popular Radio and Aviation," a journal which is now not in existence. The magazine has been returned to its owner, and as far as we can recall the description appeared in the August, 1928, number.

Selecting a Dynamic Speaker.

WISHING to purchase a dynamic speaker, F.H. (Westport) asks if one operated directly from the mains can be used with a battery set, and if this is better than the 6-volt type.

A.: So long as you have the A.C. power available it matters not how your speaker is energised. The A.C. type of speaker is far the better investment for anyone who has not an accumulator and facilities for charging it.

Output Filter Choke.

I HAVE two transformer cores, one an E shape and the other a shell. Which is the better for making an output filter choke? What gauge of wire and how much would be required?—A.G.C. (Te Aroha).

A.: The E type marked in your diagram A is the most suitable as it contains more iron. Wind on as much 36 gauge wire as possible. If double-cotton covered there is no need for insulation between the layers.

Shortwave Adapter.

WOULD the adapter described in the "Listeners' Guide" be suitable for use with a screen grid three-valve set, and would it give as good results as "Round the World two"?

A.: Our experience has been that the "Round the World" two has been the most successful short-wave receiver (excluding the screen grids) that yet we have published. The "Round the World" two would give you excellent results, but as a start try the adapter described in the Guide. Omit the fixed condenser between the plate and A+.

2. Can I use a .0005 and a .0001 condenser instead of .0002 and a .00035?—C.B. (Nelson).

A.: A .0005 is far too large for short-wave work. The .0001 condenser is to be preferred for tuning, and for this the table on page 103 has been prepared. Nothing larger than a .00025 should be employed for reaction.

Transformer Design.

CAN you give me the details for building a transformer to deliver 20,000 volts at 20 milliamperes? asks A.J.M. (Kelburn).

A.: We are afraid that the electric light authorities would not greet with pleasure any project such as this. When it is understood that a difference of potential of 20,000 volts will cause a spark 2in. long some idea of the difficulties in building and the danger attached to such a transformer it can be understood why it would not be permitted. There is no apparent reason why a transformer of these dimensions should be required. Has the correspondent committed an error?

2.: In the A.C. hand-book there is an article dealing with the construction of a crystal set and amplifier. Two condensers are specified for smoothing. Would not one electrolytic suffice?

A.: The usual electrolytic condenser is suitable only where small differences of potential are employed. They can be used successfully only in "A" battery circuits.

A Would-be Experimenter.

I HAVE been experimenting to find some other form of detector than valves are crystals. I happened to stumble across the discovery that iron filings become a conductor of electricity when a magnet is brought near to them. The iron filings are in a glass tube and care must be taken that they are not too tightly or too loosely packed. I have lit lamps by holding a strong magnet a foot away from the tubes. Could this idea be embodied in an adjustable grid leak? The resistance can be controlled by the distance of the magnet from the tube. Could this idea be used for an adjustable grid leak?—A.C. (Ohakune).

A.: You have not made clear the results of your experiments. When you speak of iron filings and a system of detection it seems that you have happened across the coherer type of detector which preceded the crystal. We think that you have merely happened across well-known electric and magnetic facts in unusual circumstances. A grid leak of this nature would be very noisy.

Silk Diaphragm Speaker.

I HAVE made up the silk diaphragm speaker without success, writes E.L.D. (Christchurch). In nailing the silk to the frame should it be drawn drum-tight and then painted? I have been doing this and then painting it, but the silk has been slipping.

A.: You are right in drawing it drum-tight before painting, but unless the silk is of good quality and nailed very evenly all round you will get trouble by splitting.

2RF Browning Drake.

I INTEND building a 2RF Browning Drake, but would like to be cleared up on the following points, writes G.C. (Dunedin):—

1. What is the size of former and gauge of wire for chokes for the parallel feed?

A.: "Cathode" has dealt very fully with the theory and construction of choke coils in an article which will in all probability be published in next week's issue—at the latest it will be published within a fortnight.

2. The receiver has four condenser controls and three rheostats. Could I make

the set one-dial control or lessen the control without losing a great deal of efficiency?

A.: The first and second RF condensers can very conveniently be ganged, the moving plates in each case being connected together and to earth. One rheostat can be made to control both RF valves, and if valves of the same voltage as the accumulator are used, there is no need for the rheostat controlling the audio stages.

3. To control the RF stages a variable high resistance of 20,000 ohms should be included in the RF plate supply with a by-pass condenser to B—. Is this a good method of controlling volume?

A.: Yes, but the simplest method is to take out all rheostats except the detector and control volume by a variable resistance 0 to 500,000 ohms shunted across the aerial and earth terminals.

One-Valve Set Required.

ALTHOUGH I have been a reader of your paper for close on 12 months, I have never seen a description of a one-valve set. Could you publish one?—"New Chum" (Hastings).

A.: The combination set was described in the "Radio Record," volume 2, No. 39 (April 12). Small regenerative receivers are not looked upon with any great favour by the Post and Telegraph Department. Although small, these receivers are capable of creating a great deal of interference, and there is always a temptation for the user to endeavour to bring in a station that is really beyond his power. A great deal of annoyance to listeners with larger sets who can, under normal circumstances, enjoy these stations, is the result.

Battery Charging.

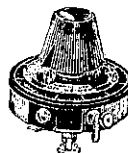
I HAVE a battery charger with which I charge a 6-volt 30 amp. battery, but



Lissen R.C.C. Unit.
Price 6/6



Lissen Mansbridge Condenser. Prices:
.01 mfd, 2/6; .1 mfd, 2/6; .25 mfd, 2/8; .5 mfd, 3/-; 1 mfd, 3/6; 2 mfd, 4/6.



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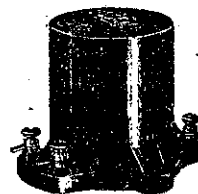
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Lissen Neutralising Condenser.
Price 6/- each

when I connect it to an 80 amp. battery the liquid boils and the charger gets too hot to touch after a few minutes.

A.: There appears to be a short circuit in the 80 amp. hour battery. Treat it as described in the "Radio Listeners' Guide."

A Legal Point.

CAN a shopkeeper sell a second-hand two-valve set which belongs to a private person. He does not have a dealer's license.—F.J.H. (Wellington).

A. No. There is no objection to a man selling his own wireless set, but when anyone sells another man's set he must have a radio dealer's license.

2. Is there any remedy for a paralysed valve which will oscillate on the local station but not on a distant one?

A. This is an unusual case, and it appears that a new valve is required.

Various Points.

I HAVE been troubled with a dead spot, writes K.A.D. (Wellington), and have found that when I watered the earth is shifted. Is this usual?—No.

2. How can one tell for certain that the set is not oscillating?

A. Damp the finger and place it on the aerial terminal. If a "plo" is heard in the speaker the set is oscillating.

2. Is it natural for stations to come in as follow: 7ZL on 30 degrees, 1YA on 81.

A. Your dial is back to front. Either turn the condenser up the other way, get another dial or put up with it as it is.

3. I wish to go away for Christmas, taking a set with me, but leaving one to be operated at home. Do I take out another license for 30/-?

A. No. Take out one for the period you will be away.

Getting America.

SHOULD I be able to get America with a six-valve battery set?—R.A.S. (Mamakura).

A. Getting America depends very much on location and the type of aerial. The writer has heard several American stations on this type of set using a Beverage aerial, such as was described in the "Radio Listeners' Guide."

Audio Transformer.

WHICH transformer should go first, a 5-1 or 3-1?

A. The lower ratio transformer should always go next to the detector valve, the reason being that better quality and sensitivity occurs through matching the impedance of this valve to the transformer. The valve impedance is high, so a high impedance transformer must be used. The 5-1 having a lower impedance takes the second place.

2. I am using two shielded transformers and when I place my finger on the shielding of the first there is a loud howl in the speaker. What is wrong?

A. Feed-back is occurring, so earth the core and the case of the transformer.

3. Do two transformers of the same ratio work well in an amplifier?—Yes.

4. Do you suggest the use of a variable grid leak in a short-wave set?—"Grid Leak" (Blenheim).

A. No, they are inclined to be noisy.

Valves Wrongly Placed.

I AM using B 605, A 615, C 603, in my radio set. Can you identify the sockets and tell me where the valves should go?

A.: It is hard to identify the sockets when the receiver is not a usual one. The radio frequency valve is always associated with the coil and condenser. A lead from the coil goes to the grid terminal of the RF socket. The detector is always recognisable by the grid leak and condenser attached to its grid socket. The power valve has its plate connected to the speaker terminal or out put jack. The RF valve (in Philips series) should be A 609. The detector A 615, the power valve B 605, or C 603, with nine volts grid bias. When using the 171 A with 90 volts about 20 volts bias should be applied.

2. I have to constantly adjust the screw of the diaphragm of my speaker to prevent rattle.

A.: It appears you are saturating the speaker winding with too much anode current. Increase the grid bias and try the use of A 609 or its equivalent in the place of B 605 in RF.

Stations Mushy.

I HAVE an American set, and am using Continental valves. I have altered the coils and now find that the reception from overseas stations is mushy. Can this be altered?

Laboratory Jottings

Components and Portables

THE following components, supplied by A. E. Strange, electrical engineer, Christchurch, have been tested to our satisfaction:—

Dubilier .0001 Variable Condenser.

This piece of apparatus has been specially designed for short-wave work. It has a special ball-bearing gear which enables a fine adjustment. The ratio of the dial movement to condenser movement is approximately 200 to 1. A rotating shaft moves a bushing piece at the back of the condenser and between this and the shaft is a single glass ball-bearing which moves its position as the dial is rotated. Thus perfectly smooth movements may be obtained and the finest values of capacities are possible. This condenser is particularly suitable to short-wave work. The .0001 midget variable condenser has also been supplied for tests. This is of the usual type for balancing and may be used for reaction.

Horizontal Grid Leak Holder.

This Dubilier product, which is sturdily made, may be fitted into any

A.: You have made a rather unfortunate mistake of using anything but American valves in an American set. This affects the neutralising and quite frequently series filament resistors are used in the circuit to break down a 6-volt battery potential to 5-volt for the American series. You should revert to American valves and re-neutralise your set.

2. Could I use three blocks of "B" batteries, and two "C" batteries with this set?

A.: Yes. The highest potential of 135 volts should be applied only to the last valve. Likewise the highest grid volts should go to the grid return of the power valve. A small grid potential of about 4½ volts should be applied to the second last valve.

Turns on a Voice Coil.

I HAVE an English 6-volt dynamic speaker equipped with a high resistance speech coil. This coil has apparently developed a short-circuit and I am contemplating removing it and winding on an American type low resistance coil for use with a 25—1 step-down transformer. Can you supply me with data re gauge, of wire and number of turns? Valves used, Osram P625 A's in push-pull. Will you also supply data of turns and gauge with P625's and Philips B403's?—D.R.K. (Hastings).

A.: All voice coils wound with 30 S.W.G. enamelled wire. P625A, 65 turns; P625, 105 turns; B403, 75 turns. quickly.

set. There is nothing shoddy about its manufacture, with the result that it will stand up to hard work in the form of pulling about from one circuit to another. The vertical grid leak holder has its application in the circuit where the grid of the valve is connected to A + for detection purposes. The grid leak tested was perfectly silent and satisfactory.

35 Ohm Resistances.

This is a fixed resistance similar to the Amperites, and, mounted as they are, its application in the set is where the voltage of the valve is much lower than the voltage of the accumulator.

The Airzone Portable.

NOTHING is more useful in providing music during camping and picnic excursions than a good portable, and our test of the "Airzone" (Smyth and Co.) reveal that it is one of the best. Tested under adverse conditions, heavy static and bad localities, this set performed well. It always brought in 2YA even at great distances, and when a temporary aerial was erected it was as good as a home receiver.

The circuit is the familiar Browning-Drake, with the antenna coil enlarged as a loop antenna, in which a tap for an aerial is provided. The ground joins the filament negative through a terminal in the lid.

An automatic switch is provided by which the set is shut off when the lid is closed. Battery current cannot thus be wasted by the set being closed up with the rheostat on.

Everything is robust, and will stand reasonably rough handling. The built-in speaker is exceptionally good for this class of work, and is a pleasure to listen to.

Connecting Flashlamps

VERY frequently it is desired to have at hand some means of rapidly connecting up one or more flash-lamp batteries for temporary use. Many kinds of clips and other fasteners have, of course, been brought out for this purpose from time to time, but, nevertheless, it is difficult to devise a handler form of flash-lamp battery than the following:—A short length (about 2in.) of ¼in. lead tubing is bent roughly in a U-shape, and the ends are flattened out. The flattened ends of the U-shaped piece of lead tubing constitute a grip for the battery electrodes, and the weight of the tubing not only effects a firm and decisive contact, but it also makes the connector an easy one to handle quickly.

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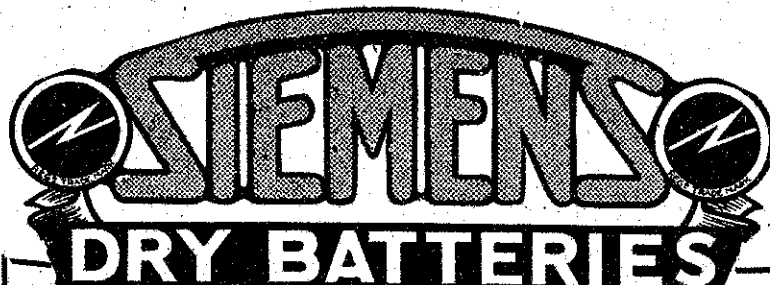
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Children's Session

4YA Advisory Committee

A THOROUGHLY representative meeting of ladies and gentlemen interested in child welfare organisations was held at the 4YA Studios, "Evening Star" Building, on November 21. There were present Mrs. C. de R. Andrews (Provincial Commissioner Girl Guides' Association), Sister Nora (Society for the Protection of Women and Children), Miss Telfer (Presbyterian Social Service Association), Rev. Cooper (Anglican Boys' and Girls' Homes), Rev. Bro. O'Connor (principal Christian Brothers' School), Mr. T. Williams (secretary Headmasters' Association), Captain Chandler (Salvation Army), Pastor W. D. More (Big Brother Bill, 4YA), Mr. George Palmer (Uncle George, 4YA), Mr. Allan Young (Uncle Allan, 4YA), Miss Anita Winkel (Aunt Anita, 4YA), Miss Beardsley (general secretary, Y.W.C.A.), Mr. John Ball (of the Broadcasting Company headquarters), and Mr. J. MacKenzie (station director). An apology for absence was received from the general secretary of the Y.M.C.A.

Mr. Ball, representing the Broadcasting Company, and acting as chairman, introduced the business of the afternoon by outlining the field of radio activity, its programmes, and the method of putting them over the air. Introducing Pastor More (Big Brother Bill), the chairman asked him to tell those present just exactly what took place before the microphone at the children's session.

Big Brother Bill stated that it was somewhat difficult to say just exactly what happened in front of the microphone, as in a sense most of the work was done before they got to the microphone. Arrangements are made with different organisations and different individuals, and if possible children's organisations, five or six weeks ahead. Big Brother Bill paid a tribute to the work of the uncles and aunts, some of whom were present.

The chairman also added his tribute to the work of the aunts and uncles, who were giving much appreciated and gratuitous service at the different broadcasting stations in the Dominion. "They attend at regular sessions, they give freely of their time and talents, but they have a wonderfully rich reward in the appreciation of thousands of children they do not know."

An opportunity was given the meeting by the chairman to ask questions upon the work of the children's session, and a motion was carried unanimously (moved by Pastor More and seconded by Mrs. Andrews), "That those present constitute the Children's Session Advisory Committee of 4YA, and that this committee includes subject to the approval of the organisation it represents, those who were invited to but who were unable to attend this meeting."

Have you obtained your copy of the

"N.Z. Radio Listener's Guide"?

Dealers and booksellers 2/6; Post Free 2/9—P.O. Box 1032, Wellington.

Available everywhere.

The "Tramper's Two"

Final Instalment

DRILL two holes $\frac{3}{16}$ in. from the top edge of the case and underneath the tickler shaft. This will accommodate the aerial and the earth terminals. It will be found easier to attach the terminals and then bring out the wires from the set rather than attempting to solder them from the inside.

The remaining connections shown in the layout diagram should now be made, by joining the long wire attached to the grid coil to the fixed plates of the variable condenser and the wire attached to A+ to the moving vanes. Top of the tickler is connected with P of the audio transformer, which is connected with one side of a .0005 fixed condenser by a piece of glazite wire. The other side of this condenser is connected with B+ of the transformer, to which connect a fairly long piece of double cotton-covered wire and passed through the hole for this purpose; this is B+ detector. G of the audio transformer joins with G of the audio valve socket. GB is to be attached to the grid bias battery, the position of which will be described later.

P of the valve socket being one of the output terminals passes to a phone jack. To mount this drill a hole about $\frac{3}{16}$ in. on the side of the case opposite the tickler and mount a filament-break jack. This is not shown in the theoretical diagram, but it is essential to disconnect the batteries when the set is not in use. The second jack limb connects with B+. From the A+ of the valve socket take a wire to one of the filament contacts on the jack. The other filament passes through a hole in the partition to A+ B—.

The Batteries.

THERE is little to choose from among these, for in order to fit into the small space they must comply with the measurements given. The "B" block, the Lissen, has been found very satisfactory by the writer. It has the advantage of having very many tapings, so that the voltage for the detector may be accurately obtained.

The most efficient "A" battery is built up from torch cells. Nine of these are wired in series parallel in the following manner:—Divide them up into groups of three and solder a strip of brass, tin, or other convenient conductor round each group to bind them tightly. Along the brass caps solder another strip. Place a piece of insulating material, e.g., waxed cardboard, between each group of three, and fasten all by some non-insulating substance, string or cord, into a compact group of nine. There will now be six projecting strips, the ends of three negatives and the three positives. Leave the first negative strip free. Connect the first positive strip to the second negative strip—the second positive strip to the third negative strip and the third positive strip is free. This is A+ and the other free terminal A—. This compact block should fit in to the space at the side of the "B" battery, which is placed in the case with the wander plugs outwards.

fitting the valves in their allotted space.

The transformer and the variable condenser can be of a standard size though smaller ones will make the set both lighter and cheaper. The coil must not be greater than 2" in diameter.

Use low filament consumption valves so that the greatest consumption will only be 2 amp. The valves used by the writer are PM1LF and P.M.2. This is an excellent combination where loudspeaker reproduction is required. For 'phone work use either two PM1LF's or PM2DX and PM1LF. PM2DX is a special detector requiring .2 of an amp. It was found, however, that the extra consumption was compensated by the better results obtained. Suitable combinations may be obtained in Osram valves, using two DEL 210's or DEH 210 as detector, and DEL 210 as audio. In Radiotron use UX 199 in both positions, but notice that the filament voltage is three requiring 6 volts "A" battery (two three-volt valves in series). Another good combination may be obtained from 660 valves, using 210 H.F. as detector and 210 LF as audio.

Short-Wave

(Concluded from page 32.)

clear on records, and later a talk in Dutch came through (strong generator hum). PLF was also picked up on 15 metres at 8.50 p.m. Records and talks in Dutch heard at R8, till 9.5 p.m., when I went over to the 80-metre band, and picked up ZL2AX, Palmerston North, on records, at a good R9.

At 10 p.m. KZRM Manila relayed the Philippine Constabulary Band. This came through at R9, good speaker strength. At 11 p.m. W2NAF was transmitting records for Australia and New Zealand. Strength R9. Closed down at 12 p.m. Bangkok, Siam, at 12.15 a.m. was picked up on 20 metres, at R6, later R7 on records. At 12.30 a.m. 5SW radiated the London lunch programme till 1 a.m. This came over at R9 very clearly. —L. Saunders (Wellington).

For Sale or Exchange.

See page 32 for column of casual advertisements.

The NEW AIRZONE SCREEN GRID AC 4

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WELLINGTON.

Transmissions on 7 Centimetres.

EXPERIMENTS in transmission on wave-lengths as short as 7.12 and 19 centimetres have recently been conducted by Professor Protoff, of the Soviet State Laboratory at Nijni-Novgorod.

According to the Russian "Radio Journal" Professor Protoff's signals have been heard clearly at distances of several thousand miles, with a transmission power of only 20 watts.

Trans-Atlantic Short Waves.

EXPERIMENTS have for some time been going on between KDKA (Pittsburg) and Nauen, Germany, in order to find out whether two-way conversations between these two countries are practicable under varying weather and electrical conditions. The tests usually take place between 7 and 8 a.m., New Zealand summer time.

Short-Wave Picture Transmission.

EXPERIMENTS in "Fultography" picture transmission on short waves are being conducted at Vienna. These tests, which enable definite comparison to be made regarding the relative ranges of telegraphy, telephony, and picture telegraphy, take place daily on a wavelength of 41-42 metres. The call sign is VOM, and the following schedule is observed (N.Z. time in parentheses):—Telegraphy: 10.10 a.m. to 10.20 a.m. (10.10 p.m. to 10.20 p.m.); telephony: 10.20 a.m. to 10.30 a.m. (10.20 p.m. to 10.30 p.m.); picture telegraphy: 10.35 a.m. to 10.45 a.m. (10.35 p.m. to 10.45 p.m.). In the afternoon a similar transmission takes place at 3.10 p.m., continuing until 3.45 p.m. (3.10 a.m. till 3.45 a.m.). Reports on reception will be welcomed by Fultograph Gesellschaft, M.B.H., Austria, IV Prinz Eugenstrasse 10, Vienna.

Short-Wave Station, Essen, Germany.

FURTHER particulars are to hand about this new high-power station from an English radio magazine as follows: "The short-wave station at Zeesen, using the wavelength of 31.38 metres on a power of about 8 k.w., has relayed the Berlin and Königswusterhauser evening programmes regularly since August 26. The relays have hitherto been confined to musical items. An exception was made on the morning of September 4, when the arrival of the Graf Zeppelin at Friedrichshafen was broadcast for the benefit of American stations, which relayed the item. Good reception is reported from America, as also from Russia, where the Zeesen station has been heard on quite small sets. The transmissions are still experimental, and for this reason no call sign has been given."

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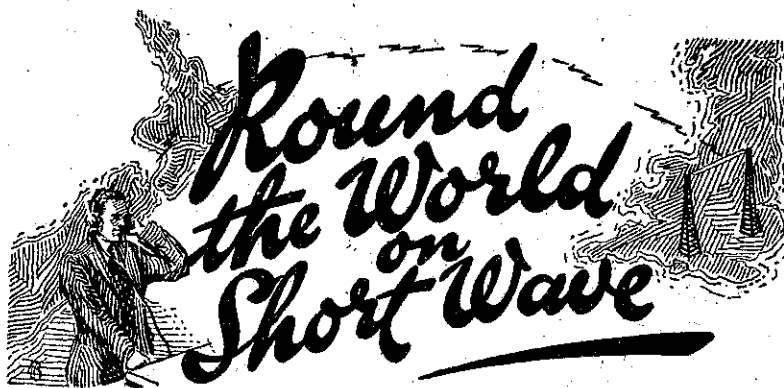
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Reception During the Week.

CONDITIONS are still bad for reception of American stations during the afternoon. This appears to be general, according to reports received by correspondents. A friend suggested that the wavelength of each station reported be included as a guide to new listeners.

RA97, Siberia (70 metres), has been spoilt by severe static on several evenings. Strength has been good, average R8-9.

W9XF, Chicago, 49.83 metres, is not audible much before 5 p.m., after which volume increases rapidly. Each evening, except Monday, they transmitted till 8 p.m.; on Monday they closed at 7 p.m. Static was bad on this station early in the week.

W2XAF, Schenectady, 1.4 metres. On Saturday and Sunday afternoons this station could not be heard, but on several mornings they have come in at good strength, but with a noisy background. On Saturday, from 11 p.m., they were R8, but very rough.

PCJ, Eindhoven, 31.4 metres, came at good strength both on Friday and Saturday, when they commenced at 6 a.m., but went off very rapidly. On Saturday afternoon they were not audible till nearly 5 p.m., and only reaching about R4-5 by closing time, 6 p.m.

Zeesen, Germany, 31.38 metres. I have been unfortunate with this station; they appear to have altered their hours of transmission. On Wednesday they closed at 6 a.m. after several orchestral items were received perfectly at R8. At 5.35 a.m. on Friday, after an announcement, a gong was heard, followed by "Hullo, hullo—Radio—" in another voice, and, I think, in another language. This was apparently the commencement of a relay of another station. An orchestral item followed, which was received at R8-9; this item, lasting 15 minutes, was loudly applauded at the conclusion. After a slight pause, the gong and another announcement was heard, followed by more orchestral music. They closed down about 6 a.m. On Friday, a talk concluded at 5.30 a.m., followed by orchestral music till 6 a.m., when they closed. Reception again was R8-9. This is the best station received just now, but is too early for the average listener.

7LO, Nairobi, 31 metres, has only been just audible each morning till 7 a.m.

VK2ME, Sydney, 28.5 metres, duplex with GBX, England, 27.5 metres (about) are heard almost every morning and evening.

KZRM, Radio Manila, 26 metres (approximately). On Sunday the Constabulary Band was heard from 6 p.m., after the studio chimed, at R8-9, static being very bad. Every evening, except Monday, they have been heard from 10 p.m.

GSSW, Chelmsford, 25.53 metres, is still too weak to bother with from 7 a.m. On Tuesday I tuned them in at 6 a.m. just as a record was concluding. After this they closed down, stating that they had been testing. Strength was R8 and reception very good. When opening again at 7 a.m. they were, as usual, very weak.

KDKA, Pittsburgh, 25.4 metres, was just audible on Sunday and Saturday by 4 p.m. and only about R3-4 by 5 p.m.

W6XN, California, 23.35 metres. This station has, like the other Americans, gone off recently. On Sunday they were readable for a short time during the afternoon. At 7.15 p.m. on Friday they were R5-6 with a programme by the "Musical Musketeers."

W2XAD, Schenectady, 19.56 metres, was heard on Friday morning at 6.30 a.m. with musical items at R4, very clear, with a slight gush. It was announced that stations W2XAD and W2XAF were transmitting this programme. At 7.30 a.m. the same morning a game was being described; readability was too poor (volume having decreased) to understand what it was.

PLE, Java, 15.74 metres, PLF, Java, 17 metres, and PCK, Holland, 16.3 metres, were heard nearly every evening on duplex telephony.

Unidentified Stations.

ABOUT 41.5 metres on Wednesday morning at 5.50 a.m. a lady was heard talking very fast at R6. A few bars of band music followed her talk. A man then spoke; this was also followed by the band for a moment or two. Later there was singing with a piano. The transmission finished at 6 a.m., but the carrier was audible for some time after.

38.8 metres (about). Music was just audible on Monday morning at 6 a.m.

31.4 metres. On Tuesday, Thursday and Friday about 6 a.m. a station on this wavelength has been heard at fair volume with foreign talk and music. Modulation has been poor.

Short Wave Reception

Some Well-known Americans

SHORT-WAVE station W2XE, short wave of WABC New York, was on a special test programme on Tuesday, November 26, between 7 p.m. and 8 p.m., and they asked for reports from New Zealand. Address reports to W2XE, Box 13, Ozone (or Odone) Park, Long Island, New York. An announcement was made that W2XE's present power was 500 watts, but very soon it would be increased to 20 kilowatts. The frequency was given as 6020 kilocycles. Strange to say, W3XAL, Baundbrook, New Jersey, was testing just above W2XE, and as they gave their frequency as 6020 kilocycles, one station was off their frequency.

Quite a number of stations are now working around 49 metres, namely W9XF, W8XAL, W2XE, W2XAL, W3XAL, and another station the call sign of which has not been heard yet. Two French stations have been heard, one on 60 metres, which I believe is F8PB. The other, on 22 metres, is often heard on a different frequency, and at one time was regarded as a mystery station.—A. P. Morrison (Wellington).

A Comprehensive Log

Reception for One Day

THE following is my log of stations received on a short-wave three-valve receiver for Wednesday, November 27:—Station 5SW at 7.15 p.m. was relaying 2LO's programme of records. Strength R7-8. The German station at Zeesen, on music, was R7. A heavy background was bad on both stations. At 9 a.m. an American station, on 23 metres, talking to London, came through at R7 very clearly.

At 3.55 p.m. W2XAF Schenectady was heard on R.K.6 programme, and later on organ music from a theatre in Albany, New York. Strength R7-8, atmospherics bad. They closed down at 12 p.m. E.S.T. (5 p.m. N.Z.T.). KDKA was very weak, so did not trouble about it. At 6 p.m. WBNR and W9XF, Chicago, came in at R4. By 7 p.m. was R7-8. At 7.50 p.m. came in much clearer till closing down at 8 p.m.

At 8.5 p.m. KZRM Radio, Manila, was R7, reception clear on records. Later was R8 till closing down at 9 p.m. Station VK2ME was testing with GBX. Later changed to Morse signals. KZRM rebroadcast Java at 8.40 p.m. Picked up PLE at 8.40 p.m. R8. Strength (Concluded on page 31.)

FOR SALE OR EXCHANGE

The rate for small advertisements under this heading is 2/- cash for 20 words, and twopence for every other word thereafter.

LATEST Novelty MOTOR SPEED BOATS; special December Price only 5/6, postage 6d. extra.—MacQuarries, Radio Dealers, 120 Willis Street, Wellington.

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TWO-VALVE AMPLIFIER, in guaranteed condition, first-class components, £2/10/- less valves. "Brand New," Box 1032, Wellington.

METRODYNE ELECTRIC challenges any set for distance, selectivity, quality, value. Nine valves, five condensers. Importers, Royds-Howard Co., 553, Colombo Street, Christchurch.

LOWEST priced Radio Gramophone, also Temple Exponential and Magnetic Speakers. Ask your dealer or call Royds-Howard Co., 553 Colombo Street, Christchurch.

SHIELDED Transformers, high grade Continental 4" to 1 ratio. Money back guarantee, tone and performance equal 35/- article. 12/6 each, post free. King's Battery Co., Victoria Square, Christchurch.

STALLOY-TRANSFORMER.—Strips 36 x 1 inches, 2 doz. Other widths proportional. Also supplied cut, punched. Special quantity quotations. Johns, Ltd., P.O. Box 471, Auckland.

ROYDS-HOWARD CO., 553 Colombo Street, Christchurch. Newest Battery and Electric Radios, Speakers, Dry Batteries, Storage Batteries, Valves, Catalogue. Agents wanted.

METRO 9-Valve Electric Radio, also Screen Grid Model. Chassis, Table Sets, Consoles. Catalogue. Importers, Royds-Howard Co., 553 Colombo Street, Christchurch.

Printed and published for the New Zealand Radio Publishing Company at the registered office, Wakefield Street, Wellington, of the Wellington Publishing Company, Ltd., by George Thompson, of 7 Rima Road, Kelburn, Printer, and Roy Cecil Temple, of Te Kaianga, Khandah, Publisher, Wellington, FRIDAY, DECEMBER 6, 1929.