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# *The Availability of Moving-Coil Loudspeakers.*

**A** GREAT deal of interest has been excited in moving-coil loudspeakers by our article on that subject last week and a healthy demand has been created. In the accompanying article additional information shows that the same principle has been embodied in de luxe equipment for the past few years, associated with power valves to secure satisfactory operation. Now, however, owing to the greater perfection and use of power valves, the various manufacturers concerned have decided to market their moving-coil speaker units apart from the power valves formerly identified with them. This move will lend additional impetus to the use of this new type of speaker with its greater capacity for faithful reproduction.

**I**N an article last week we described a design of loudspeaker which operates on the principle which has become popularly known as the moving coil type. This is distinct from what might be described as the standard principle adopted in the usual design of sound reproducing apparatus in that the coil or winding, which is fed with energy from the power valve, is fixed, and the magnetic effect set up by current traversing the windings of the coil causes an iron or steel armature to move. It is quite apparent, then, that a design in which a steel magnet is fixed and the coil of wire moves, is a distinct difference in principle. Of course, many designs of electrical instruments have inherent in their design the same idea, and perhaps the best example is represented by alternating current motors, one design having fixed coils and moving metal in the rotor, or fixed coils on the stator and moving metal in the rotor, while others have what amounts to practically the reverse. Ammeters and voltmeters for measuring current and pressure of electricity follow suit in the same way, representing two entirely different principles of design. For several years, therefore, this method of sound reproduction has been known, and was originally employed to actuate the diaphragm of horn-type loudspeakers.

**A**S explained in our previous article, Rice and Kellogg, of the General Electric Company, U.S.A., were responsible, some two or three

years ago, for the introduction of a sound reproducer combining a moving-coil actuator, coupled to a cone and driven from specially-designed amplifying apparatus.

Undoubtedly this reproducer marked the beginning of a new era in sound reproduction from the point of view of fidelity of reproduction, and for the first time it was possible to reproduce the rich bass tones which up to that time were sadly missing from the popular horn-type speakers.

**T**HE secret underlying the successful production of speakers of this design lies in the size and quality of material used in the cone, the shape of the cone, as well as the design of the "pot" magnet which supplies the necessary magnetic energy,—

but behind it all lay the definite necessity of accompanying valve equipment of suitable characteristics to enable the moving coil to carry out its functions in the desired manner.

As the result of this latter factor, the General Electric Company and their English counterpart, the British Thomson-Houston Company, who had already certain basic and developmental patents in connection with this same equipment, decided at that time that it would be impolitic to release the cone as a unit without accompanying properly-designed valve equipment. The consequence is that valve speakers

of this design which have been available on the New Zealand market for two years or more have been "de luxe" equipment, due to the fact that the valve apparatus was of a type necessitating high voltages which could only be satisfactorily taken from power mains. Moving-coil speakers have, therefore, been marketed up to the present as a speaker unit combined with special types of power valves fed from power mains, obtained from an ABC eliminator built into the equipment.

**I**N order to understand why it has now been decided to release coil units themselves on to the market it is necessary to point out that just as with moving-coil units, the reproduction from fixed-coil reproducers is improved by the use of power valves of large capacity. The trend of power-valve design in the last two or three years has been towards greater capacity and higher voltages, and—

to-day we find that the standard receiving equipment, and especially those designed to plug straight in on power mains, are fitted with power valves of a capacity even approaching the size of the ones hitherto used almost entirely with moving-coil reproducers.

The companies controlling this type of reproducer are therefore now satisfied that in the majority of cases moving-coil reproducers will give satisfaction when combined with valve

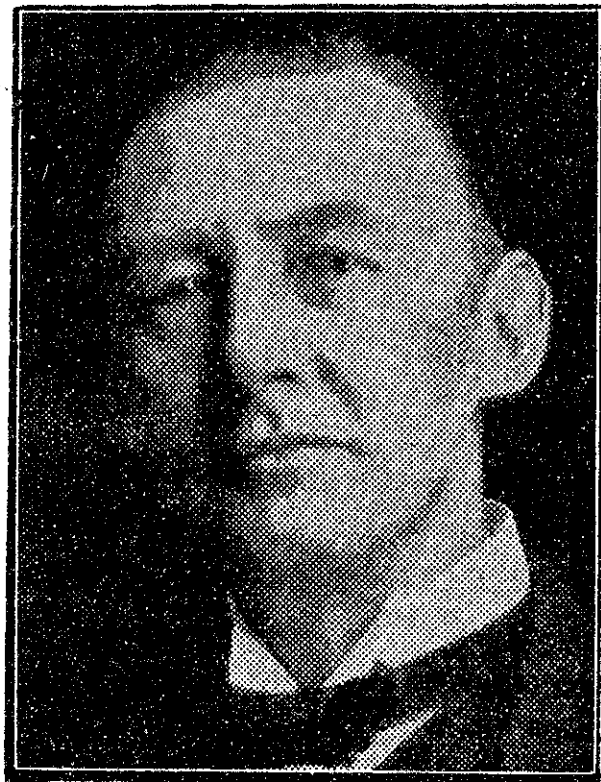
—(Continued on page 5.)

# Unique Presentation for Uncle Ernest

**L**ISTENERS who are interested in the Children's Hour will be particularly sorry to learn that Uncle Ernest—the Rev. E. Weeks, of the Terrace Congregational Church, Wellington—has decided to proceed to England. This will, of course, necessitate a cessation of his activities as an Uncle at 2YA. Beyond question his services have been greatly appreciated, and his hour has been one of the most vital and magnetic of those given by the Uncles.

**I**MMEDIATELY on it being known that he was leaving New Zealand, a movement sprang into existence to mark the occasion by giving him a testimonial that would record definitely the appreciation in which he is held by all who have enjoyed his hour. The thought finally adopted as being most suitable for conveying the goodwill felt towards Uncle Ernest was that an album should be prepared embodying the signatures of all those children—young and old—who would like to put on record their regard.

It is therefore proposed to invite all interested to write their signatures and addresses on a sheet of paper some 4½ inches long by 1½ inches deep (see typical block) and post same to Cousin George, c/o "N.Z. Radio Record," P.O. Box 1032, Wellington. These slips will then be pasted on suitable paper and bound into a handsome volume. On the front page of this volume will be engrossed a brief illuminated address, conveying the regard and appreciation



Uncle Ernest—Rev. E. Weeks.

of those whose signatures follow and good wishes for the future.

**U**NCLE ERNEST closes his services at 2YA on December 6, when the presentation will be made to him. It is therefore desired that those who wish to contribute should write immediately.

"My object in speaking to you boys and girls to-night is that a suggestion has been made that the children of New Zealand who listen to Uncle Ernest should all sign a testimonial to show their thanks to him for the many hours of pleasure and help which he has given to them. This can be done in a very simple way: if every child, no matter how old or young, would write his or her name and address on a piece of good notepaper, the slip to measure 4½ inches long by 1½ inches wide. It would read something like this: 'Geo. Meredith, 47 Trafalgar Road, Wellington.' Those of you whose parents get the 'Radio Record' will see an illustration of what we require. The slip when signed is to be posted to Box 1032, Wellington. This is all that you have to do. The idea is to have an address of thanks to Uncle Ernest inscribed—that is, written—in a book, and to paste all your names in this book. When it is complete we shall present this beautiful bound book to Uncle Ernest on the occasion of his last night at the studio, the date of which will be announced later. So that all the children may know just what they are giving to Uncle Ernest, the testimonial will be read over the air.

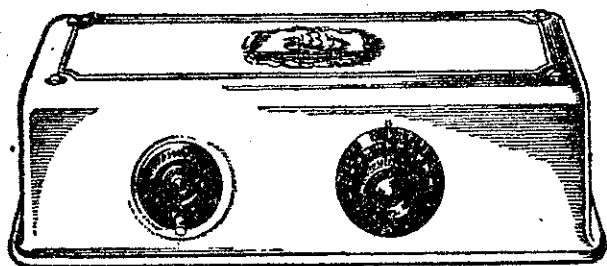
"Thus every child listening-in will be taking a part in the presentation. Just think how Uncle Ernest would appreciate such a thought from all the children whom he has not met personally, but who are his nephews and nieces and whom he loves. How nice for him to pick up this book when he is on the other side of the world and come across the names of children whose birthday he has given over the air in New Zealand. Now, dear boys and girls, please get busy. All that each one of you is asked to do is to write

direction, and the plates gradually reform to their original condition. The life of an accumulator is indeterminate, or rather, determined by its treatment. Take care of the small things, and the accumulator will take care of itself. There are definite rules for the care and maintenance of this most important piece of apparatus. Briefly they are:—

1. Do not over discharge. Test the density of the solution frequently by means of an hydrometer—likewise, do not overcharge.
2. Replace evaporated liquid (electrolyte) by pure distilled water or if not available pure rainwater—not drawn from the tank or collected from the roof. Put a clean receptacle out in a good shower.
3. Never add acid to the solution.
4. Do not bring flames near the vent holes of the cells. An inflammable vapour is given off.
5. Do not short-circuit. The simplest way of short-circuiting is to bridge the poles with an ammeter to see if the accumulator is fully charged. This would ruin the accumulator, causing internal buckling of the plates necessitating the assistance of an expert.

## ATWATER KENT RADIO

MODEL 35.



**M**ANY millions of people now know the ease, the clarity, the mellow tone of ATWATER KENT reception.

These ATWATER KENT characteristics are the standards by which all radio is judged. Hear ATWATER KENT to-day.

MODEL 35, Powerful, six-valve, FULL VISION Dial receiver shielded cabinet.

Distributors,  
**C. & A. ODLIN &  
CO., LTD.,  
WELLINGTON,  
New Zealand**

George Robinson.  
46 Trafalgar Road  
Wellington.

**I**N speaking from 1YA last night, Cousin George outlined the details of the presentation in the following words:—

"How do you do, Children of Radio Land. Auntie Gwen has been good enough to let one of your cousins say a few words to you all. You will be sorry to hear that Uncle Ernest is going to leave us soon and is departing for England and giving up the great work he has been doing at '2YA.' We are all very sorry indeed to lose Uncle Ernest. We have got to love him for his great work of love for the children. We shall miss his Friday evening sessions, and how much more shall we miss his beautiful and helpful song service on Sunday evenings? I go further and say that the grown-ups who listen to Uncle Ernest on Friday and Sunday evenings will also miss him as much as the children.

your full name and address clearly and neatly on a strip of paper, put the slip in an envelope, and post it to Cousin George, c/o 'Radio Record,' P.O. Box 1032, Wellington. Now, so that you won't forget it, just write down 'Radio Record,' P.O. Box 1032, Wellington."

### Accumulators

**T**HE most common type of accumulator is the lead acid type. This consists of positive and negative lead plates immersed in a dilute solution of sulphuric acid. When an accumulator is fully charged and in a healthy condition, the negative plate is composed of lead peroxide.

As an accumulator is discharged the layers on the surface of the plates changes into lead sulphate. Therefore, to charge the accumulator, direct current is sent through it in the reverse

**BRITAIN'S  
BEST  
BATTERY**

**THE  
ADICO**

*Will Outlast  
any other Battery  
of similar size*

Sub - Agents Re-  
quired throughout  
New Zealand.

Sole N.Z. Agents:

**LEVIN & CO.  
LTD.**

(Machinery Dept.),  
WELLINGTON.

# Moving Coil Cone Speakers of the Dynamic Principle

The Speakers which have established New Zealand  
and world-wide reputations in the last two years.

**RADIOLA 104 (R.C.A.)**

(General Electric Co., U.S.A.).

Patent Nos.

**B.T.H. R.K. (Rice Kellogg.)**

(British Thomson Houston, England).

Patent Nos. 231420, 231421, 245796, 260148 and others.

Owing to the now common use of power valves of efficient design in radio receivers the original patentees and designers have decided to release cone units without the accompanying rather costly combined power amplifier and A.B.C. eliminators.

Enquiries should be made to—

**AMALGAMATED WIRELESS (Australasia) LTD.**

Distributors of R.C.A. (Radiola) and Marconiphone Equipment.

**NATIONAL ELECTRICAL ENGINEERING CO. LTD.**

Distributors for General Electric Co., Ltd. (U.S.A.), B.T.H. and FADA Equipment.



**ANNOUNCEMENT** is made of the near-completion of a wireless station at Horta, on the Azores Islands. It is being conducted by the Portuguese Government. The service is particularly designed for trans-Atlantic flyers. Weather reports will be radiated four times daily, enabling aviators who are attempting the crossing to receive first-hand information on mid-Atlantic meteorological conditions.

**THERE** were approximately 60,000 sets in use in Canada and America in January, 1922, serving an audience of approximately 75,000 people. It is now estimated that 8,500,000 homes are equipped with radio sets, and that the listening audience has grown to nearly a third of the total population of the American continent. There are 1200 manufacturers engaged in the making of radio sets and radio parts and all types of radio equipment; over 1200 wholesalers and distributors, and approximately 35,000 dealers carrying stocks of sets and accessories.

**THE** importance of radio as a uniting influence on the far-spread countries of the world is signified by the fact that postal authorities of four countries have produced stamps with symbolical radio designs. Guatemala, as early as 1918, issued a stamp showing a radio station and radio masts. In 1925 the Soviet Republic issued a stamp bearing the likeness of Popoff, a Russian pioneer in radio experimentation. The stamp was inscribed, "Popoff, wireless pioneer." In 1927 Greece issued a stamp showing the cruiser Averoff. Radio apparatus was shown clearly by the engraver. Cabot Tower, St. Johns, Newfoundland, is

engaged on a nine-cent stamp issued in January of this year. The engraved legend says that the first trans-Atlantic wireless signal was heard in Cabot Tower in 1901.

**FROM** September onwards all passenger trains in Hungary are to be provided with radio headpieces in each compartment, and attendants will pass along the trains offering the use of them at the rate of 65 filler (about sixpence) an hour. Also the waiting-rooms at the principal stations will be provided with loud-speakers, and programmes from all countries in Europe will be received, but as regards their orchestral and vocal music only. All the railways belong to the State, which makes the organisation of the enterprise much simpler, and a company has been formed called the "State Railways Radio," to carry out the project.

**RUSSIA** has installed a number of public receiving stations through which concerts may be heard by the people. Mexico has also experimented with the idea—so have local store-keepers.

**IN** order to familiarise the public with the latest developments in radio, Vancouver dealers and broadcasting stations have been co-operating in what is termed a radio week. Radio shops are opening two hours every evening, and their whole stock is being thrown open to the public for inspection. No sales were to be effected during this period, it being merely

a time for demonstrations. The broadcasting stations put on special programmes.

**PIONEERING** the comparatively obscure territory, Spain has established a radio beacon at Cape Tres Forcas, Morocco, the first to be placed on the coast of Africa, according to announcement by the United States Lighthouse Service. Plans provide for the erection of a beacon at Cape Spartel, south of the entrance to the Mediterranean Sea. The Cape Tres Forcas beacon transmits the letter T.F., followed by a long dash of four seconds' duration. The signal is transmitted on a 300-kilocycle continuous wave.

**IN** order to track down interference, the Canadian Government has sent a trouble-tracking car, well staffed with experts, into the rough back-country. The tour laid down was for 2600 miles, into the heart of every province. In practically every place visited trouble of some description was located, and cured, or a recommendation made as to how it should be prevented. From 200 to 300 complaints were investigated each month. In addition to an eight-valve superheterodyne, a small portable set is provided so that it may be used where the car cannot be taken.

**WITH** a view to saving minutes that might mean enormous loss of life, limb and property, the New York fire department has conducted successful tests in the use of radio in directing operations. In utilising this means of

communication, officials have in mind the hazards of telephone wires being severed, thereby disorganising a fire-fighting operation which necessitates a centre of control.

**OPERATING** from Paris, detectives discovered a very powerful wireless station in the depths of a forest. It is alleged that the station was being used by anti-Fascists, opponents of Signor Mussolini. An Italian, Bertini, the station manager, has been arrested.

**THIRTEEN** automobiles raced around Brittany in a radio race. Each carried a radio receiving set, on which they received first a motto, which they had to write down, and then directions for getting to the next stopping place. Arriving there, the process began again, and after a short stop and a moment's silence while the drivers listened in to a central transmitting station, they were off again for the next leg.

**FROM** the far-off station of the Oblats Missionaries in Hudson Bay, Brother Volant, writing to his home town, states that he has heard the voice of his beloved France transmitted by the Toulouse broadcasting station. Jazz and opera and even songs of breezy frivolity were listened to by the delighted French monks. "God be praised," concludes Brother Volant, "voices from France are in the air."

**BY** means of the trans-Atlantic picture service the latest Paris models are being reproduced by New York fashion houses after being worn in Paris.

## Insulated Wire

**HOW** many experimenters have at different times said hard words about the manufacturers of insulated wire, for not making it easier to bare the ends of the wire in a neat and satisfactory way? Although an apparently simple matter, it is surprising what a large amount of time and temper can be lost in preparing a few lengths of wire for an experimental hook-up! If you use too sharp a knife, you probably cut through most of the copper strands, while if the knife is too blunt, it is impossible to hack through the insulation.

Having eventually made a way through the insulation and reached the copper conductor, you then find either that the insulation has an annoying habit of slipping back like a sleeve, so that the nicely prepared bare copper end is missing when wanted, having disappeared again into the sleeve of insulation, or that you are left with a tangled mass of cotton fibres from which it is very difficult to distinguish and extricate the required copper strands.

An American wire manufacturer (evidently an experimenter himself) has now put on the market what he describes as "the speediest hook-up wire" for the experimenter. The insulation is arranged in such a way that you simply push it back in order to obtain a bare end, and, what is more, having been pushed back it obligingly stays back. This docility is obtained by braiding the insulation into a specially elastic tubular form and then treating it with a wax preparation including a small percentage of resilient ingredient which ensures, in the words of the maker, that "it stays put."

# Amazing Results...

## on the wonderful new SCREEN-GRID "4"

Read this owner's  
remarkable letter for yourself

Bauchop's Hill,  
Burke's Pass,  
August 6th, 1928.

Dear Sir,

I am writing to let you know how delighted I am with the Screen-Grid Four which you procured for me....this little set is a wonder to all that hear it.

Prior to this set I had a six of a very popular make, and for tone, distance and volume on the ordinary broadcast band, the Screened-Grid Four comes out on top.

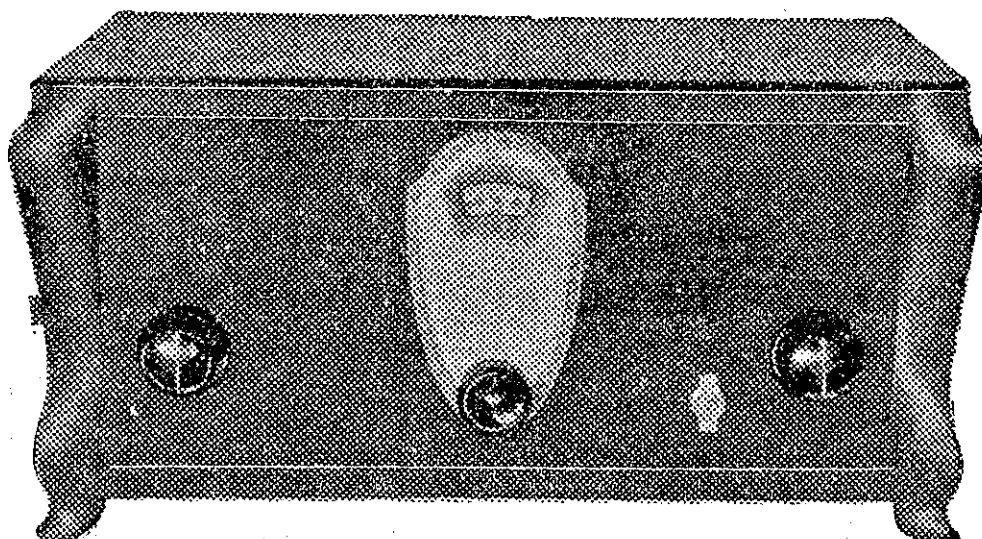
On the short-wave band I have not heard its equal.

To hear London, 5SW, PCJJ, 2XAF, 2XAD, KDKA, RFM and others all on the loudspeaker, which is a large cone, to my family, friends and self is wonderful. The Tunney-Heeney fight I worked with two stations, 2XAD and 2XAF. I tuned in 2XAD at eleven-thirty which was then about R3 on the speaker and improved to R4 by 1 p.m. I distinctly heard the opening announcements with the crowd cheering the boxers as they entered the ring. From then on I could not hear the announcer clearly to receive all the description as there was a terrific row from the ringside....

I am,

Yours truly,

(Sgd.) F. A. BUCKLEY,



THE NEW SCREEN-GRID "4"

This wonderful new Screen-Grid 4-Valve Receiver is revolutionising radio reception. Wherever it has been tried, results have been little short of marvellous. With the utmost ease, beginners have picked up stations in Siberia, America, Holland, England, Australia, etc., at perfect loudspeaker volume. Full particulars from

N.Z. Distributors: **RADIO LIMITED**  
Corner ANZAC AVENUE and BEACH ROAD, AUCKLAND.



## 2YA Sporting Service

**F**OR some six weeks listeners throughout New Zealand have been provided with a news service equalled by none. 2YA's special service has been inaugurated and has proved its worth particularly to sporting enthusiasts with whom our young country abounds. Sportsmen have been surprised and pleased at the lightning rapidity with which the latest results are to hand, and delighted as well with the accurate turf observations, racing forecasts, cricket scores, and golf results.

### Racing.

**I**T would not be a sweeping statement to say that one person out of three is interested in racing and for these the service is invaluable. A great many have followed with keen interest the observations with regard to the recent Canterbury meeting. Before the meeting the comments of a prominent sportsman were given, and the chances of each horse weighed. It is interesting to compare these indications with the actual placings. For last Saturday's meeting two "fancies" were suggested for each race, and out of these at least one was placed in each of six races. In the big race, the Cup, the three horses were suggested in the winning order.

### Was It a Slip?

**A** CERTAIN sporting paper has attempted to reflect on 2YA's sporting service. After a crude joke at the announcer, it wrote that Porter had been given as the rider of Count Cavour and Bagby as being on Black Mint. That statement is false. The facts are that these riders were never mentioned. In reading down the probable riders for the Cup it was stated that A. E. Ellis and T. Metcalf would ride Count Cavour and Black Mint respectively. And these were the riders who actually took the field.

Listeners may rest assured that all information broadcast by 2YA is correct, and that the sporting news is supplied from a reliable source. In giving this special service to listeners, 2YA has been fortunate enough to secure the services of several of the best known sporting men in New Zealand and Australia.

### Cricket.

**T**HE big cricket in Australia is creating great interest in this country, and 2YA's special service has performed a function that is appreciated by an ever-increasing circle. Results are given out shortly after each adjournment, long before any other means of dissemination is available. Each session is looked forward to as bringing some news of the progress of the match.

Before each match the latest particulars are given. These add a colour to the game which would otherwise be lost.

### Rowing.

**A**N unequalled service was presented when the New Zealand rowing crew took part in the Henley-on-Yarra regatta some few days back. Reports on the condition of men and boat were available, and shortly after their boat had been damaged the news was broadcast, together with their prospects of success if they were to use a strange boat. The remarks were found to be exact—more so than those of a prominent weekly which contrived to give an impression totally at variance with the facts.

Listeners can rest assured that all the latest sporting and other interesting news will come over the air, so far as it is humanly possible to get it. Special arrangements are being made for progress reports on the "Spirit of Australia" on her flight to Britain.

The results of the Melbourne races are to be promptly broadcast, and, conditions permitting, the important races, including the Melbourne Cup,

## Availability of Moving Coil Speakers

(Continued from front page.)

apparatus not necessarily definitely designed for such purpose, and this is the real reason why moving-coil units are now being released as a separate item.

**I**T should be understood, however, that the moving-coil units will only give reproduction anywhere approaching the perfection which is obtainable from properly-designed accompanying apparatus provided that the receiving equipment to which they are attached has an output valve of a power design and representing very considerable capacity. Put simply, a suitable power valve should have an internal resistance approximating 2000 ohms or less, and should be capable of producing at least  $\frac{1}{2}$ -watt of undistorted power. Of course, the moving-coil unit will still give very excellent results when fed from much smaller types of valves, but just as soon as the definite principles above described, necessary for first-class reproduction, are departed from, very definite decrease in quality reproduction must be looked for, and the

will be rebroadcast. Of course there is no "ban" in Australia to contend with.

As indicated, the intention is that this service shall be fully and strongly maintained.

moving-coil unit attached to a small capacity power valve will cause the reproduction to fall back into a class of music at present obtainable from standard designs of good horns and fixed-coil types.

**W**ITH the moving-coil unit it is necessary to excite a field coil which energises the driving magnet. Standard types which are appearing on this market are designed for 6 volts, 110 volts and 230 volts, and this current must be D.C., that is, direct current. The 6-volt unit may be excited from an accumulator battery, or rectifier unit, and a consumption averaging one ampere will be necessary. The 110-volt unit must be fed from 110-volt D.C. supply when the consumption will be probably 100 milliamperes. As there are no direct current supplies of this voltage in New Zealand, this current must be obtained from accumulator batteries, or from rectifying valves. A 230-volt unit would consume less current of course. In the City of Auckland, or Taihape, for instance, where direct current of 230 volts is available, the 230-volt design of unit may be plugged-in on to the mains direct, with suitable protective apparatus, or else alternating current used with valve rectifiers. The moving-coil units are therefore being marketed in various forms, and suitable excitation apparatus for connecting the unit direct to the power mains is being made available either embodied in the cabinet, or as separate units.

## TELEVISION

We have all the parts necessary to make up Television Equipment.

Selenium Cells, 27/6.

Special Mirrors, 12/6.

Two Specially Prepared Aluminium Discs, 31/-.

Screens, 1/3.

"Television" Magazines, 9d.

We are the pioneers in Television experiments in New Zealand, and can assure those contemplating doing likewise that it is a field for very interesting work.

## HARTLE and GRAY

CUSTOMS STREET, WEST, AUCKLAND.

THE FIRM FOR ALL THE LATEST GOODS.

**and NOW it's the PHILIPS B443**

**PENTHODE**

**A REMARKABLE POWER VALVE with 5 ELEMENTS**

**HERE is a miracle multi-element tube for your radio. It's the Philips PENTHODE. Possessing five elements the B443 is designed for audio amplification. In the power socket it will give tremendous volume. Used in a single audio stage in conjunction with a Philips transformer results are about equal to the usual two-tube amplifier.**

**There is no "trick" circuit, no need to alter the wiring of your present receiver, simply connect the terminal on the side to a high "B" Voltage.**

**ASK YOUR DEALER FOR A PAMPHLET.**

**PHILIPS**

**"MINIWATTS"**

8R19N

Adts. of Philips Lamps (N.Z.) Ltd. (Radio Dept.), Hope Gibbons Building, Courtenay Place, Wellington

# The New Zealand Radio Record

P.O. BOX, 1032, WELLINGTON.

Published Weekly. Subscription Post Free in advance, 10s. per annum; booked 12s. 6d.

WELLINGTON, FRIDAY, NOVEMBER 9, 1928.

**L**ISTENERS are assured of an outstanding service on the evening of November 14, when the results of the general election will be available. Never before will the results be so speedily known throughout the country, for never before has there been in existence such a radio audience as will that evening surround the 42,000 licensed receiving sets of the Dominion. As announced elsewhere a temporary studio will be fitted in the office of the "Radio Record," situated in the offices of "The Dominion" newspaper, and announcement made from this point of the results—courteously made available from "The Dominion" and the office of the Registrar-General of Electors. This spot has been chosen because of its favourable situation and the certainty that an exceptionally large crowd will there congregate. The leaders of the national parties will speak here. Their public addresses, as well as probably special addresses to the vast unseen radio audience, will be broadcast. Listeners that evening will certainly have an outstanding service from radio.

**I**T is gratifying that the number of licensed listeners has now passed the mark of 42,000. This is an outcome, we take it, not of special stunts, but of a growing appreciation on the part of the public of the value of radio from the point of view of service. Its utility value is becoming better understood and no longer is it dependent merely upon its entertainment value. The news factor is being steadily advanced, as is evidenced by the attention paid by the public to the special sports service now being given by 2YA. The rural community is also more and more appreciating the importance of the nightly weather forecast, any many instances are known of farmers installing radio for the prime purpose of securing Dr. Kidson's invaluable nightly summary. On a service basis, radio is more important even than as an entertainer.

**W**ELLINGTON last week provided a fairly satisfactory answer to the question which has agitated many entertainers as to whether the broadcasting of their entertainments was advisable or not. By arrangement 2YA broadcast the special symphony orchestral concert arranged by Mr. Leon de Mauny, held in the Town Hall, under Vice-Regal patronage. The night was particularly wild and stormy and unquestionably affected attendance. Possibly also the fact that the performance was being broadcast induced some, on such a night, to stay at home. But against such losses must be set the larger view of the gain in publicity. Here are the facts. Before noon on the day following Mr. de Mauny had telephone rings from thirty people who had "listened-in" offering to become permanent subscribing members to the proposed Symphony Orchestra. We have heard of others who, yielding to the bad weather, did stay home instead of going, but who declared subsequently that, no matter what the weather, they would attend the next concert to enjoy in person the musical delights afforded. The transmission of the concert takes rank as one of the finest musical treats ever broadcast in New Zealand, and as a direct result of the publicity given by radio, Wellington to-day is wholeheartedly talking of the event, and the formation of the orchestra into a permanency is practically assured. We congratulate Mr. de Mauny upon his public-spiritedness and foresight in permitting his concert to be broadcast.

**YOU CAN'T BUY A BETTER VALVE THAN**

**Mullard**  
**THE MASTER VALVE**

## Wanganui to Provide Radio Concert

*Big Entertainment for Friday, December 7.*

**T**HE recent test of the telephone lines from Wellington to Wanganui having proved that it would be satisfactory for the transmission of a concert programme, 2YA will re-broadcast on relay an entertainment which is to be given on Friday, December 7.

From a broadcasting point of view, this will be of considerable interest as the landline will be 125 miles in length, and this will be the longest relay carried out in New Zealand.

**A**PART from this aspect, the entertainment to be broadcast will be of outstanding merit. Wanganui, as is well known, is a very musical town. The Queen Alexandra Band, under Captain George Buckley, is the champion brass band of New Zealand. It won this honour for the second year in succession at the contest held in Christchurch. The Wanganui Highland Pipe Band also carried off the championship there. Apart from these, there are other musical organisations in the city which can boast of soloists and entertainers who are second to none.

Wanganui musicians have taken up the proposed concert in a very enthusiastic manner, and intend making this Wanganui broadcast entertainment one of the most outstanding events of the year.

## Another Thousand Mark Passed

*Radio Licenses Now 42,235*

**T**HE latest figures—to date November 2—show the total number of radio licenses in New Zealand to be 42,235. The figures are:—

District.	Receiving.	Transmitting.	Dealers.	Total.
AUCKLAND .....	13,694	53	399	14,146
WELLINGTON .....	16,194	53	579	16,826
CHRISTCHURCH .....	8,020	30	275	8,325
DUNEDIN .....	2,762	18	158	2,938
	40,670	154	1411	42,235
Previous Totals were:—				
June 30 .....			35,824	
July 31 .....			37,238	
August 31 .....			38,835	
September 30 .....			40,344	
October 19 .....			41,430	

**A**NY of the new listeners who may be anxious to familiarise themselves with necessary radio information and the ability to secure the best results from their sets are cordially invited to write the "Radio Record," P.O. Box 1032, Wellington, for a sample copy of this weekly newspaper, or submit queries on any points that may be presenting difficulty. Special effort is made in "The Beginners' Corner" to deal with matter that is likely to trouble the newcomer to radio.

## Public Opinion of Radio Items

*Interesting Competition Arranged and Big Prize Offered.*

**I**N next week's issue of the "Radio Record" will appear the coupon for the big radio competition to be conducted from the four stations and for which the prize of a £50 Columbia Gramophone is to be awarded to the winner.

In this competition, listeners are invited to allot marks (a minimum of 50 and a maximum of 99) and, basing their opinion on the appeal made by the various items, to place them in their order of popularity. From the marks awarded, the general average of public opinion regarding the respective items will be calculated, and the listener whose opinion most closely corresponds with that general average will win the £50 Columbia Gramophone.

The dates fixed for the competition are:—

1YA .....	Wednesday, November 21.
2YA .....	Tuesday, November 20.
3YA .....	Thursday, November 22.
4YA .....	Wednesday, November 21.



## Broadcast of Oratorio

### Forthcoming Big Attraction for 3YA.

**W**ON Wednesday, November 28, the Royal Christchurch Musical Society is presenting Mendelssohn's beautiful Oratorio, "St. Paul." The performance is to take place in the new Municipal Concert Hall, and will be produced in a very complete and elaborate manner with full orchestra and chorus.

The soloists for the occasion will be Madame Winnie Fraser (soprano), of Oamaru, Mrs. Ann Harper (contralto), of Christchurch (and a regular performer at 3YA); Mr. J. Hadland (tenor), of Greymouth, and Mr. Charles Clarkson (bass), of Kaiapoi.

The conductor of the choir will be Mr. A. G. Thompson, B.A., and the leader of the orchestra will be Mrs. Wilson.

## A Year's Useful Work

### 3YA Children's Session Advisory Committee

**T**HE last meeting of the 3YA Children's Advisory Committee marked the end of its first year's existence, during which time the committee has more than justified its formation.

Mr. D. E. Parton, chairman of the committee, presided at the meeting held in 3YA Studio on Monday, October 29. There were also present Mesdames R. Tomlinson (Society for the Protection of Women and Children), W. Machin (National Council of Women and Y.W.C.A.), D. James (Junior Welsh Society), Schenkel (Mothers' Union), Miss M. Brown ("Scatterjoy"), Messrs. A. McEldowney (Y.M.C.A.), Brother Hendricke (Marist Brothers), and Miss M. Hall (Children's organiser, 3YA).

The resignation of Mr. E. J. Bell, city librarian, from the committee owing to his being unable to spare the time required in attending the meetings, was accepted with regret.

The children's session organiser, "Aunt Pat," reported that the Ferry

Road Convent would give a Schubert evening on November 19, and that the programme arranged would be very good. On November 30, St. Andrew's Day, St. Andrew's College boys were coming along with their pipes, and would give a Scottish concert. Aunt Pat also reported that the use of special gramophone records for children was giving much pleasure, but that the supply of such records was very limited.

Aunt Pat also suggested that on Christmas Eve all the uncles and aunts of the station should give a combined programme, just as they did last year. Efforts will be made to get the Blind Boys' Band from Auckland to broadcast from 3YA on Saturday, December 1.

Before concluding the meeting, Mr. Parton referred to the fact that the committee had now had twelve months' experience, and he invited the members of the committee to run over in their minds the work that had been done. The Broadcasting Company considered that what the committee had accomplished was very valuable, and in view of that all members should do all they possibly could. All practicable suggestions were welcomed. Mr. Parton said he would take the opportunity of thanking all the members of the committee for taking part in the discussions from

## Notice to Subscribers

**T**HE "N.Z. Radio Record" is published weekly, on Tuesdays (bearing the following Friday's date) to permit of distribution throughout the Dominion by Saturday of the programmes of all stations for the week then following.

Special sections are devoted to beginners and constructors with a view to helping in all difficulties of reception. Correspondence on technical points is dealt with in terms announced in "The Beginners' Corner."

"Our Mail Bag" is open for the views of listeners on matters of general interest. All literary correspondence to be addressed "The Editor," "N.Z. Radio Record," P.O. Box 1032, Wellington.

### SUBSCRIPTIONS AND RENEWALS.

**T**HE subscription rate of "The Radio Record," post free, within New Zealand is 10/- per annum prepaid; or 12/6 per annum booked. Single copies 3d. per copy. Regular supplies are available from booksellers and radio dealers, or direct from the publishers, N.Z. Radio Publishing Co., Ltd., P.O. Box 1032, Wellington.

In connection with renewals, subscribers are asked to note that in order to give them the advantage of our special concessionary rate of 10/- per annum prepaid, the following procedure is necessary for economy and promptitude. The expiry date is indicated on wrappers as regularly addressed. Three weeks before expiry a request for renewal is sent by mail and if required, a further request with the last issue. Thereafter, as we are working on a fine margin, supply ceases pending renewal or instructions to continue on a booked basis. We find by experience that this procedure is necessary.

We will gladly send a sample copy of "The Radio Record" to new listeners on request, and would invite the co-operation of readers in thus extending our service to radio.

"N.Z. Radio Record."

P.O. Box 1032, Wellington.

A. J. HEIGHWAY, Managing Editor.

time to time. To work on the committee had been a great pleasure to him, and he would continue to help the children's session all he could. Matters of business and finance did not affect the deliberations of the committee. "Broadcasting," he concluded, "is a public utility, and anything we can do for the public, and more especially for the children, we should do."

## Vaudeville Troupe at 3YA

**T**AKING advantage of the presence in Christchurch of a party of vaudeville artists, the Diplomats Revue Company, who are commencing a season in the city this week, 3YA engaged them on two evenings last week. The incident shows again that no opportunity of securing turns from all available variety artists is missed. The entertainments, occupying a large part of the programmes on the two evenings, met with great appreciation.

## Maori Radio Pageant

### Souvenir for Performers

**A** SOUVENIR of the Maori Radio Pageant has been presented by the Broadcasting Company to the performers who contributed to the success of that historic entertainment. The

souvenir takes the form of a group of photographs, suitably framed.

In commenting on the photograph, the "Wanganui Herald" said: "The people of Wanganui were justly proud of the effort by their fellow citizens and all will join in applauding the company's action in permanently recording the event by presenting this historic group of photos. As for the party themselves, they will talk of the great event, and it will be many a day before the Radio Maori Pageant is forgotten, for the Radio Pageant marked an event in the history of the Maori people. Privileged, therefore, were they who took part in it."

## Physical Culture Lectures

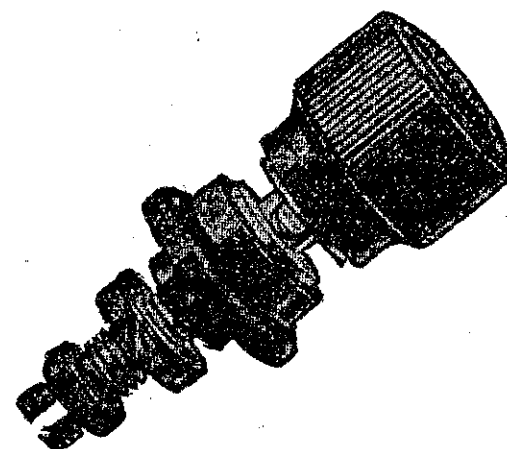
**M**R. CHARLES BUCKETT, physical culturist, has been engaged to deliver a series of lectures at 3YA. Mr. Buckett has a large school in Christchurch. In a recent gymnastic display, 180 girls took part. It will be well remembered that last year he broke the world's endurance record for club swinging.

### FOR SALE.

**A** MPLION CABINET LOUD SPEAKER. COST £2 10s.; very little used, splendid tone. Price 35/- Guaranteed sound. Apply—

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**BELLING-LEE  
TERMINALS**



# Schubert Centenary Programmes from all Stations

SCHUBERT had one of the greatest gifts of melodic spontaneity ever bestowed on a composer. Someone once said it seemed only necessary for him to hold a pen for a magic flow of melody to find itself on a sheet of paper. Schumann, in the manner of a romanticist, said, "Schubert's pencil was dipped in moonbeams and in the flame of the sun."

MANY tributes have been written about Schubert's genius, and many things said about his personal characteristics. Perhaps one of the simplest and yet most enduring appreciations was written by Sidney Grew in his "Masters of Music." In it he said: "Schubert was a generous and loving man, with a soul so gentle, passionate and sensitive—being expressed as it is in vast supplies of music—his life made the world a different place for all music-lovers, who come after him; we have, by Schubert, a kind of beauty now around us which but for him we never should have had, because since music began there has been none just like him."

ABOUT the life of Schubert nothing will be said except to remind the reader that he was the son of a schoolmaster, was born in December, 1797, at Vienna, and that he died in the same city in November, 1828, the victim of typhus, like Mozart. The inferiority of his social position has, on the whole, been exaggerated. Though never mixing, as Beethoven did, with the Viennese aristocracy on terms of something very like equality, one or two fashionable houses were open to him. The truth of the matter, however, is that Schubert, almost pathologically shy and awkward, hated society; but that is not to say, as one writer puts it, that he "preferred the servant's hall." Schubert was a thorough Bohemian; he liked carousing with his friends in the cafes of Vienna, and we know that he was the life and soul of these carousals—which to anyone with a knowledge of human nature explains a great deal—and that his friends adored him. But these friends, so far from having anything in common with "the servant's hall," were in practically every instance men of intellect, men like Mazschofer, the poet, and Vogl, the singer. It was a careless, casual kind of life, admirably suited to one like Schubert, who was constitutionally incapable of bothering about money—he earned on the aver-

This month, music lovers throughout the world will commemorate the centenary of the death of Franz Schubert, one of the greatest melodists the world has ever known. Much has been written and said about Schubert this year, and the celebrations are being looked forward to with the keenest anticipation. Special programmes have been arranged by the four New Zealand stations, when all aspects of the many-sided genius of the great composer will be presented for the enjoyment and entertainment of listeners.

age, considerably less than a hundred pounds a year—but it was not, as has sometimes been said, a life of excess. Schubert's industry proves this much. He worked every morning from six to one, an impossibility to anyone addicted to regular dissipation.

NOW, these facts, taken together, are of importance if we are to understand Schubert's music aright," writes Mr. Francis Toye. "In Vienna, the city

compositions could have appeared in exactly the same form in any other city at any other period. What Elizabethan England was to Shakespeare, Vienna of the early nineteenth century was to Schubert. His dislike of social convention, his careless Bohemian tastes, count much, too, in the fashioning of his music. To these we may trace, I think, the excessive length of some of his compositions, the easy, spontaneous nature of his inspiration. To be more accurate, perhaps, these characteristics all spring from the same root.

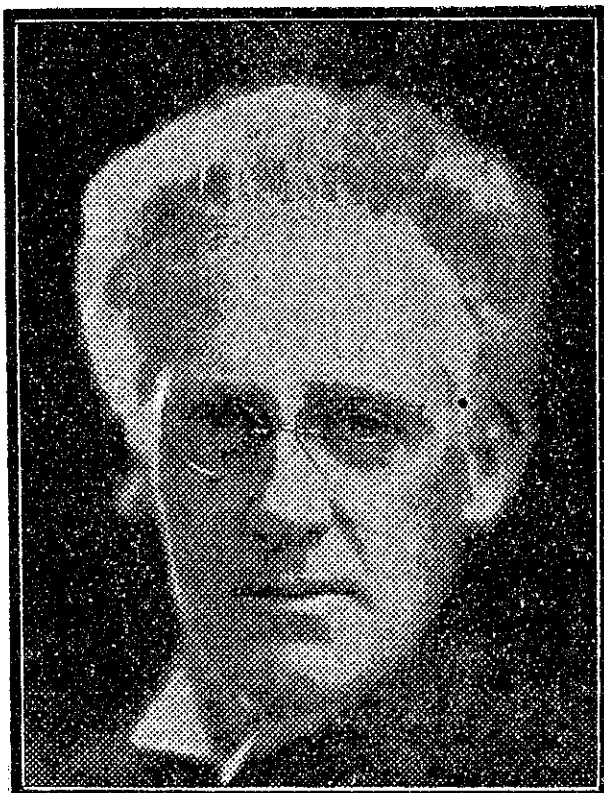
"PROFESSOR Donald Tovey, in the best essay on Schubert that has appeared in English hitherto, has shown that Schubert's lack of knowledge of musical form is more or less a myth. What he did, he did deliberately and of set purpose. But I think it is fair to say that his character was not one to trouble itself overmuch, as a Debussy or a Mozart would have done, with questions of form. The germinal musical idea is what mattered to Schubert first, last, and all the time. Temperamentally he was the natural musician—probably the most natural musician in the whole history of music. Not only could he set anything to music, as his contemporaries truly said, but nothing could stop him setting anything and almost everything to music. When he was not satisfied with a song, he did not, as a rule, revise it; he just wrote a completely new version. Essentially this generous, magnificent outpouring of ideas is characteristic of one temperament; we cannot expect to find allied with it the restraint characteristic of quite another temperament. Together with the great industry already referred to, it explains how Schubert, dead at the age of 32, left behind him a musical output considerably larger than that of most composers who attained the proverbial three score years and ten. Compare it, for instance, with that of Bizet, who also died in the thirties. I do not propose to give a list of Schubert's compositions, symphonic, operatic, ecclesiastical, or chamber; they can be found in any standard book of reference. But I will remind the reader that of songs alone he wrote nearly six hundred, and that some three hundred of these are masterpieces! Would you have such a man different in any particular even if you could? I know that I would not.

"FOR in his music, as in his life, Franz Schubert's personality is the quintessence of loveliness. I always like to imagine his real self,

underneath the uncouth, unattractive exterior, to have been something very like the first subject of the so-called 'Unfinished' symphony, when the clarinet steals in rather shyly against a background of busy, friendly strings, who are none other, of course, than Schubert and the other 'Schubertians.' Nevertheless, somewhere in this timid man there was a vein of boldness, of almost Beethovenian nobility. Think of the daring modulations characteristic of his best work, of the Scherzo of the 'Death and the Maiden' quartet, so prophetic of 'Siegfried'—above all, of the glorious Finale of the C Major Symphony (perhaps the greatest of essays in diatony), particularly towards the end, where the body of strings, like a Titan, hammers out the four great C's over and over again. thing about them is well-nigh miraculous—their mere number, their variety, the ease with which they were composed. On July 7 or 8, 1815, he wrote six songs; on October 19 he wrote no less than eight, one being in two versions. He composed "Gretchen am Spinnrade," the most remarkable song that had appeared in Germany up to then, when a lad of seventeen; 'The Erl King,' perhaps the most popular ballad in the world, was one of a hundred songs written only a year later. A learned biographer has classified the total output into more than a dozen well-defined categories, which gives some indication of their range of expression and emotion. In truth, Schubert's songs constitute a miracle every bit as inexplicable as other miracles less well attested. Think of the bustling, headstrong Scherzo of the marvellous Quintet for two 'cellos, two violins and viola, probably the best of all his chamber music, and heard far too infrequently. Think of one or two of the piano sonatas.

"NEVERTHELESS to the public at large Schubert remains primarily, I suppose, a song-composer, and in a sense the public is not wrong, because if any branch of composition had to be isolated and alone preserved we should all vote for the songs. Other composers may have surpassed Schubert in other forms; nobody, before or since ever wrote such songs."

STATION WEBB at Cambridge, Ohio, using 10 watts of power, is said to be serving approximately 37,000 listeners daily, covering a radius of 25 miles.



Mr. Cyril Towsey, of 1YA.  
—Andrew, Photo.

itself and the country round, lay his while life; and it is the romanticism of contemporary Vienna that inspires his whole musical output. I doubt if his

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**VOTE**  
**FOR COATES CANDIDATES**

## Auckland Notes

(By "Listener.")

**Q**UICK service to its supporters is a motto to which local broadcasting lives up. On Wednesday a poll was taken in the city and suburbs upon the question of establishing a transport board. Within a few minutes of the totalling of the votes thousands of Aucklanders, comfortably settled in their own homes, knew of the civic decision. 1YA did the trick promptly.

**L**ISTENING-OUT has supplanted listening-in during the last few days, and will continue to do so for a week or two to come. Thousands are swarming nightly to political meetings, which cannot be broadcast, and as a result sets are being less used than is usual. When the declaration of the polling comes, however, the most satisfactory place to be will be in front of the loud-speaker. Radio will considerably diminish the crowds that crane their necks around the newspaper screens which announce results.

**2YA** gave us two excellent nights of boxing this week. The military tournament was well described, while the followers of Charlie Purdy sought out many a receiver to hear how he fared against Fairhall on Tuesday night. Whoever described the fight deserves congratulation upon a vivid account that was splendidly transmitted.

**O**NE of the best programmes yet provided by Madame Ainsley's party was given this week. "Il Trovatore" is the most popular of grand operas with the general public, and can well stand more than one repetition. The other items on the programme were both varied and attractive, but special mention must be made of the effort of the orchestra and the vocal party in rendering a selection from the "Waltz Dream," with its attractive music of pre-war days.

**"W**HY didn't they broadcast the Prime Minister's speech?" was a general query this week. At the time Mr. Coates was speaking in Auckland listeners could tune in 2FC and hear the leader of the Australian Labour Party expounding his platform. There are still a large number of listeners who are unaware that politics are taboo on the air in New Zealand. Though this is so, it might easily be considered that a speech by the leader of the Government should override this restriction.

**S**OME of the Australian stations are very considerate in catering for New Zealanders, to whom they are under no obligation. The special cricket announcements given out by 2FC at 9.55 each evening that the Englishmen are playing are much appreciated locally, and 2FC received much attention during the Adelaide match. One wonders whether such descriptions might not be either re-broadcast or re-announced

in New Zealand. (2YA is giving prominence to Australian sporting notes.)

**H**E was a new arrival in the Dominion, a holiday-maker from far and little known South America, where broadcasting has as yet but little local hold. "I got to know your country," he said, "when fully a week away from it in the Pacific Ocean. It was a treat to hear the typically English programmes, but a still greater treat to listen to the news of a strange land, and to become familiar with happenings and conditions long before one set foot on shore. Your broadcasting service meant much to me. It gave me the New Zealand atmosphere in such a way that I landed without the feeling of being an absolute stranger in entirely new surroundings. Though I was the only stranger aboard, I was not alone in following keenly everything that could be picked up from 2YA and 1YA."

## Radio for Farmers

### A Wonderful Boon

**T**HOSE farmers throughout New Zealand, who have broadcast receiving sets, will readily testify to the wonderful assets they have proved for more reasons than one. As compared with city and township life, that on a farm is one of isolation, and the families of farmers are of necessity somewhat restricted in the fullest enjoyment of the amenities so readily available in cities and townships. This may, in a large measure, be compensated for by the ownership of a first-class broadcast receiving set. The farmer's family is thus immediately placed in close contact with the distant cities of New Zealand and Australia. Vocal and instrumental music by the best talent available is brought right into the home. There is dance music in galore. All the news of the hour comes pouring in through numerous channels. There are instructional and educative addresses, lecturettes, on world topics, studio playlets, travelogues, and theatrical productions flashed right from the stage, in far-away Sydney or Melbourne. Illustrious visitors from overseas are heard from various studios. Sports, football, etc., are frequently described from the very scene of competition. The children's early evening sessions afford pleasure and interest for the juveniles. And, so from the little ones right up to the head of the household, broadcast listening is a very definite boon.

**T**HERE is yet another thoroughly valuable use for broadcast listening by the farmer, and that is the reception of the regular evening weather forecasts supplied to the New Zealand broadcast stations by Dr. Kidson, Director of the Government Meteorological Department. Testimony is available from some hundreds of farmers as to the great value of these broadcast

weather forecasts in apportioning the work on their farms for the following day, for Dr. Kidson's forecasts have proved almost uncannily reliable. It requires no stressing to mention the advantage to a farmer to know what kind of weather the morrow will bring.

One example may be quoted of an up-to-date farmer who finds so much use and profit from his radio set that he states he could not think of being without it. Mr. O. Sykes, of Westmere district, about 20 miles east of Masterton, not only finds most valuable for his farm work the evening weather forecasts, which are broadcast and picked up by his receiving set, but, like the good neighbour that he is, serves his farmer friends for miles around by telephoning the forecasts to them. Thus he is the weather-forecast distributing agent for his area. If heavy rains are predicted for the morrow orders are given not to trouble about getting the ploughing teams out in the morning, and so on. The following day's work can be laid out on the preceding evening.

Mr. Sykes has erected two 60ft. aerial masts and has an up-to-date four-valve Browning-Drake circuit radio set. His "earth" wire is connected to a pipe which runs to an artesian well. With his set he not infrequently enjoys music from 6000 miles distant American broadcast stations, so it is not to be wondered that he obtains reception from the principal New Zealand stations, and the Australian stations have been received even during daylight in the early evening. At night-time, which is more favourable for long-distance reception, Mr. Sykes is able to draw unlimited entertainment and interest from far and near. He often hears as many as five Japanese broadcast stations, over 5000 miles distant, from his loud-speaker.

**T**HE farmer need no longer fear the intricacies in operating a radio set which marked the stone age of broadcast reception. Everything is now so simply arranged that a little child can operate the latest receiving sets. The cost of electricity for operating them works out at less than a penny a night. First-class sets with all necessary equipment to bring in the New Zealand and chief Australian station range from about £45 up to 100 guineas. As an investment solely for the convenience of obtaining the weather forecasts in remote areas a radio set is a profitable purchase by a farmer, but as an entertainer and news agent it is easily the "best buy" ever offered to the farming community.

## Amateur Radio Society

**I**N the Cambridge Terrace Congregational Church Hall on the evening of Tuesday, November 13, at 7.45 p.m., Mr. Preston Billing, the well-known radio expert, will give an address and demonstration on the "Freed-Eismann All-electric Sets," under the auspices of the Wellington Amateur Radio Society. Mr. Billing is a thorough expert in his subject, and listeners, who are cordially invited to be present, may rest assured that a very informative evening will result. Mr. Billing will base his remarks upon a typical set, and, as the electric sets have a very definite and attractive future, an interesting evening is assured.

## Friendship in Radio

### What Broadcasting Is Doing

**W**HEN the Southern Cross left New Zealand for Australia it bore a letter from Mr. A. R. Harris, general manager of the Radio Broadcasting Company. The latest Australian mail brings the following reply from the New South Wales Company:—

"We have to acknowledge your letter of September 28, per favour of Squadron-Leader Kingsford Smith, and Flight-Lieutenant Ulm.

"We can assure you that we appreciate the thought which prompted you to take the opportunity of sending these greetings by the Southern Cross. We wish to say that your kind wishes are very warmly reciprocated, and we too feel that wireless broadcasting together with aeronautics are rapidly bringing the Commonwealth of Australia and the Dominion of New Zealand into closer touch.

"We believe that already there is a far better understanding of the problems of these two great countries as the result of the publicity which is daily given through the broadcasting stations."

## Weather Forecasting

**Mr. B. V. Pemberton, of the Meteorological Office, will on Monday evening next at 7.25 deliver a short talk on weather forecasting.**

## Armistice Day Service

**A** SPECIAL service, to be held at the St. Andrew's Presbyterian Church on Armistice Day, Sunday, November 11, will be broadcast by 1YA. The service will commence at 10.45 a.m., and will be conducted by the Rev. D. D. Scott and the Rev. James Milne, M.A.

## 1YA Mystery Night

**T**HE winner of the 1YA Mystery Night, held on October 24 is Miss (or Mrs.) Margaret Robertson, 124 Selwyn Street, Onehunga, with a total of 18 answers correct out of the 20 numbers broadcast. The full list of the correct numbers will be published in next week's "Radio Record."

## An Analogy

**A**N American periodical (not a radio journal) thus pithily comments:—"On the same principle that broadcasting Sunday morning sermons injures the Sunday morning attendance at church services, we could argue that the showing of travelogue pictures on the screen would injure travel, only in the latter instance we would find no one fool enough to believe us." If "races" were referred to instead of church services, the American writer could quite well say the same thing of New Zealand.

# WHY?

Kingsford Smith uses Burgess Batteries. Commander Byrd uses Burgess. More Burgess Batteries are sold in New Zealand than any other make. WHY?

# BURGESS RADIO BATTERIES



**Faulty Leads.**

**T**ALKING of aerial leads reminds one of an incident told of an owner who sought to criticise an experienced man before he had thought of what his trouble might be.

An amplifier had been installed to a crystal set and the whole outfit left working satisfactorily. Shortly after the owner came in with a "grouse"—the set was a failure, it had been examined by an expert and was one mass of faults.

After the annoyed owner had calmed down, it was learned that signals could be heard only intermittently and were then very weak. The set had to be put right or removed. It was put right quicker than the owner had hoped for.

To improve appearances, certainly not for any other purposes, a speaker cord had been employed to bring the ground and aerial connections to the set. The trouble seeker suspecting this, connected the set and these terminals by plain wire and without a hitch the set went "better than it had ever gone before."

Cheap cord had been used; the insulators being poor had broken down, and had caused a short circuit with the adjacent ground wire.

The casual reader may think he has a good idea when it was mentioned that speaker cord was used for leads, but this is unwise. Impulses pass along the aerial wire at very high frequency, and unless the wires are well insulated trouble is bound to arise. When applied to the speaker, the current is less likely to break down-insulation, for it is at low frequency.

Incidentally long connections should not be necessary to join the set to the aerial and earth terminals. For the best results these wires should be kept as short as possible.

**Symbols.**

**S**OME time ago a request was made that we publish the symbols commonly used in radio. As endeavours now are being made to standardise radio technicology and symbols, there is a likelihood of these being altered before very long, so that the list is being withheld for the time being.

**A Cause of Distortion.**

**I**T often happens that bad distortion occurs which cannot be attributed to faulty batteries, incorrectly biased valves, or valves wrongly placed. It is then that the condensers, especially the fixed condensers that set designers recommend, be placed between transformer and grid, or between plate of one valve, and grid of the next, should be examined. After long use, or by careless treatment, these may break down and allow leakage, giving distortion.

A simple test which can be applied to any condenser can be conducted by following these few simple instructions. Connect one pole of battery to one lug on the condenser. Connect the other battery terminal to one terminal of a pair of phones. Now place the free terminal of the phones on the free lug of the condenser. A healthy click should be heard in the phones. Discharge the condenser by connecting the lugs, and repeat the experiment. Each time there should be one clear click, and no more. A series of clicks indicates that the condenser is faulty, and must be replaced.

**Noise from Speaker.**

**I**T may be that on connecting up the speaker there is heard a loud, purring noise, which forms an objectional

background. Atmospherics, which are usually blamed for all these unwanted trouble is in the batteries, for run-down batteries can cause a multitude of troubles. Failing this the next most likely cause is a faulty grid leak or a broken connection to the grid terminal of the detector valve. Faulty grid leaks may cause many troubles even to giving the set a harsh tone and it is well to keep spare parts on hand.

Naturally the first place to look for trouble is in the batteries, for run-down batteries can cause a multitude of troubles. Failing this the next most likely cause is a faulty grid leak or a broken connection to the grid terminal of the detector valve. Faulty grid leaks may cause many troubles even to giving the set a harsh tone and it is well to keep spare parts on hand.

Some eliminators give a purring noise, known as motor-boating, as the sound resembles the exhaust of a motor boat. Another unwanted noise may be caused through the elements of the valve vibrating, resulting in a loud "pang." The valves it would be found vibrate easily and sometimes a heavy footfall may be enough to set the elements moving resulting in this disagreeable noise. On being started this may continue several seconds, gradually dying away.

The trouble is seldom apparent in sets constructed by experts, but quite a feature of those home made. It is easily remedied by the use of shock absorbing sockets, in place of the ordinary fixed type.

**E**ACH time the loud speaker or phones are plugged in a distinct click should be heard. If this is not heard, all "B" battery connections and plate leads should be examined. Sometimes the plug itself becomes faulty.

**Aerial and Earth Troubles.**

**T**ROUBLE arising from faults in the aerial-earth systems are often difficult to locate and may seriously impair reception. The easiest way out of this difficulty is to erect an efficient aerial, for the more efficient the aerial the cheaper and easier to maintain the set. The aerial collects energy from the ether and it is obvious that its efficient collection must be a matter of great importance.

It is a common mistake to believe that any sort of wire put up anyway will do for an aerial. Because signals

are received from such an aerial, it is not to say that the listener is getting the best results, and none but the best are worth while.

No wireless engineer would think of using anything but high conductivity wire—that is wire that permits of the easy flow of electrical impulses, for his aerial.

A point even more neglected is to have a good earth. It is a prevalent idea that any piece of old wire, no matter what its dimensions may be, will do for an earth lead, and any rusty kerosene tin for an earth. Again it is boasted that good reception may be obtained but that is beside the point. By the substitution of a better aerial or earth, improved reception is assured. The earth lead should be short, and wire at least as heavy as the aerial should be used. The idea is to give the least resistance to the return flow of the current.

Discard that long jointed piece of wire used for an earth lead and substitute a short stranded cable. The result will surely be worth while.

**Joints.**

**T**OO much cannot be said about joints for almost every would-be listener, on arranging his aerial-earth system, not knowing nor worrying about principles of electricity, neglects to clean the joints. Reference to previous notes in our column will show trouble has been caused by defective joints.

Joints must be clean, all paint or enamel must be scraped off and the surface polished with sand paper. If an earth clip, which is the best medium for making a connection to a water-pipe, is used, it should be tightly clamped to the pipe. If wire is wound round it should be drawn very tight and covered to prevent corrosion. This, however, is an unsatisfactory joint.

Avoid the use of joints in the earth lead or aerial systems. If they are inevitable they should be soldered. Twisting wires together may serve temporarily but will lead in a short time to lower efficiency. Numerous lead-in wires are only twisted to the aerial. Sooner or later this must cause trouble. Corrosion takes place, signals fade out, come in intermittently or become very weak. This denotes defective joints and requires immediate attention.

It is important to see that the aerial is so rigged that it is not constantly chafing with the action of the wind; an aerial which is allowed to swing too much is apt to break some strands of the wire of which it is composed, producing unpleasant crackling noises in the set.

**Dirty Insulators.**

**A** NOT infrequent cause of leakage and consequent loss of signals is dirty insulators. After a time, especially if the aerial be near a railway line where the smoke nuisance is manifest, insulators become caked with a covering of deposit which is usually a good conductor. Bare wires passing through an insulator thus rendered imperfect, are able to form a contact with stay-wires and consequently to earth.

Trouble arising from this source will be more in evidence in wet weather when the coating becomes damp and its conductivity is improved.

Seaside dwellers may be troubled with the reverse, good reception during wet weather and poor reception during dry weather. This could be accounted for by a coating of salt forming on the insulators and forming a bridge to earth. During wet weather this would be washed off leaving a perfect insulator.

It is well worth while inspecting and scraping insulators periodically—this may save a great deal of trouble later on.

**R**UNNING down of B battery is the commonest form of distortion in a set.

**W**HEN it is found that volume is just as good without an aerial and earth, the trouble will most likely be due to some faulty connection, either in the detector, radio frequency stages, or in the aerial-earth system itself.

# A Corner for Beginners

— By Observer —

**Notice to Beginners and Correspondents.**

- (1) Readers in difficulty or who have solved a difficulty which may be of interest to others are invited to write to us.
- (2) Questions of general interest will be answered in these columns, those referring to construction will be referred to "Pentode."
- (3) All questions not of general interest must be accompanied by a stamped and addressed envelope, for individual reply.
- (4) Address all correspondence "Observer," Radio Record, Box 1032, Wellington.
- (5) Where a query refers to trouble which cannot be located the following information should be given:—
  - (a) Name and model of set if factory made.
  - (b) A diagram of layout if home constructed.
  - (c) Particulars of valves, voltage, and grid bias.
  - (d) As many other details as readily available.

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### My Lady in London

NOVEL necklaces are always sought by women who prefer unusual jewellery, and trinkets answering to this description are composed of small pieces of glass cut to resemble leaves or flowers and strung at intervals on heavy silk cords. One necklace is made of Lalique glass in a dark sea green, cut to resemble ivy leaves, and strung on silk to match. This glass can be made into necklets and bracelets of flowers and leaves, to suit any particular toilette.

BLACK chiffon dinner frocks, which are suitable for so many informal occasions, are being made with swathed belts, which have the ends weighted with embroidery in brightly-coloured wools. The wool flowers are worked on to a background of white Angora wool, which is brushed to its fluffiest state, and the same decoration appears on the triangular scarf, which is still a fashionable accompaniment to semi-evening gowns.

BLACK satin is used to make a smart hat suitable for afternoon wear. The crown is made from strips of the satin sewn to give a latticed effect, and the brim is cut in an original manner, very narrow at one side, with a deep point at the other, giving the wearer a rather rakish appearance.

THOSE who are tired of floral buttonholes may follow a new fashion by wearing a tassel in silk or wool, or strands of material, in the lapel of their coat or jumper. The tassel is designed to match the ensemble it accompanies, and, if the toilette is of silk, the tassel is made of small strips of silk bound with material to match.

AQUAMARINE blue promises to be one of the most popular colours for next autumn's evening gowns. The Queen's gown for the Royal Garden Party was made in this lovely subtle shade, and probably this has something to do with its sudden popularity. The newest silk curtains have also appeared in this unusual blue-green tone, and look particularly well in a heavy silk, with a slub weave.

A belt which holds a pouched sweater, or blouse, firmly in position, and is never likely to slip out of place, is made from thin gold discs, closely sewn, like the scales of a fish, to the background of thick elastic. As the belt stretches, the scales move farther apart, and the elastic ensures a perfect fit. The buckle is of beaten gold, and the belt makes a practical finish to many toilettes.

# THE WOMAN'S POINT OF VIEW

By "VERITY"

## Distortions from Omar Khayyam

*A Brace of Trippers underneath a Bough,  
Some Orange Peel, some Gasper Cards—and Thou  
Broadcasting bellows straight from 2LO  
Make every glade a little Hell enow.*

*Some for the Cottage Tea-Gardens; and some  
Sigh for the People's Palaces to come;  
All eat the Buns, and let the Papers fly  
Nor heed the Woodpecker's derisive drum.*

*Look at the Summer Girl beyond us, Low  
Laughter escapes her. Watch, and see her blow  
The Orange Pips from her ensanguined mouth,  
And all the debris of her picnic throw.*

*Think from each reeking Charabancserai,  
The whole of Summer, shrieking Night and Day,  
How Tripper after Tripper, with his girl,  
Will litter every lane, and go his way.*

*I often think I never see so red  
As when I walk where scattered stems have bled  
To satisfy some Vandal's wanton greed,  
And trampled lies each lovely Blossom's head.*

*But when at dusk, O Tripper, you shall pass  
Among the Peel and Paper on the grass,  
Then may you trip indeed on battered tins  
And cut yourself upon your broken glass!*

—Barbara Euphan Todd.

## Oranges and Lemons

### Grape Fruit Marmalade.

THIS is the simplest of all grape fruit preserves. It produces a marmalade pale in colour, and of distinctive flavour. 4 grape fruit, 5 lemons, 6qts. water, 9lb. sugar. Wipe the lemons and grape fruit, and cut in half. Remove and collect the juice, but reject the pips and centre core of the grape fruit. Shred the pith and rind of both the grape fruit and lemons thinly, either by hand or machine. Put the shredded pith and peel into a large pan, with the water and juice, and soak overnight. Next day, put into a saucepan and simmer slowly until the contents of the pan have reduced by half. This will take about 3 hours. Add the sugar, bring to the boil, stirring meanwhile, and boil until it jells. (Time required will be about 20 to 30 minutes.) Pour into pots and cover.

### Lemon Curd.

1lb. castor sugar.  
4oz. fresh butter.  
4 lemons.  
5 eggs.

PEEL the rind very thinly; beat the eggs. Put the lemon rind and juice, beaten eggs, butter and sugar, into a double saucepan. Whisk until the sugar is dissolved, and the mixture cooks and thickens. Then strain into pots.

As boiling causes the eggs to curdle, it is advisable to use a double sauce-

pan, but if such a pan is not available, place a jar in a large saucepan containing hot water.

Home made lemon curd containing a liberal proportion of eggs, should be made in small quantities, and only kept for a short time.

### Lemon Shred Marmalade.

6 lemons (weight approx. 1½lb.).  
6 pints water.  
Sugar.

CUT the lemons in half. Remove the juice by squeezing, shred the peel finely, tying about 6 ounces in a piece of clean muslin. Put all the peel, with the juice and water, into a basin. Allow to stand overnight. Put the peel, juice, and water into a preserving pan, and mark the level of the contents on the outside of the pan. Allow to boil slowly for about 2½ hours, or until the contents of the pan are reduced by rather less than one-half. Then strain. Next day, weigh the strained extract, and allow 1lb. sugar to 1lb. of extract. Bring the extract to the boil, add the sugar and the 6oz. of shreds, and boil for about 10 minutes, or until it jells when tested on a cold plate. Skim, allow to cool, and pour into clean, dry jars. If potted whilst very hot, the jelly is too liquid to support the shreds, and they are very liable to rise to the surface. If a thick marmalade is preferred, use the same ingredients and method, but omit the straining.

## Click! went the Kodak



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*Sweets to the Sweet***Chocolate-Date Flan or Tartlets.**

**MAKE** some short crust, using 3oz. flour, 2oz. margarine, and the yolk of an egg, well beaten, for mixing. Line a flan ring, or if you are making tartlets, take some good-sized pate-pans. Trim the edges neatly, and brush the pastry with liquid jam. Bake in a moderate oven for twenty to thirty minutes.

**Filling.**—2oz. finely-chopped dates, 1 oz. chopped nuts, any kind, 1oz. cornflour, 1 dessertspoonful sugar, Vanilla essence, 1oz., chocolate powder, 1 gill milk.

Heat the milk, using a little to blend the cornflour, sugar, and chocolate powder. Mix these well. Pour the hot milk in, stir well, and return to the fire. Stir well until it thickens, but if too thick add a little milk. Now add the dates, nuts, and vanilla essence to the chocolate mixture, and mix well. Spread this over the pastry evenly.

Now for the meringue: Take two whites of egg and 4oz. castor sugar. Whip the whites very stiffly, then add a teaspoonful of sugar. Continue beating till very stiff, then fold the rest of the sugar in. Take a broad knife and spread over the chocolate. Then take the rest of the meringue, and pipe it on top daintily, decorating it either with cherries and angelica or crystallised fruits. Sprinkle thickly with castor sugar, then place in a very cool oven to dry off.

**Arrowroot Sauce.**

To make the arrowroot sauce take: 1 teaspoonful arrowroot, 1 teaspoonful sugar,  $\frac{1}{2}$  pint of fruit juice.

**MIX** the arrowroot just when you want it, otherwise it gets stiff again, mixing it with a little of the juice. Place the rest of the juice with the sugar on to boil. Pour it on to the mixed arrowroot, and boil it all for about ten minutes, when you will find that it becomes quite clear. Pour the arrowroot sauce over the fruit in the flan, and allow it to cool before serving. Arrowroot is particularly useful for this purpose, as it is glossy, and adds considerably to the appearance of the flan. The longer you boil arrowroot with either fruit juice or jam, for sauce, the richer it becomes in colour.

**Caramel Custard.**

**FOR** the caramel use  $\frac{1}{2}$  gill cold water, 2 ozs. loaf sugar.

Place the sugar and water in an old saucepan and boil rapidly. Don't use a good saucepan, for it will spoil its appearance, and an old one does just as well.

The outstanding flavour is burnt sugar, and to get this use loaf sugar and water, boiled rapidly to a golden brown colour. The darker the colour gets, the more pronounced the flavour. Remove the caramel from the fire directly it is brown. Caramel must not be stirred, but when it browns shake the pan to keep it an even colour.

Take an old mould, not a greasy one, and warm it so that the caramel will

(Continued at foot of column 4.)

# Annotations of Annabel

**DEAREST:**

"To be or Not to be" is in the air and the offing, tension is omnipresent, and anyone remotely connected with a candidate for parliamentary honours wears a wistful, worried, give-us-this-day-our-daily-bread expression. In some quarters a forced camaraderie prevails, in others an excess of vituperation.

**MRS. R—**, Irish, charming, and until last week an ardent if theoretic Socialist, surrounded by her accustomed satellites, went one night to the meeting of a Reform candidate; where to her sorrow and amaze some aggressive representatives of Labour found their feelings so worked upon that they were unable to stand when the National Anthem was sung, making coarse sounds with their feet to indicate, one surmises, contempt for the effete superstition of loyalty to the Throne.

**MRS. R—**, who is emotional and articulate, made pungent and personal comments, and all desire to be Comrade Margaret evaporated like the snows of yesteryear; her taste being immaculate in other things besides dress, and her ethical code more concerned with the manners than the morals of her fellow-creatures.

**SO** that, by an odd and misguided demonstration of the Will to Assert Itself, the Labour Party lost a nice little, tight little wedge of votes; as Mrs. R— possesses in fullest measure her country's persuasive gift of the gab, and into whatsoever of Kedar's tents she strays, there her coterie will follow her, and this election, at any rate, it will not be into the Communistic camp.

**A** RECENT writer exploits an interesting angle of the many facets of the sociological spectacle. By means of a magical drug, the personality of a lovely mondaine is transferred by turn to each one of a long list of those she has injured in the course of her selfish, superficial existence. Successively she finds herself a birdlet whose feathers were plucked for her adornment; the husband she has wronged; the chorus

girl whose lover she filched; a small, happy rambler in the forest whose jolly life was cruelly cut short to help clothe her in the rarest of furs; none of their sensations, physical or spiritual, paltry or poignant, being spared her.

**INTERESTING** and salutary, in some quiet hour of midnight, when the motor-hoot is silent and the tramcars clank no more, to emulate the action of that Oriental magic, and in imagination enter the lives of those who have been affected by our pleasures and pursuits. Not a Nietzschean pastime, and by no means adapted to exalt the ego; but an illuminating spiritual exercise for us all, mes amis.

**IN** Mr. Arnold Bennett's latest contribution to the drama, he has resuscitated the plot of Goethe's great story with a moral, and gives us an up-to-date Faust, with Sir Gerald du Maurier, in inimitable fashion, playing the part of Lothario Rejuvenescent. By an operation on the glands, rendered possible by modern scientific research, an elderly scholar, high honour heaped upon him failing to reconcile him to ennui occasioned by decay of physical forces, is docked of half his eighty years, emerging delightful and debonair at the admirable age—for a man!—of forty years. Revelling in rediscovery of that "first, fine, careless rapture," so mourned in retrospect, he takes unto himself the fiancée of a nice young man, and for a few months all goes merrier than a marriage bell. Alack, when to Sweet and Twenty is revealed the hoax perpetrated by science and seventy, her new-old lover is discarded, and, artificially attained youth slipping off with even more amazing rapidity than that to which we are accustomed, poor old Faustus, as he was in the beginning, is left lamenting.

**A** FASCINATING topic, and one that holds strong appeal to the many who fain would have another toss of fate's dice that are always loaded; a few more of the flown and golden years; another chance in this world instead of the next. Strangely enough, most people never have quite enough of an imperfect life—

That, like a dome of many-coloured glass.

Stains the white radiance of eternity,

Until death tramples it to fragments.

Your

ANNABEL LEE.

## Books.

**THE ENGLISH MISS.**

(R. H. Mottram.)

**AS** a successor to Mr. Mottram's penetrating analysis of the character of Flemish Madeleine Vanderlyden, his "l'Anglaise" comes in the nature of a disappointment. In this portrait of a girl of the English middle class, although her outlook and idiosyncracies are delineated with sympathy and vision, and her sane simplicity emphasised, the author entirely ignores those complexities of the eternal feminine which continue to exist in spite of wars and rumours of wars, past, present and to come. To be clean, well exercised, and do her job as well as possible, these are the ideals of Mr. Mottram's Marny; who is conscientious, efficient, a fair and fragrant maiden, quite strangely indifferent to the things of the spirit.

After budding years spent in a boarding-school (admirably sketched), without either enthusiasm or distaste, the girl works for a time in war service organisations, and then goes to France to visit the grave of him who won her austere young heart. During a short and distressful sojourn she discovers that her Rex has had a sordid intrigue with a vulgar and promiscuous "bonne," in whose baby's cradle Marny discovers the love mascotte she gave to her soldier lover the day he left her to join his regiment.

There are some arresting vignettes of the life of Suburbia, in and out of war-time, minor characters being meticulously observed and limned with insight and understanding. Plump Mr. Proudfoot is true to type as ineptly he philanders on the edge of the primrose path; so is "Auntie," his motherly spouse, who "glitters and tinkles, and is essentially a woman who has to think hard, and put on a good deal, in order to look well." The quiet English father, devoted to the memory of his girl-wife, is in deed and in truth a prince of parents; of commendable courtesy in "doing out the duty" of daily domesticity, while displaying a rare and enviable tact in consoling his daughter in her inarticulate sorrow and a sympathetic comprehension when finally she responds to a patiently adoring and not very convincing American medico, her comrade in war and peace, who is laconic and unimaginative as the English Miss herself.—R.U.R.

(Continued from foot of first column.)

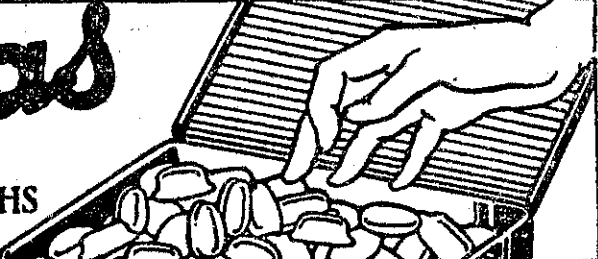
not set, as it would in a cold one. Line the tin with the caramel mixture, right up to the top, but holding the tin in your left hand, and away from you.

When the tin is lined, place it in a window to cool, as it must be cold before the custard goes in.

For the custard you want  $\frac{1}{2}$  pint of milk, one egg, sugar, a few drops of vanilla.

Mix these in the same way as for a baked custard, fill the tin with the custard, then cover with greased paper. Place in a fish kettle, and cook for about forty minutes.

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# Features of Next Week's Programmes

## Notes from 1YA

CONTRIBUTING the major portion of the vocal programme on Thursday evening, Mr. Barry Coney's quartet will render a variety of quartets and solos, including "The Sea Hath its Pearls" and "Queen of the Light." Elocutionary and humorous items will be given by Miss Maise Carte-Lloyd, while on the instrumental side of the programme will be the Auckland Trio and Miss Ina Bosworth (violinist). Mr. A. B. Chappell will be heard on



MISS NAARE HOOPER.

—Photo, Steffano Webb.

Tuesday evening in the second of his series of talks on "The Maori," the subject being "His Language."

THE main vocalists on Friday's programme will be Madame Mary Towsey's quartet, whose numbers will include "Sweet and Low" and "The Long Day Closes." Among the solos, "On the Road to Mandalay" will be sung by Mr. John Bree, and "Beneath Thy Window" by Mr. J. McDougall, while Madame Towsey will sing "The Sands of Dee." On Friday evening the Auckland Comedy Players, under the direction of Mr. J. F. Montague, will provide a one-act farcical comedy "When He Comes Home," and also a sketch, "Two of a Kind," which should appeal greatly to listeners.

ON the instrumental side of the programme, the Studio Orchestra will play selections from the musical comedies, "Blue Kitten" and "Blue Mazurka," together with other popular numbers. Electrically-reproduced records will also be played throughout the evening.

On Saturday evening, Mr. Frank Sutherland will sing "The Skipper of the Mary Jane," "To-morrow,"

## Special Programmes from 1YA

NEXT week, 1YA and 4YA will commemorate the centenary of the death of Franz Schubert, and the following week "Schubert Evenings" will be given by 2YA and 3YA.

Schubert makes a curious figure in the history of music in the early nineteenth century. Though neither tragedy nor romance centre round him, his simple, uneventful and pathetically short life is tragic enough in its own way. He was much influenced by Mozart and the earlier compositions of Beethoven, although his early death (only a year after Beethoven) precluded the possibility of his hearing many of the works of Beethoven's wonderful "last period." Had he lived longer, no doubt he would have given to the world symphonies which would have placed him in the forefront of musical history. As it is, there are only one or two names that can stand before his. The astonishing fertility of his compositions—his "profuse strains of unpremeditated art" scarcely allowed time for self-criticism, and for this reason many of his bigger works lack proportion and form. But in Schubert's music there is a loveliness, an exquisite tenderness and quiet strength and grandeur, the equivalent of which has not been produced by other masters.

The opening item on the programme will be an introductory talk by Dr. Kenneth Phillips, who will speak on Schubert, his life and works. Following this will be a wide selection representative of Schubert's greatest works and songs performed by the Savoy Octette in conjunction with the Studio Orchestra. Mr. Cyril Towsey (pianist) and Miss Ina Bosworth (violinist) will also contribute items.

Included among the vocal portion of the programme will be "The Erl King," "The Wanderer," "Thou are Sweet Peace," and "Whither," while excerpts from the light opera "Lilac Time" will also be performed.

and "Captain Danny." Mr. F. Baker will sing "When the Sergeant-Major is on Parade," "Less Than the Dust," and "Old Barty."

MR. F. W. BARKER will include among his elocutionary numbers, "Did She," a problem story, and "British Workmen's Rights." The Auckland Trio will also be heard in "The First Movement from Trio" and "Nay, Though My Heart Should Break," Miss Molly Wright contributing a 'cello solo, "Tarantelle." The concluding portion of the programme will be given over to dance music.

## Notes from 2YA

MISS Eileen Kimbell, a singer with a very pleasing soprano voice, which has previously delighted listeners-in to 2YA, is to appear again on Monday evening. Miss Kimbell broadcasts well. On this occasion her items will be "Morning Hymn" and Rachmaninoff's "Lilacs."

Another great radio favourite, Miss Nora Greene, contralto, will sing a bracket of two songs by the well-known English composer, Roger Quilter, and Elgar's well-known "Like to the Damask Rose," coupled with "Fortunes Quest," by Oliver.

Mr. Claude Moss, baritone, who recently sang for 2YA, his contributions being solos from "Scipio" and "Faust," will appear again on Monday. On

this occasion he will be heard in the Italian version of Tosti's "La Serenata," and "Keramos" (Harris), the words of the latter song being by Longfellow. He will also sing the well-known Maori song "Haere Tonu," a composition by Mr. R. Horne, of Christchurch.

Mr. Stewart Nelson, a popular tenor will sing on Monday evening, Handel's "Where E'er You Walk" and Schubert's "Who is Sylvia." The former song was a favourite of that popular singer Paul Dufaut.

Very popular with radio audiences is Mr. Norman Aitken. He is the fortunate possessor of an excellent broadcasting voice, and he handles his themes in a most artistic way. His items on Monday evening will be "The Dream Speech" from the well-known melodrama "The Silver King," a play made famous by the late Bland Holt; a serio-comic item "Ercules" and two further humorous numbers "The Colonel" and "My Eye Glass."

A talented young pianist, Miss Nora Cotton, from the studio of Miss Valerie Corliss, will play a bracket of four numbers.

THE Two Boiled Owls will make a welcome re-appearance on Tuesday evening. Phoenix-like, they are arising fresh and vigorous from their ashes with new humour and novelties. One of their items will be a sketch on how not to run a confectionery shop.

The vocalists for Tuesday evening will be Miss Rita Arnold and Mr. Ray Kemp, who will give numbers, both solos and duets, from musical comedies, notably, "The Girl on the Film," "Floro-

dora" and "San Toy." The gramophone items, which will intersperse those given by the studio artists, will be Brunswick recordings supplied by Messrs. Brice and Brice Limited.

Election results will be broadcast on Wednesday evening.

ON Thursday, November 15, the whole evening will be devoted to a relay of the performance of "The Bohemian Girl" by the Orpheus Musical Society, assisted by 2YA Orchestra under the baton of Mr. Len Barnes. This opera was the biggest money-maker of the original Carl Rosa Opera Company. There is probably no other opera so well known, and its principal songs are often heard on the public platform, "When Other Lips," "The Heart Bow'd Down," "I Dreamt that I Dwelt in Marble Halls," "Love Smiles But to Deceive" are a few amongst many beautiful numbers in the opera. The opera was first produced at Drury Lane in 1843, and its reception was tremendous, and the season ran for three months. The performance is being given in the Concert Chamber, Wellington, and the proceeds are for "Iphigenia" (Miss Kathleen O'Brien) the Entertainment Queen for the forthcoming pageant for the Dominion Museum and National Art Gallery Fund. The soloists are Arline, Miss Gretta Stark; The Queen, Miss Dorothy Newman; Thaddeus, Mr. Oscar Dyer; Florestin, Mr. Will Hancock; The Count, Mr. James Cook; and Devilshoof, Mr. A. J. Baker. Of these, Miss Newman and Mr. Baker are new to listeners-in. The pianist is Miss Hazel Rowé, L.A.B., L.T.C.L.



MRS. ERNEST DRAKE, OF 4YA.

—Photo, Artlite.

OPERATIC night at 2YA, Friday, will this week be of great interest. An excellent programme will be presented by the artists: Miss Veronica Mackenzie, Miss Agnes McDavitt, Mr. W. McLellan, Mr. Edgar Swain, Miss Eileen

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## Special Programmes from 4YA

Blunt (pianist) and Mr. Cedric Gardner (elocutionist. Miss Mackenzie (soprano) will sing the well-known "Caro Nome" (Dearest Name), from Verdi's "Rigoletto," and the famous "Waltz Song," from German's well-known comic opera "Tom Jones."

Mr. W. McLellan, a young bass of promise and one who specialises in operatic numbers, will be heard in the aria "Il Lacerato Spirito," from "Simon Boccanegra," and "Ho, Jolly Jenkin," from "Robin Hood," a good contrast to the previous item. Mr. McLellan is from the studio of Signor Cesaroni, the well-known operatic basso.

Miss Agnes McDavitt (contralto) has chosen for her items "Ah! se tu Dormi," from the opera "Romeo and Juliet," and "Chong Kind," from Sydney Jones's comic opera "The Geisha." Miss McDavitt is a young singer whose artistic rendering of these items should provide listeners with a rare treat.

That well-known operatic tenor solo from Puccini's "La Boheme," "Your Tiny Hand is Frozen," will be sung by Mr. Edgar Swain.

As a second number Mr. Swain will sing the bright "Here's to Love and Laughter" from Ruben's "The Sunshine Girl."

**MR. Cedric Gardner**, a local elocutionist of promise, and one who has done consistently good work from 2YA, will entertain listeners with a recital of "Rio Grand" by Banjo Paterson and will also render a humorous item entitled "The Mechanical Cow." This item will be of special interest to farmer listeners.



MISS NORA GREENE, OF 2YA.  
—Photo, Andrew.

THERE is no more popular night than Saturday. For next week-end another fine programme has been arranged. Such an entertainment would not be complete without the Melodie Four, who will again draw on their never-ending repertoire. The Studio Orchestra will be contributing, and Mr. J. S. Webb will supply much of the evening's humour. His items will be "Not Too Bad," and a collection of anecdotes "New, True and Neither."

SCHUBERT'S Centenary will be celebrated at 4YA on the evening of Friday, November 16. This will be an outstanding concert, as the leading professional talent of Dunedin has been engaged to perform the wonderful works of the great composer.

Mr. Ernest Drake, the well-known tenor, will present "Serenade," "Who is Sylvia?" and "Thy Sweet Repose." Miss Molly Vickers, a mezzo-soprano of wide experience, will be heard in "Gretchen at the Spinning Wheel," "The Young Nun," and "Whither?" Mr. J. D. McKechnie, one of Dunedin's forecast basses will render "The Wanderer," and "Hark, Hark the Lark."

Mr. J. Wallace, leading violinist of the southern city, will play Schubert's "Ave Marie," and "The Cradle Song." Mrs. Ernest Drake, studio pianiste, will contribute "Marche Militaire," "Impromptu in F Minor," and "Moment Musical" (Schubert-Godowsky).

Mr. W. Paget Gale, organist at the new Empire Theatre, will deliver a most interesting talk on "Schubert and His Music." Much of Schubert's magnificent orchestral and string music will also be included on the programme.

In addition to items of the above artists, Schubert's famous quartet, "Death and The Maiden," will be rendered by the Wallace String Quartet, each member of which is a very talented performer. Schubert wrote many quartets for strings, but this is acknowledged as his greatest. The whole composition displays wonderful contrast in light and serious moods, and each of the four movements abounds in charming melodies. Schubert received his inspiration for the work from the ballad song, "Death and The Maiden," which is portrayed in the variations of the slow movement.

## Attractions at 3YA

"THE Song of the Bow," a marching song of the English archers when campaigning in France hundreds of years ago, will be sung by Mr. E. J. Johnson on Monday evening. Other solos will be Allitsen's "Prince Ivan's Song" and Willeby's "Coming Home."

Miss Frances Hamerton and Miss Belle Renaut are singing on Monday evening. To two of Miss Hamerton's solos there will be flute obbligatos played by Mr. T. H. Amos.

Mr. Basil Johnson, a very welcome 3YA artist, will be heard in three humorous songs on Monday evening. His contributions of late have given much pleasure to listeners.

The band engaged for Monday evening is Derry's, under the baton of Mr. J. Scott. A programme of much diversity and excellent quality will be presented.

"IN a Persian Garden," which was to have been performed at 3YA some weeks ago but had to be postponed owing to the illness of one of the artists, is to be presented on Wednesday evening. This fine song cycle of Liza Lehmann was given from 3YA in February last and met with the greatest appreciation. As is well known, it is based on Omar Khayyam's "Rubaiyat." The performance on Thursday, November 15, should be a great treat, as was the previous production. Madame Gower Burns's Grand Opera Quartet will be the vocalists.

An excellent programme will support the song cycle, the same artists contributing with the addition of Miss Naare Hooper, elocutioniste. Her items will be "Work and Triumph," "When the Minister Comes to Tea," and Chevalier's "A Fallen Star."

A VERY bright concert of the popular type will be given on Friday. The programme will open with a re-broadcast of the overture of 2YA Orchestra. Then will follow a splendid duet of the Yeoman Due, "Go! Baffled Coward, Go!" from Handel's "Samson." Miss

Moana Lawrence will then contribute two solos, one of which will be "Cheerio," for which many requests have been received.

Another vocalist will be Mrs. H. W. Stow, who has previously sung for 3YA. One of her items will be the old favourite "An Old-Fashioned Town." An elocutionist new to radio will be heard on Friday. He will be known as "Father Friendly," and is reputed to be an excellent entertainer. Appearing the same evening will be another popular combination, Eyre's Social Instrumental Trio, who will play dance numbers with vocal accompaniment.

THE first broadcast to be made by the Rev. N. L. D. Webster on his return from Australia, where he has been recuperating from a very severe illness, will take place on Sunday, November 18. Following the church service there will be a studio concert to which Mrs. P. S. Lawrence and Mr. Gregory Russell will be contributing. Instrumental music will be provided by electrically-reproduced records.

## Features of 4YA

KNOX Church Armistice Day service will be relayed on Sunday even-

ing, the Rev. Tulloch Yuille, D.D., M.A., preaching the sermon. At the conclusion of the service, the organist, Mr. Roy Spackman, will render an appropriate recital.

The St. Kilda Band, under Mr. James Dixon, will again be on the air on Tuesday night, and some well known music will be heard, including Aletter's tuneful intermezzo, "Rendezvous," and a selection from Edward German's light opera "Merry England."

AN interesting concert will be heard on Friday evening. Miss Dorothy Skinner (contralto) will sing a group of old Scottish songs, including "W'd Better Bide a Wee." Miss Mae Matheson (soprano) will present three numbers by modern composers.

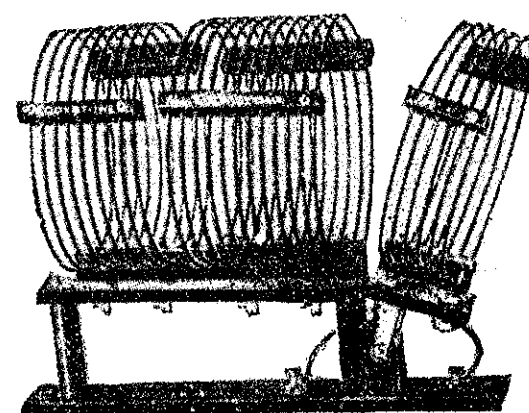


MISS FRANCES HAMMERTON, OF 3YA.  
—Photo, Steffano Webb.

SATURDAY'S programme will be of the usual high standard. Miss Agnes Guy, will sing Sanderson's "Crescent Moon," and Miss Irene Hornblow, L.R.A.M., will be heard in Sullivan's "My Dearest Heart." Mr. Arthur Lungley will sing Willeby's setting of "Crossing the Bar," from the immortal poem by Tennyson. Mr. J. Ferguson will present "Lochnager." Violin solos will be rendered by Mr. H. Riddle, cello solos by Mr. P. J. Palmer. Schubert's "Impromptu in F. Minor," will be played by Mrs. Ernest Drake.

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# Full Programmes for Next

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## Sunday, November 11

### 1YA, AUCKLAND (333 METRES)—SUNDAY, NOVEMBER 11.

8 p.m.: Afternoon session—Selected studio items.

4.0: Literary selection by the Announcer.

4.8: Studio items.

4.30: Close down.

6.0: Children's session, conducted by Uncle Leo.

7.0: Relay of service from Church of Christ. Preacher, Mr. Chas. Garrett; organist, Mr. H. Knowles; choirmaster, Mr. W. Thomson.

8.30: Selected items from the studio.

9.30: Close down.

### 2YA, WELLINGTON (420 METRES)—SUNDAY, NOVEMBER 11.

3 p.m.: Chimes of the General Post Office Clock, Wellington.

3.1: Relay of Armistice Day Disarmament Meeting from the Town Hall.

6.0: Children's Sunday service conducted by Uncle Ernest.

7.0: Relay of Evening Service from St. John's Presbyterian Church. Preacher, Rev. J. R. Blanchard, M.A. Organist and Choirmaster, Mr. C. W. Kerry.

8.45 (approx.): Studio concert:

Overture—New Queen's Hall Light Orchestra, "Britannia Overture" (Columbia Record 02586).

Trio—Wellington Ladies' Trio, "How Lovely are the Messengers" (from "St. Paul") (Mendelssohn).

"Cello solo—W. H. Squire, "Melodie in E." (Rachmaninoff-Squire) (Columbia Record 04130).

Soprano solo—Miss Nora Gray, Recit. and Aria "And When He Had Spent All" and "O That Thou Hadst Hearkened" from "The Prodigal Son" (Sullivan).

Pianoforte solos—Mark Hambourg, (a) "Au Bord D'Une Source" (Liszt); (b) "Nocturne in E Major" (Chopin) (H.M.V. Record 1454).

Contralto solos—Miss Mollie Fenton, (a) "From Grief I Cannot Measure" (Franz); (b) "Spin, Spin" (Jungst).

Violin solo—Joseph Szigeti, "Slavonic Dance in G Minor, No. 1" (Dvorak-Kreisler) (Columbia Record 04129).

Vocal duet—Misses Nora Gray and Mollie Fenton, "On Wings of Song" (Mendelssohn).

"Cello solo—Gaspar Casado, "Le Cygne" (The Swan) (Saint-Saens). (Columbia Record 03579).

Trio—Wellington Ladies' Trio, "The Snow" (Elgar).

Orchestral selection—Victor Symphony Orchestra, "Dance of the Hours" (from "Gloconda" (Poncheilli) (Zonophone Record EF12).

Mezzo-contralto solos—Mrs. P. J. Townley, (a) "I Am Not Fair" (Tosti); (b) "At Parting" (Rogers).

Cornet solo—"Stars in a Velvety Sky" (Clarke) (Columbia Record 01065).

Vocal duet—Misses Nora Gray and Mollie Fenton, "Welsh Cradle Song" (Williams).

Organ solos—R. Arnold Grier, F.R.C.O., A Group of National Airs (Zonophone Record 5087):—

1. "Hearts of Oak."

2. "The British Grenadiers."

3. "Home, Sweet Home."

4. "The Bonnie Banks of Loch Lomond."

5. "Annie Laurie."

6. "Men of Harlech."

7. "The Minstrel Boy."

8. "Rule Britannia."

Trio—Wellington Ladies' Trio, "A Peat Fire Smoothing Prayer" (Arrgd. Hugh Roberts).

Band and chorus—Band of H.M. Grenadier Guards with chorus, "Pomp and Circumstance (Elgar); "Land of Hope and Glory" (Columbia Record 9080).

Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SUNDAY, NOVEMBER 11.

3 p.m.: Gramophone recital (electrically reproduced).

4.30: Close down.

5.30: Children's song service conducted by Uncle David.

6.30: Relay of anniversary service of Oxford Terrace Baptist Sunday School. Preacher, Rev. J. Robertson, M.A. Conductor, Mr. Wilfred Drayton. Organist, Mr. W. Melville Lawry. Pianiste, Miss V. Halliday, A.T.C.L.

8.0 (approx.): Studio concert.

Orchestral selection—Philadelphia Symphony Orchestra, "Toccata and Fugue in D Minor" (Bach) (H.M.V. Record D1428).

Mezzo-soprano solos—Mrs. Hilda Reeve, (a) "Thoughts" (Howard); (b) "Parted" (Tosti).

Orchestral selections—Victor Symphony Orchestra, (a) "Kammenoi Ostrow" (Cloister Scene) (Rubenstein); (b) "Liebestraum" (Dream of Love) (Liszt) (H.M.V. Record EB10).

Tenor solo—Mr. W. Bradshaw, "The Lord is My Light" (Allitsen).

Boy soprano, with organ accompaniment—Master Lough, "Hear Ye, Israel" (Mendelssohn) (H.M.V. Record B2627).

Mezzo-soprano and tenor duet—Mrs. Hilda Reeve and Mr. W. Bradshaw, "Oh, That We Two Were Maying" (Smith).

Orchestral selections—International Concert Orchestra, (a) "La Spagnola" (The Spanish Dancer) (Di-Chiara); (b) "Tesora Moi" (My Treasure) (Becucci) (Zonophone Record EF15).

Mezzo-soprano solo—Mrs. Hilda Reeve, "The Old Countree" (Pinsuti).

Wurlitzer organ solo, followed by contralto solo with organ, cello and harp accompaniment—(a) Reginald Foort, "A Brown Bird Singing" (Haydn-Wood) (H.M.V. Record B2664); (b) Maartu Offers, "Ombra Mai Fu" (from "Xerxes") (Handel) (H.M.V. Record DA816).

Tenor solo—Mr. W. Bradshaw, "Mona" (Adams).

Duet in Italian with orchestra, followed by boy soprano with organ accompaniment, (a) John Hislop and Apollo Granforte, "Solenne in Questa Ora" (Swear at This Hour) (Verdi) (H.M.V. Record DB939); (b) Master Lough, "I Know that My Redeemer Liveth" (Handel) (H.M.V. Record B2656).

Soprano and tenor duet—Mrs. Hilda Reeve and Mr. W. Bradshaw, "A Night in Venice" (Luocantoni).

Band—Band of H.M. Coldstream Guards, "Poet and Peasant" (Suppe) (H.M.V. Record C1315).

Close down.

### 4YA, DUNEDIN (463 METRES)—SUNDAY, NOVEMBER 11.

5.30 p.m.: Children's song service conducted by Big Brother Bill.

6.30: Relay of service from Knox Church. Preacher, Rev. Tulloch Yuille, B.D., M.A. Organist, Mr. Roy Spackman.

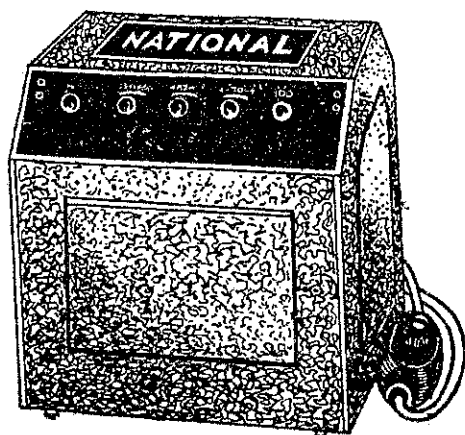
7.45: Relay of organ solos by Mr. Spackman.

8.0: Relay from St. Kilda of concert by the St. Kilda Band under the conductorship of Mr. James Dixon.

Close down.

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# Week-all Stations-to Nov. 18

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## Monday, November 12

1YA, AUCKLAND (333 METRES)—MONDAY, NOVEMBER 12.

SILENT DAY.

2YA, WELLINGTON (420 METRES)—MONDAY, NOVEMBER 12.

- 3 p.m.: Chimes of the G.P.O. clock.  
 3.1: Selected gramophone items.  
 4.30 and 4.55: Sports results to hand.  
 5.0: Close down.  
 6.0: Children's session, conducted by Uncle Jeff and Aunt Gwen.  
 7.0: News session, market reports, and sports results.  
 7.40: Lecturette—Mr. Bryce Wilson, "Care of the Feet."  
 8.0: Chimes of the G.P.O. clock.  
 8.1: Overture—Orchestra, "Alceste" (Gluck).  
 8.9: Soprano solo—Miss Eileen Kimbell, "Morning Hymn" (Henschel).  
 8.13: Pianoforte solo—Miss Nora Cotton, (a) "Prelude in E Flat Minor" (Bach); (b) "Two Preludes" (Scriabin); (c) "Poem" (Scriabin).  
 8.20: Baritone solos—Mr. Claude Moss, (a) "La Serenata" (Italian version), (Tosti); (b) "Keramos" (Harris).  
 8.26: Suite—Orchestra, "Reminiscences of Grieg" (arr. Godfrey).  
 8.38: Contralto solos—Miss Nora Greene, (a) "O Mistress Mine" (Quilter); (b) "Blow, Blow, Thou Winter Wind" (Quilter).  
 8.43: Recital and humour—Mr. Norman Aitken, (a) "The Dream Speech" (from "The Silver King"); (b) "Ercules" (Winter).  
 8.50: Tenor solo—Mr. Stewart Nelson, "Who is Sylvia?" (Schubert).  
 8.54: Cello solo, with orchestral accompaniment—Mr. Geo. Ellwood, "Slumber song" (Squire).  
 Instrumental—Orchestra, (a) "Rondo" (Mozart); (b) "Minuet" (Mozart).  
 9.6: Weather forecast.  
 9.7: Grand organ solo—Marcel Dupre, "Prelude and Fugue in G Major" (Bach), (H.M.V. record D1402).  
 9.15: Soprano solos—Miss Eileen Kimbell, (a) "Lilacs" (Rachmaninoff); (b) "Dormi Pure" (Scuderi).  
 9.21: Instrumental—Orchestra, repeat number.  
 9.29: Baritone solo—Mr. Charles Moss, "Haere Tonu" (Horne).  
 9.33: Baritone with quartet—John Goss and Cathedral Male Voice Choir, (a) "Rio Grande"; (b) "Billy Boy" (arr. Terry), (H.M.V. record B2646).  
 9.37: Contralto solos—Miss Nora Greene, (a) "Like to the Damask Rose" (Elgar); (b) "Fortune's Quest" (Oliver).  
 9.43: Humour—Mr. Norman Aitken, (a) "The Colonel" (Winter); (b) "The Eye-glass" (Luke).  
 9.50: Chorus with orchestra—Victor Mixed Chorus, "Anvil Chorus" from "Il Trovatore" (Verdi), (H.M.V. record EA89).  
 9.54: Tenor solo—Mr. Stewart Nelson, "Where'er You Walk" (Handel).  
 9.58: Grand opera selection—Orchestra, "Les Contes d'Hoffmann" (Offenbach).  
 10.6: God Save the King.

3YA, CHRISTCHURCH (306 METRES)—MONDAY, NOVEMBER 12.

- 3 p.m.: Afternoon session—selected studio items.  
 4.30: Close down.  
 6.0: Children's session conducted by Scatterjoy.  
 7.15: News session.  
 8.0: Chimes. Studio programme by Derry's Military Band under the conductorship of Mr. J. Scott, and assisting artists.  
 8.1: March—Band, "New Colonial" (Hall).  
 Bell Gavotte, Band, "Les Cloches de St. Malo" (Rimmer).  
 8.11: Bass solo—Mr. E. J. Johnson, "Song of the Bow" (Aylward).  
 8.15: Instrumental trios—Christchurch Broadcasting Trio, (a) "Slow Waltz" (Carse); (b) "Fest Tanz" (Delibes).  
 8.22: Soprano solo—Miss Frances Hamerton, "Lo, Here the Gentle Lark" (Bishop) (with flute obligato by Mr. T. H. Amos).  
 8.26: Selection—Band, "Rose Marie" (Friml).  
 8.36: Contralto solos—Miss Belle Renaut, (a) "Spanish Love Song" (Chaminade); (b) "Boat Song" (Ware).  
 8.40: Humour—John Henry and Blossom, "The Story of Lady Godiva" (H.M.V. Record B2485).  
 8.44: Humorous songs—Mr. Basil Johnson, (a) "How Ya Gonna Keep 'em" (Lewis); (b) "Down on the Farm" (Young).  
 8.50: Waltz—Band, "Donau Wellan" (Ivanovici).  
 8.57: Soprano and contralto duets—Dulce Duo, (a) "Queen Mab" (Rowley); (b) "Winter" (Rowley).  
 9.0: Weather forecast.

- 9.2: Cinema organ solo followed by light orchestral selection, (a) Chas. W. Saxby, "Raymond Overture" (Thomas) (Zonophone Record 5057); (b) "New Light Symphony Orchestra, "My Blue Heaven" (De Sylva, Brown and Henderson) (H.M.V. Record EB18).  
 9.10: Bass solos—Mr. E. J. Johnson, (a) "Prince Ivan's Song" (Allitsen); (b) "Coming Home" (Willeby).  
 9.16: Flute solo—Mr. T. H. Amos, "Jenny Jones" (with variations) (Le Thiere).  
 9.21: Soprano solos—Miss Frances Hamerton, (a) "The Snake Charmer" (Lehmann); (b) "Echo Song" (Bishop) (with flute obligato) (flautist, Mr. T. H. Amos).  
 9.25: Humoresque—Band, "A Musical Switch" (Alford).  
 9.35: Humorous song—Mr. Basil Johnson, "Chick, Chick, Chicken" (Holt, King).  
 9.39: Instrumental trios—Christchurch Broadcasting Trio, (a) "Allegretto" (Schutt); (b) "Miniature March" (Kreisler).  
 9.48: Contralto solos, followed by soprano and contralto duet, (a) "Laburnum" (Phillips); (b) "A Banjo Song" (Homer); (c) "April is a Lady" (Phillips).  
 9.52: Foxtrot—Band, "There Must be a Silver Lining" (Donaldson).  
 March—Band, "The 3 D.G.'s" (Brophy).  
 10.0: Close down.

4YA, DUNEDIN (463 METRES)—MONDAY, NOVEMBER 12.

SILENT DAY.

## Tuesday, November 13

1YA, AUCKLAND (333 METRES)—TUESDAY, NOVEMBER 13.

- 3 p.m.: Afternoon session—Selected studio items.  
 4.0: Literary selection by the Announcer.  
 4.8: Selected studio items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Children's session conducted by Uncle George.  
 7.15: News and market reports—book review.  
 8.0: Chimes.  
 Special "Schubert" Programme.  
 8.1: Talk—Dr. Kenneth Phillips, "Schubert, His Life and Works."  
 8.16: Selection—Orchestra, "Unfinished Symphony" (Schubert).  
 8.26: Contralto solo—"To Music" (Schubert).  
 8.30: Pianoforte solo—Mr. Cyril Towsey, "To the Sea" (Schubert).  
 8.35: Tenor solo—"Serenade" (from "Lilac Time") (Schubert-Clutsam).  
 8.39: Orchestral—London Symphony Orchestra, "Finale" (Allegro Vivace) (from "Symphony No. 7 in C Major" (Schubert) (H.M.V. Records D1395 and D1391).

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- 8.51: Soprano solo—"The Erl King" (Schubert).  
 8.55: Relay of selection "Lilac Time" from Majestic Theatre Orchestra, under the direction of Mr. J. Whiteford Waugh.  
 9.0: Weather forecast.  
 9.4: Orchestral—Orchestra, "Entr'acte and Ballet Music," from "Rosamunde" (Schubert).  
 9.12: Baritone solo—"The Wanderer" (Schubert).  
 9.15: Vocal duet—"The Golden Song" (from "Lilac Time") (Schubert-Clutsam).  
 9.19: Violin solo—"Ave Maria" (Schubert).  
 9.23: Baritone solo—"Vision Song" (from "Lilac Time" (Schubert-Clutsam).  
 9.27: String quartet—Budapest String Quartet, "2nd Movement (Andante con Moto), from "Quartet in D Minor" (Death of the Maiden) (Schubert) (H.M.V. Records D1424 and D1425). (This movement takes the form of an "Air and Variations." The air is borrowed from one of Schubert's own songs, "Death of the Maiden" (Tod und das Madchen"), and it is to this movement that the work owes its name.)  
 9.39: Tenor solo—"Who is Sylvia?" (Schubert).  
 9.43: Orchestral selections—Orchestra, (a) "Cradle Song" (Schubert); (b) "Marche Militaire" (Schubert).  
 9.50: Vocal trio—"Just a Little Ring" (from "Lilac Time") (Schubert-Clutsam).  
 9.54: Soprano solos—(a) "Thou Art Sweet, Peace" (Schubert); (b) "Whither?" (Schubert).  
 10.0: String quartet—Thibaud, Casals and Cortot, "1st Movement from Trio No. 1 in B Flat" (Allegro Moderato) (Schubert) (H.M.V. Records DB947 and DB948).  
 10.12: Baritone solo—"The Linden Tree" (Schubert).  
 10.16: Vocal quartet—"We're Four Jolly Brothers" (from "Lilac Time") (Schubert-Clutsam).  
 10.20: Selection—Orchestra, "Lilac Time" (Schubert-Clutsam).  
 Close down.

## 2YA, WELLINGTON (420 METRES)—TUESDAY, NOVEMBER 13.

- 3 p.m.: Chimes of the G.P.O. clock.  
 3.1: Selected gramophone items.  
 4.30 and 4.55: Sports results to hand.  
 5.0: Close down.  
 6.0: Children's session, conducted by Big Brother Jack.  
 7.0: News session, market reports and sports results.  
 7.40: Lecturette by a representative of the Agricultural Department—"For the Man on the Land."  
 8.0: Chimes of the G.P.O. clock.  
 8.1: Overture—Orchestra, "Nachtlanger in Granada" (Kreutzer).  
 8.11: Contralto solo—Miss Rita Arnold, "Song of the Mill" (from "The Girl on the Film") (Bredschneider).  
 8.15: Tenor solo with orchestral accompaniment—Harold Lambert, "My Angel" (Brunswick Record 3626).  
 8.19: Musical comedy selection—Orchestra, "The Mikado" (Sullivan).  
 8.29: Vocal duet—Miss Rita Arnold and Mr. Ray Kemp, "Somebody" (from "Floradora"), (Stuart).  
 8.33: Waltz with vocal chorus—Regent Club Orchestra, "The Vagabond King Waltz" (Brunswick Record 3653).  
 8.37: Humour—Two Boiled Owls, "In a Confectionery Shop" (original).  
 8.43: Hawaiian selection—The Royal Hawaiians, "Aloha Land" (Brunswick Record 3836).  
 8.47: Baritone solo—Mr. Ray Kemp, "The Shade of the Palm" (from "Floradora"), (Stuart).  
 8.51: Instrumental—Orchestra, repeat number.  
 8.59: Weather forecast.  
 9.0: Contralto solo—Miss Rita Arnold, "There's a Light in Your Eyes" (from "Kissing Time"), (Caryl).  
 9.4: Orchestral novelty—Orchestra, "Carnival of the Animals" (Saint-Saens).

### Synopsis:

In this work the composer brings the imagination into play by his dexterous handling of the orchestra in describing a fantastic procession of animals, and each by characteristic instruments as it passes. First we have the Introduction and Majestic March of the Royal Lion, immediately followed by the Hens and Cocks, aptly suggested by a cockcrow in the violins. Soon we see the tortoise, ponderous and slow, with the orchestra moving in broad triplet rhythm. The elephant in his turn is found

among the double basses, followed by the kangaroo, orchestrated in characteristic leaps of intervals. Even the fish swimming in their pond are pictured by rippling sounds, and as the ass appears he introduces himself by a bray in the violins. The woodwind, always expressive of bird life, is used to describe this, and we have the cuckoo in soft, appealing clarinet note. When the aviary comes into view there is a burst of twittering sound from the violins and flute. Near the end of the procession the swan glides by with rippling accompaniment in his song in the 'cellos. This is frequently heard as a 'cello solo, and will be recognised by many listeners. The work ends happily in the finale, as is fitting on an occasion of this kind.

- 9.21: Tenor solo with orchestral accompaniment—Eddy Thomas, "The Church Bells are Ringing For Mary" (Brunswick Record 3845).  
 9.25: Novelty (instrumental and vocal)—Two Boiled Owls, (a) "Dainty Miss" (Barnes); (b) "Mary Ann"; (c) "Virginia Creepers" (Mayerl); (d) "Together."  
 9.35: Organ solo—Lew White, "My Angel" (theme music of "The Street Angel"), (Brunswick Record 3956).  
 9.39: Vocal duet—Miss Rita Arnold and Mr. Ray Kemp, "A Night in Venice" (Lucantoni).  
 9.43: Selection—Orchestra, "Slavonic Rhapsody" (Friedman), (soloist, Mr. A. H. Wright).  
 9.50: Baritone solo—Mr. Ray Kemp, "Love Has Come From Lotus Land" (from "San Toy"), (Jones).  
 9.54: Scottish comedian with orchestra—Sandy MacFarlane, "I'm Eighty in the Mornin'" (Brunswick Record 3934).  
 9.58: Fox-trot—The Anglo-Persians, "The Dance of the Blue Danube" (Brunswick Record 3935).  
 10.2: God Save the King.

## 3YA, CHRISTCHURCH (306 METRES)—TUESDAY, NOVEMBER 13.

SILENT DAY.

## 4YA, DUNEDIN (463 METRES)—TUESDAY, NOVEMBER 13.

- 8 p.m.: Town Hall chimes.  
 3.1: Afternoon session—Selected gramophone items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Town Hall chimes.  
 6.1: Children's session conducted by Big Brother Bill.  
 7.15: News session.  
 7.30: Talk on "Tourist Resorts" by Mr. R. W. Marshall, of the Government Tourist Office.  
 8.0: Town Hall chimes. Concert by the St. Kilda Band, under the conductorship of Mr. Jas. Dixon, and assisting artists.  
 8.1: March—Band, "Westward Ho" (Frith).  
 8.4: Baritone solos—Mr. R. B. Macdonald, (a) "The Blue Dragoons" (Russell); (b) "Big Steamers" (German).  
 8.10: Waltz—Band, "Dream of Delight" (Nichols).  
 8.18: Contralto solo—Miss Gwenda Burt, "When You Pass" (Oliver).  
 8.21: Recitals—Miss Nancy Ayson, (a) "The Girl on the Stairs"; (b) "The Hindoo's Paradise."  
 8.27: Cornet solo, with band accompaniment, "For You Alone" (Gheel).  
 8.32: Bass solos—Mr. J. McNaughton, (a) "Bedouin Love Song" (Pinsuti); (b) "Absent" (Metcalf).  
 8.38: Tenor, with orchestra—Silver-Masked Tenor, "You'd Rather Forget Than Forgive" (Yellen and Jerome) (Zonophone Record EE99).  
 8.42: Selection—Band, "Merry England" (German).  
 8.52: Address—Pastor W. D. More, "Ghosts."  
 9.5: Weather forecast.  
 9.7: Concerted with orchestra—D'Oyly Carte Opera Company, (a) "From the Sunny Spanish Shore"; (b) "In Enterprise of Martial Kind" (from "The Gondoliers") (Sullivan) (H.M.V. Record D1337).  
 9.11: Intermezzo—Band, "Rendezvous" (Aletter).  
 9.17: Baritone solo—Mr. R. B. Macdonald, "In Summertime on Bredon" (Peel).  
 9.20: Recital—Miss Nancy Ayson, "The Great Lover" (Brooks).  
 9.28: Concerted with orchestra—D'Oyly Carte Opera Company, (a) "Oh, Rapture, When Alone Together"; (b) "There was a Time" (from "The Gondoliers") (Sullivan) (H.M.V. Record D1337).  
 9.32: Euphonium duet, with band accompaniment, "Watchman, What of the Night?" (Sergeant).  
 9.38: Contralto solos—Miss Gwenda Burt, (a) "Danny Boy" (Weatherley); (b) "The Crescent Moon" (Sanderson).  
 9.43: Tenor solo with violin, 'cello and piano accompaniment—Maurice J. Gunsby, "Lay My Head Beneath a Rose" (Falkenstein) (Zonophone Record EE17).  
 9.47: Fox-trot—Band, "Just a Cottage Small" (Henley).  
 9.51: Bass solo—Mr. J. McNaughton, "Mary of Argyle" (Traditional).  
 9.55: Concerted with orchestra—Light Opera Company, Gems from "The Girl Friend" (Rodgers) (H.M.V. Record C1399).  
 9.59: March—Band—"Love and Honour" (Hume).  
 10.4: Close down.

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## Wednesday, November 14

## 1YA, AUCKLAND (333 METRES)—WEDNESDAY, NOVEMBER 14.

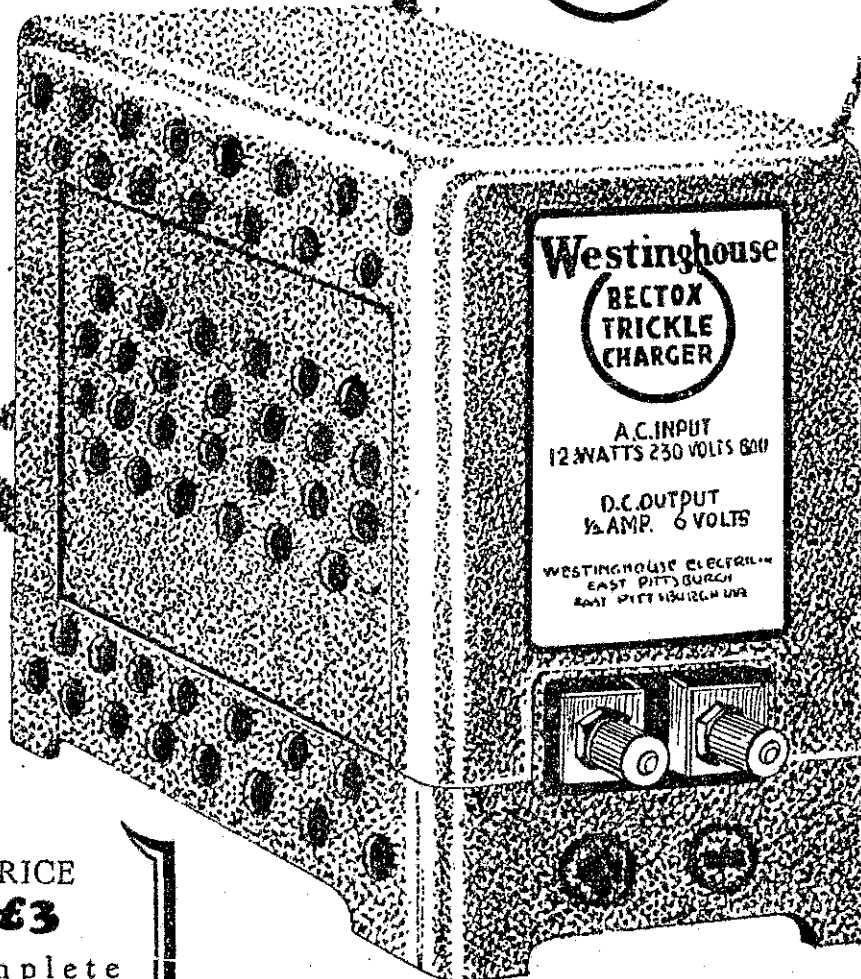
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**2YA, WELLINGTON (420 METRES)—WEDNESDAY, NOVEMBER 14.****ELECTION NIGHT.****3YA, CHRISTCHURCH (306 METRES)—WEDNESDAY, NOVEMBER 14.**

3 p.m.: Afternoon session—Selected studio items.

4.30: Close down.

6.0: Children's session conducted by Uncle Peter and Mother Hubbard.

7.15: Addington stock market reports.

7.30: News session.

8.0: Chimes.

There will be a studio gramophone recital (electrically reproduced) in place of the usual musical programme, and election results will be broadcast as received.

Close down.

**4YA, DUNEDIN (463 METRES)—WEDNESDAY, NOVEMBER 14.**

7 p.m.: Town Hall chimes.

7.1: Request gramophone concert.

7.40: News session—Burnside stock sales report.

8.0: Town Hall chimes.

8.1: Relay of orchestral music from Octagon Theatre Orchestra under the direction of Monsieur Henri de Rose, Mus. Bac.

8.11: Popular song hits—Mr. Norman Scurr, (a) "There's a Little Girl Who Loves Me" (Whiting); (b) "Are You Happy?" (Ager).

8.18: Light orchestral—New Light Symphony Orchestra, "Just a Memory" (De Sylva, Brown, and Henderson) (H.M.V. Record EE18).

8.22: Light soprano solo—Miss Jacqueline Burke, "No, No, Nanette" (Youmans).

8.26: Humorous sketch—Miss Anita Winkel and Major F. H. Lampen.

8.36: Relay of orchestral music from Octagon Theatre.

8.46: Humorous Scottish songs—Mr. Buster Brown, (a) "Early in the Morning" (Lauder); (b) "The Waggle o' the Kilt" (Lauder).

8.52: Tenor solo with piano, violin, and cello accompaniment—John Hislop, "Mary" (Richardson) (H.M.V. Record DA901).

8.56: Novelty piano solos—Mr. T. V. Anson, selected.

9.1: Weather forecast.

9.3: Humorous song at the piano—Miss Eileen Cooper, "Earthenware."

9.7: Marimba orchestra—Rio Marimba Orchestra, "My Isle of Golden Dreams" (Blauffuss) (Columbia Record 02685).

9.11: Popular song hit—Mr. Norman Scurr, "I'm in Love with You" (Moret).

9.15: Humorous sketch—Miss Anita Winkel and Major F. H. Lampen.

9.25: Light soprano solos—Miss Jacqueline Burke, (a) "Whip-Poor-Will" (Kern); (b) "She'll Tell You What to Do" (Hirsch).

9.32: Dance orchestra—International Novelty Quartet, "Cuckoo" (Jonassen) (Zonophone Record EE67).

9.36: Humorous Scottish song—Mr. Buster Brown, "Tobermory" (Lauder).

9.39: Novelty piano solo—Mr. T. V. Anson, selected.

9.47: Humorous songs at the piano—Miss Eileen Cooper, (a) "When Sister Mary Tried to Broadcast"; (b) "Shut Up" (Townsend).

9.54: Band selection—Band of H.M. Coldstream Guards, "Pirates of Penzance" (Sullivan) (H.M.V. Record C1368).

9.58: Close down.

**Thursday, November 15****1YA, AUCKLAND (333 METRES)—THURSDAY, NOVEMBER 15.**

3 p.m.: Afternoon session—Selected studio items.

4.0: Literary selection by the Announcer.

4.8: Further selected items.

4.25: Sports results.

4.30: Close down.

6.0: Children's session.

7.0: Close down.

7.15: News and market reports.

7.45: Close down.

8.0: Chimes.

8.1: Record—Symphony Orchestra, "Mastersingers of Nuremberg" (H.M.V. record D1021), (Wagner).

8.9: Vocal quartet—Mr. Barry Coney's Quartet, "The Sea Hath Its Pearls" (Pinsuti).

8.13: Instrumental trio—The Auckland Trio, "Presto" from "Trio in C Minor" (Bruch).

8.21: Contralto solo—Miss Martha Williamson, "Auld Robin Gray."

8.25: Record—Light Opera Co., gems from "Iolanthe" (Zonophone A312), (Sullivan).

8.29: Baritone solo—Mr. Barry Coney, "Do Not Go, My Love" (Hafeman).

8.33: Elocutionary item—Miss Maisie Carte-Lloyd, by special request.

8.38: Soprano solo—Miss Dorothy Youd, "I Know a Lovely Garden" (d'Hardelet).

8.42: Record—Creator's Band, "Moraima" (Zonophone EF5), (Espinosa).

8.46: Talk—Mr. A. B. Chappell, M.A., "The Maori: His Language."

9.1: Evening forecast.

9.3: Record—Philadelphia Symphony Orchestra, "Casse-Noisette Suite" (H.M.V. D1214), (Tchaikowsky).

9.11: Tenor—Mr. Lambert Harvey, "Serenade" (Schubert).

9.15: Violin—Miss Ina Bosworth, "Humoreske" (Dvorak).

9.19: Contralto—Miss M. Williamson, "Just a-wearyin' for You" (Jacobs-Bond).

9.23: Saxophone—Rudy Weidoeft, "Saxotrix" (Brunswick 3395 (Weidoeft)).

9.27: Elocution and humour—Miss Maisie Carte-Lloyd, (a) "The Kitten of the Regiment"; (b) "The Tramp."

9.35: Baritone—Mr. Barry Coney, "The Crown of the Year" (Martin).

9.39: Instrumental trio—The Auckland Trio, "Overture" to "Figaro" (Mozart).

9.46: Soprano—Miss Dorothy Youd, "The Bitterness of Love" (Dunn).

9.50: Hawaiian—Hilo Orchestra, "Hawaiian Sunset" (H.M.V. B2328), (Vandersloot).

9.54: Tenor—Mr. Lambert Harvey, "Mary of Argyle" (Nelson).

9.58: Vocal quartet—Mr. Barry Coney's Quartet, "Queen of the Night" (Smart).

10.2: God Save the King.

**2YA, WELLINGTON (420 METRES)—THURSDAY, NOVEMBER 15.**

3 p.m.: Chimes of the G.P.O. clock.

3.1: Selected gramophone items.

4.30 and 4.55: Sports results to hand.

5.0: Close down.

6.0: Children's session, conducted by Aunt Gwen.

7.0: News session, market reports, and sports results.

7.40: Lecturette—Mr. Alfred Blaxall, "Health and Fitness."

8.0: Chimes of the G.P.O. clock.

8.1: Relay from the Concert Chamber, Town Hall, of a concert presentation of Balfe's "The Bohemian Girl," by the Wellington Orpheus Society, under the conductorship of Mr. Len. Barnes. The society will be assisted by the 2YA Orchestra.

**Dramatis Personæ.**

Count Arnheim (Governor of Presburg), baritone... Mr. Jas. Cooke  
Thaddeus (a proscribed Pole), tenor ..... Mr. Oscar Dyer  
Florestein (Nephew of the Count), tenor .... Mr. Will Hancock  
Devilshoof (Chief of the Gipsies), bass ..... Mr. A. J. Baker  
Arline (Daughter of the Count), soprano .... Miss Gretta Stark  
Queen of the Gipsies, soprano ..... Miss Dorothy Newman

This opera is founded on a ballet called "La Gipsy," derived from Cervante's tale, "Preciosa." Its action is as follows:—  
Count Arnheim, loyal to the Austrian empire, entertains certain guests at his castle, where they raise the National Standard above the Emperor's statue, the Count meanwhile extolling a soldier's life. The guests depart for 'chase without him, his daughter, Arline, a child six years old, accompanying them with her nurse. Thaddeus, an exiled Polish rebel, enters, seeking refuge, which he finds in the company of a tribe of passing gipsies, who disguise him by order of their leader, Devilshoof, just in time to escape his pursuers. The huntsmen, with Florestein, a foolish nephew of Count Arnheim, return in terror with the tidings that Arline is attacked by a stag. Thaddeus rushes to her assistance, and restores her unhurt to the Count, whose gratitude induces him to invite the apparent gipsy to join the feast of rejoicing. At this feast Arnheim proposes the Emperor's health, which is declined boldly by Thaddeus, whose life is in danger by this act, but he is protected by the Count. Devilshoof, however, who has shared the republican enthusiasm of Thaddeus, is arrested, and confined in the castle. He escapes, and is seen by the distracted company bearing away in his arms Arline, whose abducting suggests his revenge. In Act II, twelve years have passed in sorrow by the Count—the gipsies are stationed at Presburg ready for a fair, led still by Devilshoof, who catches and robs Florestein, an incautious intruder. The Gipsy Queen, however, demands the restoration of his property. Devilshoof obeys, but reserves a diamond medallion for himself. Arline, reared among the gipsies and tended gently by Thaddeus, awakes from a sleep and relates a strange dream which Thaddeus knows is retrospective. She asks the history of her birth, which he hesitates to relate, fearing her love should leave him. The Gipsy Queen, who also loves Thaddeus, now irritates Arline into jealousy, whereupon Thaddeus implores her to marry him. Their betrothal is witnessed by the tribe, who now set out for the fair. Here Arline attracts hosts of admirers, amongst them Florestein, who suddenly recognises his medallion (Arline's neck, where it has been cunningly placed by the Gipsy Queen. In spite of Thaddeus and the tribe, she is seized and conveyed to the Count's castle. Here an accident reveals to the father that the prisoner is his child. Thaddeus implores Arline (Act III), in a secret interview, not to desert him, but the Count spurns the supposed vagabond, when Thaddeus declares himself, and Arnheim is induced to give his daughter to the noble exile. At the feast in their honour the Gipsy Queen, with Devilshoof, attempts Arline's life, but the gipsy diverts the shot which strikes her who aimed it. The festival proceeds to commemorate the happy fortunes of "The Bohemian Girl."

The scene is laid in Presburg and its neighbourhood.

Close down.

**3YA, CHRISTCHURCH (306 METRES)—THURSDAY, NOVEMBER 15.**

3.0 p.m.: Afternoon session—selected studio items.

4.30: Close down.



6.0: Children's session, conducted by Uncle Hal.

7.15: News session.

7.30: Talk (under the auspices of the Canterbury Progress League).

8.0: Chimes.

8.1: Excerpts from the song cycle, "In a Persian Garden" (Lehmann), presented by the Grand Opera Quartet, under the direction of Madame Gower-Burns:—

(Omar was a tentmaker, astronomer and poet of Persia 800 years ago. He was also a scientist and metaphysician, and there are works of his on Algebra and Euclid still existant. Yet this great thinker's message contained in his "Rubaiyat" is on the uselessness of thinking. The "Rubaiyat" constitutes no formal poem—the stanzas are not even necessarily connected—yet they contain the poet's estimate of the sum of existence, the doctrine of an amiable Epicurean philosophy. Seeing only this world, and the material things in it, Omar bids us enjoy ourselves while we may.

From Edward Fitzgerald's translation, Liza Lehmann selected which she has set to music. This musical setting of portions of the "Rubaiyat" aroused interest immediately upon its appearance. It is so written as to employ all the resources of a mixed quartet of the highest rank in both solo and concerted work, while the accompaniment is characteristic piano music, yet sympathetic and original in spite of its difficulty. Indeed, the technical difficulty of the accompaniment has often been an obstacle to the successful presentation of the work.)

Soprano .....	Madame Gower-Burns
Contralto .....	Mrs. Ann Harper
Tenor .....	Mr. Harold Prescott
Baritone .....	Mr. Clive Hindle

Instrumental accompaniment by the Christchurch Broadcasting Trio.

"Wake, for the Sun who Scattered into Flight."—Quartet.

"Before the Phantom of False Morning Died."—Tenor.

"Now the New Year Reviving Old Desires."—Bass Recitative.

"Iram Indeed is Gone With All his Rose."—Tenor.

"Come Fill the Cup, and in the Fire of Spring."—Quartet.

"Whether at Naishapur or Babylon."—Bass.

"Ah! Not a Drop That From our Cups we Throw."—Contralto recitative.

"I Sometimes Think That Never Blows so Red."—Contralto.

"A Book of Verse Underneath the Bow."—Soprano and tenor.

"Myself When Young Did Eagerly Frequent."—Bass.

"Ah! Make the Most of What We Yet May Spend."—Bass recitative.

"When You and I Behind the Veil are Past."—Contralto.

"But if the Soul Can Fling the Dust Aside."—Soprano recitative.

"I Sent My Soul Through the Invisible."—Soprano.

"Alas! That Spring Should Vanish With The Rose."—Tenor.

"The Worldly Hope Men Set Their Hearts Upon."—Contralto.

"Each Morn A Thousand Roses Brings You Say."—Soprano.

"They Say The Lion And The Lizard Keep."—Quartet.

"Ah! Fill The Cup, What Boots Us to Repeat."—Tenor recitative.

"Ah! Moon Of My Delight."—Tenor.

"As Then The Tulip For Her Morning Sup."—Bass.

"Alas! That Spring Should Vanish With The Rose."—Quartet.

8.47: Orchestral selection—Philadelphia Symphony Orchestra, "Arab Dance" (from "Nutcracker Suite") (Tschaikowsky) (H.M.V. Record D1215).

8.51: Recital—Miss Naare Hooper, "Work and Triumph."

8.55: Weather forecast.

8.57: Orchestral selection—Victor Symphony Orchestra, "Orpheus in Hades" (Zonophone Record EF16).

9.4: Baritone solos—Mr. Clive Hindle, (a) "What Am I, Love, Without Thee?" (Adams); (b) "Down Among the Dead Men" (17th century).

9.12: Pianoforte solos—Miss Aileen Warren, (a) "Nocturne in E Minor No. 19" (Chopin); (b) "Gigue Anglaise" (English Jig) (Moffatt).

9.21: Soprano solos—Madame Gower-Burns, (a) "Oh! My Garden" (Mallinson); (b) "Kissing Time" (Needham).

9.26: Wurlitzer organ solo—Reginald Foort, "Overture Miniature" (from "Nutcracker Suite") (Tschaikowsky) (H.M.V. Record C1386).

9.30: Recitals—Miss Naare Hooper, (a) "A Fallen Star" (Chevalier); (b) "When the Minister Comes to Tea." (Anon.)

9.37: Contralto solos—Mrs. Ann Harper, (a) "My Harp is on the Willow Tree" (Needham); (b) "Linden Lea" (Vaughan Williams).

9.41: Concerted with orchestra—D'Oyly Carte Opera Company, (a) "From the Sunny Spanish Shore," (b) "In Enterprise of Martial Kind" (from "The Gondoliers") (Sullivan) (H.M.V. Record D 1337).

9.45: Tenor solo—Mr. Harold Prescott, "Sigh No More, Ladies" (Stevens).

9.45: Choral with orchestra—Chorus and London Symphony Orchestra, "A Breath of Our Inspiration" (from "The Merry-makers") (Elgar) (H.M.V. Record D1349).

Orchestral selection—Royal Albert Hall Orchestra, "Carmen" Prelude to Act 2 (Bizet) (H.M.V. Record E461).

10.0: Close down.

## Friday, November 16

1YA, AUCKLAND (333 METRES)—FRIDAY, NOVEMBER 16.

3 p.m.: Afternoon session—Selected studio items.

4.0: Literary selection by the Announcer.

4.8: Further selected items.

4.25: Sports results.

4.30: Close down.

6.0: Children's session.

7.0: Close down.

7.15: News and market reports.

7.45: Close down.

8.0: Chimes.

8.1: March—The Orchestra, London Scottish (Haines).

8.7: Vocal quartet—Madame M. Towsey's Quartet, "The Long Day Closes" (Sullivan).

8.11: Baritone—Mr. John Bree, "On the Road to Mandalay" (Speaks).

8.15: Chorus—Light Opera Co., "Hit the Deck," vocal gems (H.M.V. C1433), (Youmans).

8.19: Soprano—Madame Mary Towsey, "The Sands o' Dee" (Clay).

8.23: Musical selection—The Orchestra, "Blue Kitten" (Friml).

8.33: Tenor—Mr. J. McDougall, "Beneath Thy Window" (Di Capua).

8.36: Irish—Victor Concert Orchestra, "Amaryllis" (H.M.V. record EA240), (Ghys).

8.39: Comedy—Auckland Company Players, one-act farcical comedy, "When He Comes Home."

9.4: Evening forecast and announcements.

9.5: Quintet—Madame Towsey, Miss Atkinson, Messrs. J. Bree, McDougall, and Bertram—"I Rejoice That's Decided" (Sullivan).

9.8: Dance orchestra—Jack Hylton and his Orchestra, "Souvenirs" (H.M.V. EA297), (Nicholls).

9.11: Contralto—Miss E. Peace, selected.

9.14: Orchestra—The Orchestra, (a) "Serenade" (from "Eine Kleine Nachtmusik"), (Mozart); (b) "Rigador" (Raff); (c) "Tarantelle" (Raff).

9.25: Duet—Messrs. John Bree and McDougall, "O Wert Thou in the Cold Blast" (Mendelssohn).

9.29: Comedy sketch—Auckland Comedy Players, "Two of a Kind."

9.41: Baritone—Mr. John Bree, "The Gentle Maiden" (Somerville).

9.45: Saxophone—Rudy Weidoeft, "In the Orient" (Bruns. 3395), (Savino).

9.49: Quartet—Madame Mary Towsey's Quartet, "Sweet and Low" (Barnby).

9.52: Mus. Co. selection—The Orchestra, "Blue Mazurka" (Lehar).

10.2: God Save the King.

2YA, WELLINGTON (420 METRES)—FRIDAY, NOVEMBER 16.

3 p.m.: Chimes of the G.P.O. clock.

3.1: Selected gramophone items.

4.30 and 4.55: Sports results to hand.

5.0: Close down.

6.0: Children's session, conducted by Uncle Ernest.

7.0: News session, market reports, and sports results.

8.0: Chimes of the G.P.O. clock.

8.1: Overture—Orchestra, "Semiramis" (Rossini).

8.11: Soprano solo—Miss Veronica Mackenzie, "Caro Nome" (from "Rigoletto") (Verdi).

8.15: Pianoforte solos—Miss Eileen Amo Bennett, (a) "Prelude in G," Op. 17, No. 3 (Blumenfeld), (b) "Spanish Dance" (Cervantes), (c) "First Movement, Sonata in B Flat," Op. 22 (Beethoven).

8.23: Bass solo—Mr. W. McLellan, "Il Lacerato Spirito" (from "Simon Boccanegra").

8.27: Waltz—Orchestra, "Valse Triste" (Sibelius).

March—Orchestra, "Marche de Tannhauser" (Wagner).

8.36: Contralto solo—Miss Agnes McDavitt, "Ah! Se Tu Dormi" (from "Romeo and Juliet"). (Verdi).

8.40: Recital—Mr. Cedric Gardiner, "Rio Grande" (Paterson).

8.45: Tenor solo—Mr. Edgar Swain, "Thy Tiny Hand is Frozen" (from "La Boheme"), (Puccini).

8.50: Instrumental—Orchestra, repeat number.

8.58: Weather forecast.

8.59: Duet with orchestra—D'Oyly Carte Opera Co., "To Help Unhappy. Commoners."

Concerted with orchestra—D'Oyly Carte Opera Co., (a) "With Ducal Pomp," (b) "On the Day When I Was Wedded" (from "The Gondoliers"), (Sullivan), H.M.V. record D1344).

9.7: Soprano solo—Miss Veronica Mackenzie, "Waltz Song" from "Tom Jones" (German).

9.12: Ballet suite—Orchestra, "Ascanio Ballet Music," Part 1 (Saint-Saens), (1) Entry of the Master of the Games; (2) Venus, Juno, and Pallas; (3) Diana, Woodnymphs, and Waternymphs; (4) Bacchus and Bacchantes; (5) A vision of Phoebus, Apollo, and the nine Muses; (6) Phoebus and the Harp and Cupid.

9.26: Bass solo—Mr. W. McLellan, "Ho! Jolly Jenkin" (from "Robin Hood") (De Koven).

9.30: Humour—Mr. Cedric Gardiner, "The Mechanical Cow" (Thomas).

9.35: Contralto solo—Miss Agnes McDavitt, "Chong Kina" (from "The Geisha"), (Jones).

9.39: Concerted with orchestra—D'Oyly Carte Opera Co., (a) "I Am a Courtier Grave and Serious," (b) "Here is a Case," (c) "Now Let the Loyal Lieges Gather Round" (from "The Gondoliers"), (Sullivan), (H.M.V. record D1345).

4YA, DUNEDIN (463 METRES)—THURSDAY, NOVEMBER 15.

SILENT DAY.

- 9.47: Tenor solo—Mr. Edgar Swain, "Here's to Love and Laughter" (from "The Sunshine Girl"), (Rubens).  
 9.51: Musical comedy selection—Orchestra, "The Gondoliers" (Sullivan).  
 10.1: God Save the King.

### 3YA CHRISTCHURCH (306 METRES)—FRIDAY, NOVEMBER 16.

- 3.0 p.m.: Afternoon session—selected studio items.  
 4.30: Close down.  
 6.0: Children's session, conducted by Big Brother.  
 7.15: News session.  
 8.0: Chimes.  
 8.1: Overture—"Semiramis" (Rossini) (re-broadcast of 2YA, Wellington).  
 8.11: Vocal recitative and aria—Yeoman Duo, "Go! Baffled Coward, Go!" (from "Samson") (Handel).  
 Soprano solos—Mrs. Moana Lawrence, (a) "A Faded Rose" (Cairo), (b) "Cheerio" (Beresford).  
 8.20: Violin solo—Miss Irene Morris, "Liebeslied" (Kreisler).  
 8.24: Tenor solos—Mr. Russell Sumner, (a) "Glorious Devon" (German), (b) "Canoe Song" (Coleridge-Taylor).  
 8.29: Instrumental Trios—Christchurch Broadcasting Trio, (a) "Ave Maria" (Schubert), (b) "Scherzo" (Schubert).  
 8.38: Mezzo-soprano solo—Mrs. H. W. Stow, "I Wonder If Ever the Rose" (Slater).  
 8.42: Waltz and foxtrot—Bert Firman's Dance Orchestra, (a) "I'm Away From the World" (Clare Pollock); (b) "When I Ring Your Front-door Bell" (Lynn) (Zonophone Record 5099).  
 8.50: Recitals—Father Friendly, (a) "Bernardo and Alphonso" (Lockhart), (b) "Bernardo's Revenge" (Anon.).  
 8.56: Popular instrumental numbers—Eyres Social Instrumental Trio, (a) "The Organ and Rosary" (waltz) (Gilbert), (b) "Honolulu Moon" (waltz) (Lawrence).  
 9.2: Bass solos—Mr. T. D. Williams, (a) "Kishmuls Galley" (Kennedy-Fraser), (b) "Skye Fisher's Song" (Kennedy-Fraser).  
 9.6: Weather forecast.  
 9.7: Overture—National Symphony Orchestra, "Martha" (Flotow) (H.M.V. Record EF19).  
 9.15: Tenor and bass duet, followed by soprano solo—Yeomen Duo and Mrs. Moana Lawrence, (a) "Love and War" (Cooke), (b) "Love Is Just a Little Bit of Heaven" (Baer).  
 9.23: Violin solo—Miss Irene Morris, "Minuet" (Mozart).  
 9.27: Tenor solos—Mr. Russell Sumner, (a) "Like to the Damask Rose" (Elgar), (b) "O Mistress Mine" (Quilter).  
 9.33: Instrumental trios—Christchurch Broadcasting Trio, (a) "The Old Refrain" (Arr. Kreisler), (b) "Anitra's Dance" (Grieg).  
 9.39: Mezzo-soprano solos, Mrs. H. W. Stow, (a) "The Little Green Lane" (Clarke), (b) "An Old-fashioned Town" (Squire).  
 9.45: Hawaiian selections—Hilo Hawaiian Orchestra, (a) "Hawaiian Dreams" (Maple), (b) "Honolulu Moon" (Lawrence) (Zonophone Record EE56).  
 9.53: Humorous recital—Father Friendly, "Mick Hurley's Visit to Dublin" (Anon.).  
 9.58: Foxtrots with vocal choruses—(a) "Dancing Shadows" (Golden) (H.M.V. Record EA367) (b) "My Pet" (Yellen, Ager) (H.M.V. Record EA373).  
 10.5: Bass solos—Mr. T. D. Williams, (a) "Three Hundred Miles from London" (Drummond); (b) "Garden of Memories" (Drummond).  
 10.9: Popular instrumental numbers—Eyres Social Instrumental Trio, (a) "Wanna Go Back Again" (Blues) (Campbell), (b) "When the Love Bird Leaves Its Nest" (Wade), (with vocal choruses).  
 Close down.

### 4YA, DUNEDIN (463 METRES)—FRIDAY, NOVEMBER 16.

- 3 p.m.: Town Hall chimes.  
 3.1: Gramophone items.  
 3.30: Relay of afternoon-tea music from the Savoy.  
 3.45: Studio music.  
 4.0: Relay of music from the Savoy.  
 4.15: Gramophone items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Town Hall chimes.  
 6.1: Children's session, conducted by Aunt Sheila and Big Brother Bill.  
 7.15: News session.  
 7.30: Book review, Mr. H. Greenwood, of the Dunedin Athenaeum.  
 8.0: Town Hall chimes.

#### SCHUBERT CENTENARY CONCERT.

- 8.1: Orchestral overture—Halle Orchestra, "Rosamunde" (Schubert), (Columbia record L1998).  
 8.9: Tenor solos—Mr. Ernest Drake, (a) "Serenade" (Schubert); (b) "Who Is Sylvia?" (Schubert).  
 8.16: Violin solos—Mr. J. Wallace, (a) "Ave Maria" (Schubert); (b) "Cradle Song" (Schubert).  
 8.27: Mezzo-soprano solo—Miss Molly Vickers, "Gretchen at the Spinning Wheel" (Schubert).  
 8.31: Pianoforte solo—Mrs. Ernest Drake, "Marche Militaire" (Schubert-Tausig).  
 8.37: Bass solos—Mr. J. D. McKechnie,

- 8.45: Orchestral—New Queen's Hall Orchestra, "Unfinished Symphony" (Schubert), (Columbia records L1791/2/3).  
 9.8: Weather forecast.  
 9.10: Address—Mr. W. Paget Gale, "Schubert and His Music."  
 9.25: Tenor solo—Mr. Ernest Drake, "The Sweet Repose" (Schubert).  
 9.28: Instrumental quartet—Wallace Quartet, "Death and the Maiden" (Schubert).  
 9.38: Mezzo-soprano solos—Miss Molly Vickers, (a) "The Young Nun" (Schubert); (b) "Whither?" (Schubert).  
 9.45: Pianoforte solos—Mrs. Ernest Drake, (a) "Impromptu in F Minor" (Schubert); (b) "Moment Musicale" (Schubert-Godowsky).  
 9.54: Bass solo—Mr. J. D. McKechnie, "The Wanderer" (Schubert).  
 9.59: Instrumental quartet—London String Quartet, "Quartet Satz in C Minor" (Schubert), (Columbia record L1679).  
 10.8: Close down.

## Saturday, November 17

### 1YA, AUCKLAND (333 METRES)—SATURDAY, NOVEMBER 17.

- 3 p.m.: Afternoon session—Selected studio items.  
 4.0: Literary selection by the announcer.  
 4.8: Further studio items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Children's session.  
 7.0: Close down.  
 7.15: News and market reports—Sports results.  
 7.30: Book review.  
 7.45: Close down.  
 8.0: Chimes.  
 8.1: Orchestra—National Symphony Orchestra, "Martha" Overture (Zonophone EF19), (Flotow).  
 8.9: Bass—Mr. Frank Sutherland, "The Skipper of the Mary Jane" (Richards).  
 8.13: Instrumental trio—Auckland Trio, "First Movement from Trio" (Reisiger).  
 8.21: Chorus—Mixed chorus, "Songs of Scotland" (H.M.V. EB23).  
 8.25: Baritone—Mr. E. Baker, "When the Sergeant-Major's on Parade" (Longstaffe).  
 8.29: Humour—Mr. F. W. Barker, "Did She?" (a problem story), (Wood).  
 8.34: Tenor (with orchestra and organ)—"Jeanine, I Dream of Lilac Time" (H.M.V. EA400), (Shilhret).  
 8.42: Bass—Mr. F. Sutherland, (a) "To-morrow" (Keel); (b) "Captain Danny" (Longborough).  
 8.50: Cello—Miss M. Wright, "Tarantelle" (Popper).  
 8.55: Hawaiian Hilo Orchestra—"Sweet Hawaiian Dreams" (H.M.V. B2328), (Coleman).  
 8.59: Evening forecast and announcements.  
 9.1: Baritone—Mr. F. Baker, (a) "Less Than the Dust" (Woodforde-Finden); (b) "Old Barty" (Grant).  
 9.9: Instrumental—Auckland Trio, "Nay, Though My Heart Should Break" (Tschaikowsky).  
 9.18: Chorus—Mixed chorus, "Songs of Ireland" (H.M.V. EB23).  
 9.22: Mr. F. W. Barker, (a) "Don't Use Big Words"; (b) "British Workmen's Rights."  
 9.30: Programme of dance music.  
 11 p.m.: God Save the King.

### 2YA, WELLINGTON (420 METRES)—SATURDAY, NOVEMBER 17.

- 3 p.m.: Chimes of the G.P.O. clock.  
 3.1: Selected gramophone items.  
 4.30 and 4.55: Sports results to hand.  
 5.0: Close down.  
 6.0: Children's session, conducted by Aunt Gwen.  
 7.0: News session, market reports and sports results.  
 7.40: Lecturette by the Secretary of the Workers' Educational Association—"The W.E.A. Summer School."  
 8.0: Chimes of the G.P.O. clock.  
 8.1: Overture—Orchestra, "La Sirene" (Auber).  
 8.9: Vocal quartet—Melodie Four, "In the Shadows" (Finck).  
 8.13: Hawaiian selection—Hilo Hawaiian Orchestra, "Hawaiian Dreams" (waltz), (Maple), (Zonophone Record EE56).  
 8.17: Tenor solo—Mr. F. Bryant, "Blue Sky and White Road" (Coates).  
 8.21: Flute and clarinet duet with orchestral accompaniment—"Lo, Here the Gentle Lark" (Bishop). Soloists, Signor Truda and Mr. A. H. Wright.  
 Entr'acte—Orchestra, "Love's Old Sweet Song" (Molloy).  
 8.32: Bass solo—Mr. W. W. Marshall, "The Mountains of Mourne" (Frenn and Collison).  
 8.36: Fox-trot with vocal refrain—Nat. Shilkret's Orchestra, "Get Out and Get Under the Moon" (Tobias, Jerome and Shay), (H.M.V. Record EA368).  
 8.40: Humour—Mr. J. S. Webb, "Not Too Bad" (Spencer).  
 8.46: Vocal quartet—Melodie Four, "Good Fellows" (Petrie).  
 8.50: Instrumental—Orchestra, repeat number.  
 8.58: Weather forecast.  
 9.0: Fox-trot—Nat. Shilkret's Orchestra, "Dainty Miss" (Barnes), (H.M.V. Record EA276).



- 9.8: Tenor solo—Mr. Sam Duncan, "I Hear a Thrush at Eve" (Cadman).  
 9.12: Selection—Orchestra, "Popular Melodies," 1st Selection (Sullivan).  
 9.23: Baritone solo—Mr. R. S. Allwright, "Waiata Maori" (Hill).  
 9.26: Hawaiian selection—Hilo Hawaiian Orchestra, "Honolulu Moon" (waltz), (Lawrence), (Zonophone Record EE56).  
 9.30: Humour—Mr. J. S. Webb, "Stories" (new, true and neither).  
 9.36: Vocal quartet—Melodie Four, "Drifting and Dreaming" (Van Alstyne, arr. Melodie Four).  
 9.40: Instrumental—Orchestra, fox-trot novelties.  
 9.50: Dance programme.  
 11.0: Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SATURDAY, NOVEMBER 17.

- 3 p.m.: Afternoon session—selected studio items.  
 4.30: Close down.  
 6.0: Children's session conducted by Chuckle and Aunt Pat.  
 7.15: News session.  
 7.30: Sports results.  
 8.0: Rebroadcast of 2YA, Wellington.  
 10.0: Dance Programme.  
 God Save the King.

### 4YA, DUNEDIN (463 METRES)—SATURDAY, NOVEMBER 17.

- 7.15 p.m.: News session.  
 8.0: Town Hall chimes.  
 8.1: Relay of orchestral music from the Strand Theatre Orchestra under the direction of Mr. L. D. Austin.  
 8.11: Mezzo-contralto solos—Miss Irene Horniblow, L.R.A.M., (a) "Jean" (Burleigh); (b) "Why I Left Home" (McFarren).  
 8.17: 'Cello solo—Mr. P. J. Palmer, (a) "Am Meer" (Schubert); (b) "Siciliana" (from "Cavalleria Rusticana") (Mascagni).  
 8.27: Baritone with male quartet—John Goss and Cathedral Male Voice Choir, "Sheandoah" (Arr. Terry) (H.M.V. Record B2646).  
 8.31: Bass solo—Mr. J. Ferguson, "Lochnagar" (Maxfield).  
 8.35: Pianoforte solo—Mrs. Ernest Drake, "Impromptu in F Minor" (Schubert).  
 8.41: Mezzo-soprano solos—Miss Agnes Guy, (a) "The Arrow and the Song" (Balfe); (b) "Sanctuary" (Hewitt).  
 8.46: Instrumental trio (violin, 'cello and piano), "Andante from Trio in G Major" (Mozart).  
 8.52: Baritone solo—Mr. Arthur Lungley, "Crossing the Bar" (Willeby).  
 8.56: Wurlitzer organ solo—Reginald Foort, "Ballet Egyptien" (Luigini) (H.M.V. Record B2479).  
 9.4: Weather forecast.  
 9.6: Relay of orchestral music from the Stand Theatre.  
 9.16: Mezzo-contralto solo—Miss Irene Horniblow, "My Dearest Heart" (Sullivan).  
 9.19: Humour—Will King's "Bertram at the Rotary Dinner" (Merry), (H.M.V. Record C1340).  
 9.23: Bass solos—Mr. J. Ferguson, (a) "Yeoman's Wedding Song" (Pontatowski); (b) "A Man's a Man for a' That" (Macfarren).  
 9.30: Instrumental trios (violin, 'cello and piano), (a) "Prelude" (Rachmaninoff); (b) "Lullaby" (Glinsky).  
 9.40: Concerted with orchestra—Light Opera Company, "Hit the Deck" Vocal Gems (Youmans) (H.M.V. Record C1433).  
 9.44: Mezzo-soprano solo—Miss Agnes Guy, "The Crescent Moon" (Sander-son).  
 9.47: Violin solos—Mr. Harold Riddle, (a) "Chanson de Nuit" (Elgar); (b) "Toujours Gai" (Rowland).  
 9.57: Baritone solos—Mr. Arthur Lungley, (a) "On the Wings of Song" (Mendelssohn); (b) "Bonnie Banks o' Loch Lomond" (McLaren).  
 10.2: Waltz—International Concert Orchestra, "La Spagnola" (The Spanish Dancer) (Di Chiara) (Zonophone Record EF15).  
 10.6: Close down.

## Sunday, November 18

### 1YA, AUCKLAND (333 METRES)—SUNDAY, NOVEMBER 18.

- 3 p.m.: Afternoon session—Selected studio items.  
 4.0: Literary selection by the announcer.  
 4.8: Further selected studio items.  
 4.30: Close down.  
 6.0: Children's session, conducted by Uncle Leo.  
 6.55: Pitt Street Methodist Church, Divine Service. Preacher, Rev. Lionel B. Dalby; choir-master, Mr. W. Leather.  
 8.30: Gramophone lecture-recital from the studio.  
 9.30: God Save the King.

### 2YA, WELLINGTON (420 METRES)—SUNDAY, NOVEMBER 18.

- 3 p.m.: Afternoon session—Selected studio items.  
 4.30: Close down.  
 6.0: Children's Sunday service conducted by Uncle Ernest.  
 7.0: Relay of evening service of Vivian Street Baptist Church. Preacher, Rev. F. E. Harry. Organist, Mr. Chas. Collins. Choir-master, Mr. J. R. Samson.

### 8.15 (approx.): Studio concert.

- Overture—London Symphony Orchestra, "Coriolan" (Beethoven) (H.M.V. Record D1409).  
 Mezzo-contralto solo—Miss Ngaire Coster, "Ave Maria" (Kahn).  
 Pianoforte solo—Frederic Lamond, (a) "La Ronde des Lutins" (Liszt); (b) "Second Movement, Sonata No. 2, Op. 10, in F Major" (Beethoven), (H.M.V. record D1274).  
 Vocal sextet—Galli-Curci, Homer, Gigli, Le Luca, Pinza, and Bada, "Chi Mi Frena" (from "Lucia di Lammermoor" (Donizetti), (H.M.V. record DQ102).  
 Violin solo—Tosca Seidel, "Humoresque" (Dvorak), (Columbia record 09506).  
 Bass solo—Mr. J. M. Caldwell, (a) "God Is My Shepherd" (Dvorak); (b) "I Will Sing New Songs of Gladness" (Dvorak).  
 Orchestral—Columbia Symphony Orchestra, "Spring Song" (Mendelssohn), (Columbia record 01076).  
 Tenor solo—Ernest McKinley, (a) "Ka Mate" (Te Rangi Hi Kiroa); (b) "Hine e Hine" (Princess Te Rangi Pai), (Columbia record 01067).  
 'Cello solo—Felix Salmond, "Berceuse de Jocelyn" (Godard), (Columbia 03591).  
 Vocal duet—Miss Ngaire Coster and Mr. J. M. Caldwell, "Still as the Night" (Bohm).  
 Overture—Columbia Symphony Orchestra, "Light Cavalry" (Suppe), (Columbia record 02559).  
 Mezzo-contralto solo—Barbara Maurice, "From Out the Long Ago" (Stratton and Dick), (Columbia record 01159).  
 Violin solo—Tosca Seidel, "Meditation" (Massenet), (Columbia record 09506).  
 Bass solo—Mr. J. M. Caldwell, "Hear Me, Ye Winds and Waves" (Handel).  
 Mezzo-contralto solo—Miss Ngaire Coster, "A Spirit Flower" (Tipton).  
 Orchestral—Jean Lensen and his Orchestra, "Chanson Bohemienne" (Columbia record 01102).  
 Vocal duet—Miss Ngaire Coster and Mr. J. M. Caldwell, "The Pastoral" (Peterkin).  
 Band selection—National Military Band, "National Emblem March" (Bagley), (Columbia record 01153).  
 Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SUNDAY, NOVEMBER 18.

- 3 p.m.: Afternoon session—Selected studio items.  
 3.15: Organ recital from St. Andrew's Presbyterian Church. Organist, Mr. Robt. Lake.  
 3.30: Studio gramophone recital.  
 3.45: Organ recital by Mr. Robt. Lake (continued).  
 4.0: Studio gramophone recital.  
 4.30: Close down.  
 5.30: Children's song service conducted by Uncle David.  
 7.0: Relay of evening service from St. Andrew's Presbyterian Church (corner Antigua and Tuam Streets). Preacher, Rev. N. L. D. Webster. Choir-master, Mr. J. Maclean. Organist, Mr. Robt. Lake.  
 7.45 (approx.): After-church studio concert.  
 Overture—Royal Philharmonic Orchestra, "Flying Dutchman" (Wagner) (Columbia Records L1961/2).  
 7.57: Tenor recitative and aria—Mr. Gregory Russell, "If with all Your Hearts ye Truly Seek Him" (from "Elijah") (Mendelssohn).  
 8.0: Choir—British Broadcasting Company's Choir, "A Few More Years Shall Roll" (Bonner, Hayne) (Columbia Record 01211).  
 8.4: Soprano solo—Mrs. P. S. Lawrence, "There is a Bower of Roses" (Stanford).  
 8.8: Organ solos—G. T. Pattman, (a) "Kashmiri Song" (b) "Till I Wake" (from "Four Indian Love Lyrics") (Woodforde-Finden) (Columbia Record 02696).  
 8.12: Soprano and tenor duet—Mrs. P. S. Lawrence and Mr. Gregory Russell, "Love Divine" (from "The Daughter of Jairus" (Stainer).  
 8.16: Orchestral with chorus—Bayreuth Festival Orchestra, "Parsifal" (The Grail Scene) (Wagner) (Columbia Record L2008).  
 8.20: Tenor solos—Mr. Gregory Russell, (a) "Passing By" (Purcell); (b) "On Wings of Song" (Mendelssohn).  
 8.25: Grand organ solos—Reginald Goss-Custard, (a) "The Question"; (b) "The Answer" (Wolstenholme) (H.M.V. Record E415).  
 8.33: Soprano solo—Mrs. P. S. Lawrence, "For Ever and Ever" (Tosti).  
 8.37: Band selections—U.S. Navy Band, (a) "Anchor's Aweigh" (march) (Zimmerman); (b) "All Hands" (march) (Benter) (Zonophone Record EE105).  
 8.45: Soprano and tenor duet—Mrs. P. S. Lawrence and Mr. Gregory Russell, "Dear Love of Mine" (from "Nadeska") (Goring Thomas).  
 8.49: Studio gramophone recital of selected items (electrically reproduced).  
 9.30: Close down.

### 4YA, DUNEDIN (463 METRES)—SUNDAY, NOVEMBER 18.

- 5.30 p.m.: Children's song service conducted by Big Brother Bill.  
 6.30: Relay of service from the Methodist Central Mission. Preacher, Rev. W. Walker. Organist, Mr. Chas. A. Martin.  
 8.0: Relay from St. Kilda of concert by the St. Kilda Band.  
 9.15: Close down.

## ANSWERS TO CORRESPONDENTS.

E.E.S. (Blenheim).—(1) 2YA will repeat the song suite, "Old Favourites," on Saturday. (2) Literary items are given once a month, as suggested by the Musical and Dramatic Advisory Committee. Your suggestion for a Dickens evening will be referred to the committee. On December 21 it has already been arranged for the Rev. J. R. Blanchard to give Christmas poems, in which will be incorporated Dickens items. (3) The "Carnaval de Venice" will be given on the afternoon of November 15.

## A Little More Humour.

I WOULD like to make an appeal for a little more humour in our evening programmes. Am making this appeal on other people's behalf as much as for my own family. Several listeners-in I know are old folks or invalids, to whom the wireless concert each night is the only pastime they have, and so much classical musical palls, to say the least of it. At the same time, I would like to thank Aunt Gwen for the way the children's session is conducted; very often we enjoy this hour more than the latter session—H.R. (Rose-neth).

## More Classical Music Wanted.

THE many complaints of the listeners-in as printed in the "Record" have interested and amused me, but now I want to make a complaint myself. The

## Our Mail Bag

Will correspondents please practice brevity, as heavy demands are now made on space. All letters must be signed and address given as proof of genuineness; noms de plume for publication are permitted. Address correspondence Editor, "Radio Record," P.O. Box 1032, Wellington.

chief reason I bought a radio set a year ago was to listen to the Symons-Ellwood-Short Trio, whom I had heard at concerts in Wellington. I thoroughly enjoyed the programmes at first, but since the orchestra started in May we have heard less and less of the trio. I understand that they were still to perform twice a week, Mondays and Fridays, and they did so for some time, but lately have not been heard at all. I quite understand that the majority of listeners prefer more popular music, and that they must be catered for, but surely the minority should get a little of their choice too! The trio, classical though they were, gave great pleasure in this district at any rate, and were much appreciated here by farmers who had had no musical education whatever. Otherwise I have no complaint to make, as I consider the programmes well rendered, and of good variety.—"Country Listener" (Murchison).

## The "Mail Bag" Corner.

I would like to add my measure of praise to the Broadcasting Company for their efforts in furthering the listeners' interests. Personally, I think we in New Zealand are well catered for, and the programmes sent out here compare more than favourably with any other country. "Megohm's" articles on construction have been appreciated, indeed; and the News and Notes of "Switch," and others, are always interesting. Of course, some of the criticisms are more amusing than constructive, but that's all in the game.

The "Mail Bag" is the portion I mostly turn to first, and the reports of such keen DX fans as Messrs. Grey, Holmes, and Ellis are always of keen interest.

Seeing so many records of stations logged by listeners from various parts of New Zealand compels me to submit my gleanings from the air. To those listeners who possess sets favourable for long distance reception, plenty of patience, as well as the ability to handle their sets, is required. There are often periods when reception from distant stations is impossible, no matter how good the set is, or the number of valves used.

Generally speaking, reception is best in the winter time, although most of my long distance receptions have been on particular evenings during summer, especially the Americans.

All of the stations in this list have been received on the speaker (even 2AV P.N., 5 watts, and KGER, California, 100 watts), at some times, but, of course, not always, very loud. The small Australians have mostly been logged between 11 p.m. and 3 a.m.

The set used is a 6-valve super-het., and 135 volts, "B" battery, on the last stage hooked on to a 40ft. aerial of 7.22 strand, 120ft. o.a. earth wire, on to water pipe.—W. E. Davies (Picton).

[Mr. Davies' list covers 56 stations—6 Japanese, 18 American, 16 Australian, and 16 New Zealand.]

## "A Bob-in" for the Races?

WILL you allow me to make a suggestion. Last evening, the announ-

cer of the Boxing Association asked for funds from listeners-in, all money collected to be given to the hospital, etc. My idea is this, when renewing our license in March, for all owners of sets to pay 31s. instead of the usual 30s., and that extra money (it would be a fairly large sum) be distributed by you, and give half to the four racing clubs. We do miss the broadcasting of races. We here in the backblocks have no hope of ever attending a meeting, but they would have our money, and allow you to carry on. Unless there is a universal charge, there are not many who will send in a sub to be spent anyhow, and each district has its own hospital to support. I should like you to carry this suggestion further.—(Mrs.) H. E. Allen (Hunterville).

[None of the statements made on behalf of the racing clubs have admitted that it was money they required; their "ban" is made on so-called strictly "moral" grounds. We are afraid the idea would not be acceptable to listeners, but we place it before them.—Ed.]

## 9XF, Chicago.

A FEW nights ago I was tuning-in on my five-valve neodyne set, to station 2BL, and I was surprised to hear, after listening to a musical item, an announcer say that it was station 9XF, Illinois. I was unable to catch the name of the town. I have searched what logs I have, but I have so far been unable to locate the station, and I would be greatly obliged if you could help me. This makes the eighth American station received on the loudspeaker. I have had KJR, Seattle; KGO, Oakland; KNX, Hollywood; KFON, Long Beach; KMOX, Avalon; KF (or M) RC, Vancouver; KGX, Portland; and 9XF, Illinois.

[9XF, Chicago, Illinois, of 50 kw., operates on a frequency of 1040 kc. and a wave-length of 288 metres. Several listeners have reported its reception. There is no station KF (or M) RC in Vancouver, but KFZC in San Francisco may be the station in question.]

## A Complaint from Dunedin.

IT is with great interest that I have just read the article on Mr. Holland and his "stink bomb." One sentence is of exceptional interest—it is "the original contract provided for four 500 watts broadcasting stations." Now, Sir, this has apparently been altered to (in my mind), "two 500 watts, one 5000 watts, and forget the other."

2YA will soon be 18 months old, and yet there is no sign or news of anything for Dunedin. It is still in the same old place, the same old way, and giving grudgingly. Sir, it has been the remarks of the R.B.C. that licenses are too few. Have they looked at it in this way? It is an undisputed fact that 4YA is not received in Central Otago or Southland. Forty (40) miles inland it was the greatest struggle of my life to drag in 4YA. This proves that Otago has no station. For this reason (neglect of Dunedin) if it came to the vote I would certainly vote Govern-

ment control in New Zealand, because in any case it could not be bound up with any more red tape. My thanks are due to the Dunedin 4Z stations, viz., 4ZM, 4ZL, and 4ZO, who are each doing better than station 4YA. It may interest you to know a remark of a very prominent radio man in Dunedin, "I see 4ZO is giving the dinner session promised by 2YA twelve months ago, and a luncheon session tossed in. I enjoy 4ZO." Sir, in conclusion, as this letter is against the R.B.C. I doubt if it will be published, but in case it does I ask you to criticise the company concerning Dunedin and give us any information.—Equality.

[Our correspondent's closing suggestion is uncalled for. We give particularly free scope in "Our Mailbag" to the views of listeners, and do not suppress letters critical of any radio matter (company or otherwise) that is worthy of public mention. The Government, with whom the contract was entered into, may be relied upon to supervise the period in which the contractual objections should be met. Dunedin is not being overlooked and progress will be made there in due course. The references of our correspondent to "the dinner session promised by 2YA twelve months ago" is, to our mind, proof of the unwisdom of making premature announcement of intentions. The facts in this connection are that six months ago (not twelve), Mr. Ball, in speaking at a complimentary dinner to Mr. J. H. Owen, said (April 13), "the company intended during the winter introducing a dinner music session by changing, etc. This music would be of a subdued type and would be electrically reproduced from special records which the company is arranging to procure." This intention was announced early in April, but as listeners will remember, licenses, after being

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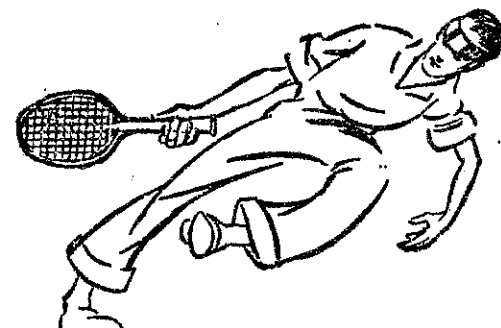
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at over 40,000, slumped to below 30,000 at the renewal period, consequently the company, as was shortly afterwards announced, was compelled to adjust its intentions to financial actualities. Delays were also experienced in procuring suitable records. The incident proves to our mind the undesirability of making announcements of "intentions," and explains in all probability the preference of the company to allow actions to speak for themselves. Everybody will be glad when 4YA can be strengthened, but, with some knowledge of the facts, we do not feel called on to accept the dictation of our correspondent to "criticise" the company on this point. Plans are in prospect, we understand, and in due course will reach maturity; meantime, the P. and T. Department is watching listeners' interests in regard to the contract. The latest license figures are:—Wellington, 16,826; Auckland, 14,146; Christchurch, 8325; and Dunedin, 2938.—Ed.]

#### M.C.C. Tour.

**BEING** deeply interested in the tour of the M.C.C. team in Australia, will you be re-broadcasting the results of Tests and other matches played.—Cricket (Hastings).

[Full attention to the M.C.C. team's results will be given by 2YA's special sports service.—Ed.]

#### Radio for Way-Back Farmers.

**MORE** people on the land, is the great need of this Dominion, at the present time. How are we to get this reform? I maintain, that every farmer, say 10 miles or more, from any large town, should be supplied with a radio set, so that any new settler who might take up farming, would be able to keep in touch with the news, the reports of sales, etc., and might enjoy a good concert every night in the week, without leaving his farm. I am sure a receiving set could be supplied to every new settler at about £25 complete, and this cost to the Government would be negligible, and would assist to get more land occupied.—"Listening-in," Rangataua.

#### Nothing Like Candour.

**ARE** you aware that on the whole, your afternoon session's of gramophone items, especially the Sunday afternoon sessions are rotten. Why is it that you cannot get better records? The record you transmit are, to say the least of it, absolutely awful in their mournfulness. Cannot you look out and put on a decent record now and again? The majority of listeners in this district are of the same opinion as myself. Hoping for some decent music in the very near future.—Fred J. Martin, c/o J. W. Mills & Co., Pahiatua.

#### Notes for DX Men.

**DURING** the past few nights I have noticed stations hetrodyning behind 2BL, 2FC, 2ZF, 1YA, 2YA. I presume they are as follows:—KYA, WHXAL, WENR, KNX, WLW. Have other listeners heard these stations lately. There are two very notable stations, 2BL, every evening you can hear dance music with a heterodyne whistle till 7.30 p.m. On October 14, while 2ZF was on the air, you could hear WENR very plain in between 2ZF musical numbers. This might be of some interest to DX listeners as to a station below 200 metres. Has any one heard this one. It is harmonic of 3LO. It was at speaker strength on October 25. Cheerio—DX, Okato.

#### "The Pro's and Con's of 2YA's Transmission."

**SINCE** my last letter on the above subject, which you kindly gave space as a special article, I venture to submit a little more criticism, of a constructive nature, I hope, of the transmission. I have kept 2YA under close observation for a long time now, listening every evening it is on the air, without exception. Lately 2YA has not been fading so persistently as previously, but still mashes badly. My last remarks on this subject drew the anticipated "bites" from those—in two cases I have proof—who are inexperienced listeners who have only had sets for a few months and therefore cannot be expected to offer anything in the nature of reliable information on the subject; the other, an Auckland listener, apparently replied to boost his prowess as a constructor and the capabilities of his wonderful English set. The night that 2YA put over his "frequency" tests was, to my mind, one of the worst transmissions he has ever put on the air, or, at any rate, that has been received from him! He faded, mused, and blasted persistently, but, lo and behold, when he came on the air again at ten-thirty the same night he put over half an hour of the most perfect reception I have ever had from him—no fades, no mush, and no blasting! Several listeners to whom I spoke the following day referred to the vast difference in the two transmissions. Why?

A few weeks ago another experience: on each alternate night during the week he seemed, and was, different. The first he had an objectionable generator hum, faded badly, but no mush, and with beautiful full, round tone; the next and alternate nights throughout the week there was an entire absence of hum, slight fading, but bad musing and blasting, and the tone was harsh. This second condition was more like his general reception here, but since then, however, he has shown considerable improvement in all-round reception.

Another objectionable feature of recent innovation: when the announcer announces an item he comes in with great volume and good modulation, but as soon as the item starts the volume is only about half of that of the announcer. You raise the volume of the set to bring in the music, etc., at natural volume, and then when the announcer comes in again there is a roar and a blast, and, owing to the enormous volume, you can hardly discern what is being said. This is no doubt being done intentionally, as one effect of it has been to practically eliminate all traces of blasting during an item. So much for this time. I also heard the test transmission from Wanganui about the beginning of the month, and it came through very well indeed, and there appears to be no reason why re-broadcasts of this nature could not be satisfactorily staged. The "flight" re-broadcast was a triumph for the company, and they must be congratulated upon it. There only remains a little clearing-up of the modulation, and 2YA would then compare with the other YA's with, perhaps, the exception of 3YA. The "fade" is now not so bad, but the "mush" is still objectionable. Thanking you for your space,—"Napier."

[Some tests of a comprehensive nature were recently carried out by 2YA with a view to noting effects, and we are inclined to think some of our correspondent's observations apply to the period of such tests. Certain

changes in detail have been made as a result of the experiences recorded.—Ed.]

#### Curious Case of Induction.

**THE** following seems of sufficient interest to bring under your notice. I have a six valve set, the earth of which is practically at the same spot as the telephone earth. I am connected to the public exchange in the township five and a-half miles distance. The telephone line is a metallic circuit for three miles from the post office, the other two and a-half miles being earth return. Last night when listening to 2YA the exchange attendant rang me up to ask if I had the wireless going. He informed me that he could hear the music perfectly even though my telephone receiver was on the hook. I may mention that my aerial crosses the telephone wire at a height about 25 feet above it, and at an angle of about 45 degrees. I am interested to know if you have heard of this before and what the explanation is.—Interested (Lake Wakatipu).

[The cause appears to be audio frequency current inducting into the telephone circuit, owing to the proximity of the earths, and probably because filament circuit of the valve set is connected to the earth terminal. If this is so try disconnecting the earth connection from the filaments. The easiest way out of the difficulty is to shift the earth or failing that erect a counterpoise. Cases are on record in which the carbon granules in the telephone microphone have acted as a detector, thus enabling broadcasting to be heard in a telephone circuit. This, however, is not the case in this particular instance.—Ed.]

#### Praise for 4YA.

**THE** Wellington station seems to have received the greatest thanks for the Tasman flight broadcast. I wish to praise 4YA staff who to my mind achieved the best results. At one part of the flight (I think about 8.30 a.m. on the Saturday morning), 4YA gave the latest news from the 'plane received but a few minutes before. The announcer then said they would rebroadcast 2YA Wellington and to our amazement 2YA gave the "latest" news which was nearly one and a-half hours old compared with the Dunedin information. Evidently the staff at the Dunedin station is one of the best in New Zealand. Why then does not the R.B.C. pay more attention to its station? On an average the other company stations are on the air each twelve hours longer per week than 4YA. Why is this so? Is the 30/- obtained from Dunedin worth less than 30/- from any of the other three districts? I notice other listeners inquiring for dinner music. If they want dinner music or luncheon music let them tune in Dunedin and they will

get it—from our private stations 4ZB, 4ZL, 4ZM, 4ZO. Enough of growling. We hope the company will take more care of Dunedin in the future.—Dunedin Listener. P.S.—Many thanks for 2YA orchestra. It's great.

[2YA was working on official news which was given immediately it was available and summarised at each hour. Praise of 4YA is appreciated and needless to say all will be glad when it becomes possible for the Otago listeners to increase their numerical strength and the station to grow in importance.—Ed.]

#### All for a Penny a Night.

**I** HAVE only one complaint to make about broadcasting and the "Record" and that is that you publish the foolish letters of unreasonable amateurs who complain about everything under the sun being wrong with the Broadcasting Company, and the artists, times, items, etc. If these disgruntled people would stop playing round with toy crystal sets and buy a set capable of at least bringing in the four main New Zealand stations then, when hearing anything they did not like, what is easier than switching over to another station or closing down altogether? I have only a 4 valve reflex set but have a choice on good nights of 16 Australian and New Zealand stations for loud speaker work, and on off nights when static is present can count on the three main Australian and whatever New Zealand stations are running. If one can't get something to suit and please out of such a selection there are still lots of smaller powered stations to be picked up on earphones, etc. There is evidently no pleasing some people. It only costs a 1d. per night, for an entertainment one might otherwise have to spend 2/6 to go to a concert to hear similar music, etc. I for one am quite satisfied with everything connected with New Zealand broadcasting and wish to express my appreciation of both your paper and the 365 splendid concerts one can attend all for the modest sum of 30/- plus 12/6 per annum.—Frank H. Pearce (Bluff).

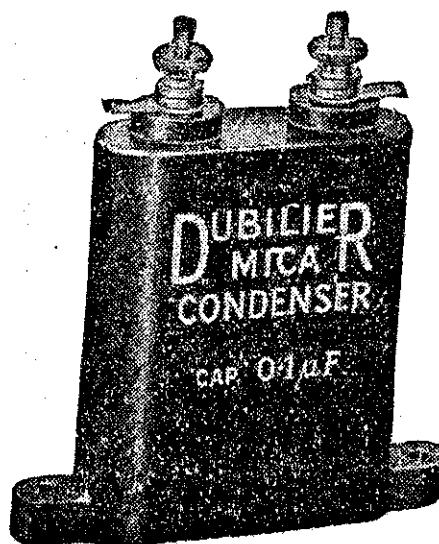
#### AMATEUR RADIO SOCIETY OF WELLINGTON.

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# Crystal Set, Wave Trap and Detector for Valve Sets

## Will Cut Out the Local Station

By "Pentode"

**C**AN you cut out the local station? "That is the question asked everyone who has a multi-valve receiver. Answers vary, and it does not always follow that because a man has six valves, one after the other, he can cut out the local station and "drag in the Aussies." The prospective buyer then asks, "Why the need for so many valves when all one hears is the home programme?" More often than not the nearby station is somewhat distorted by having to use so many valves and depending on de-tuning to cut down the volume. People say that reception on a crystal is so much clearer.

It is not generally known that a valve used in the proper way can give less distortion on a powerful signal than a crystal. However, that is beside the point. In the majority of cases the distortion that arises when using a powerful receiver on a nearby station is due to overloading of the high-frequency and detector valves. And so it is that many people blame the broadcasting station when the trouble is right at home with them.

The writer has often thought of the need for an efficient wavetraps combined with a crystal set. The one now to be described, however, has many salient points in its favour. In itself it is a long-range crystal receiver, and can be used with the 'phones or coupled to a single or two-valve amplifier.

When the 'phone plug is disconnected it forms an efficient wavetraps for use in the aerial lead of any valve set. There is also another use to which it can be put. By making the special adapter, described here, the detector or first audio valve of any set can be taken out and the adapter plugged into their places. When arranged this way, your three, four, five, or six-valve set is converted to a crystal detector with one or two audio stages. The high-frequency and detector valves

can then be turned out. Besides a great saving in battery current, there will be a decided improvement in the tone of the local station. It can be used in three different ways, and being easy to construct, the assembly should present no difficulties to the merest novice.

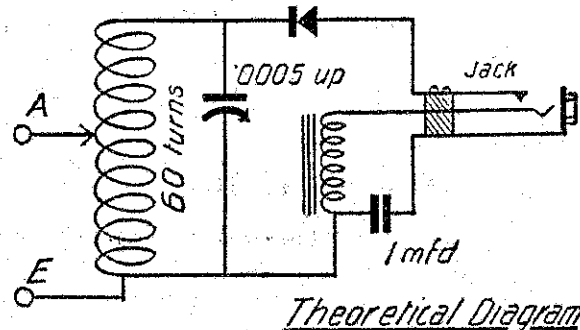
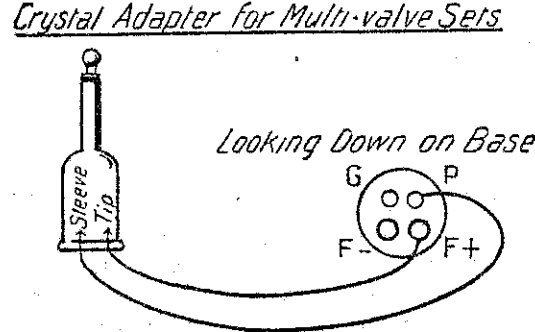
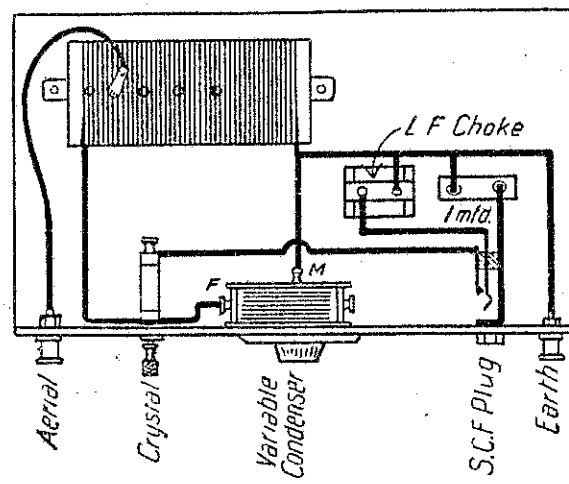
### Making the Coil.

**FIRST** there is the coil to be made. This is of the space wound, low-loss type, wound on celluloid. Procure a sheet of clear celluloid 10in. x. 6in. and cut two strips half an inch wide from one side. The remaining piece, five inches wide, is wound round a 3-inch former (after winding 2 or 3 layers brown paper to prevent celluloid from binding) and a touch of celluloid cement spread along the overlapping edges. If there is more than  $\frac{1}{4}$ in. overlap, the surplus should be cut off before cementing. If the wire is inclined to be twisted or kinked on the reel, sufficient should be wound off in an open space (about 48 feet will be required) and stretched slightly until it is quite straight. Two small holes are made at one end of the celluloid former and the end of the wire threaded through. Spacing is done with the aid of thin string, or better still, a length of 22 or 24 gauge wire. Whichever is used for the spacing, it is wound on at the same time as the straight wire already mentioned. When twelve turns have been put on, make a twist or loop in the wire on the op-

posite side to the cemented seam. Afterwards these twists are cleaned and are used to make variable tapings from the aerial. A similar twist is made after the 18th, 27th, 38th and 50th turn. These loops are made in a straight line all on the same side of the coil and project about  $\frac{1}{4}$ in.

Wind both the spacing wire and coil wire on fairly tightly and when 60 turns have been put on fasten the coil wire to the celluloid. A good plan is to wind on a few more turns than necessary, drill a hole through celluloid and former and fasten the wire tightly at the end.

**NOW** carefully unwind the spacing wire or string, taking care not to disturb the even spacing of the wire



on the coil. The whole should then be given a liberal coating of celluloid cement. A good formulae for making celluloid cement is to get a chemist to mix equal parts of amyl acetate and acetone, into which should be placed a few strips of clear celluloid. Amyl acetate alone takes too long to dry, while acetone dries quickly but tends to peel off as a consequence. Put the coil in a warm place to dry as moisture makes the cement go milky. When quite dry slide out the centre former. Unwind the few turns extra and leave about six inches of wire at each end.

Both ends can now be trimmed off close to the wire with a small pair of scissors. The two strips  $\frac{1}{4}$ in. wide are now cut to a length about one inch longer than the coil, and a quarter of an inch from each end an  $\frac{1}{8}$ in. hole is drilled. When put one on each side of the coil seam and screw down to the baseboard on two blocks of wood, about  $\frac{1}{4}$ in. high, this makes an excellent holder for the coil. So much for the hardest part of the construction.

**THE** plan below will give an idea of the disposition of the components. The ebonite panel is drilled and screwed to the front of the baseboard. In the centre of the panel is mounted the variable condenser, while on either side at the bottom are the detector and single circuit filament jack. At the two top corners holes are drilled for two terminals. Just behind the variable condenser the choke is screwed. The secondary winding of a burnt-out transformer will do quite well in place of this choke. A 1 m.f.d. condenser is fixed in place immediately behind the jack. By following the wires on the wiring diagram, no difficulty should be experienced in the wiring up of the parts. Thick wire, square busbar or No. 18 S.W. and tinned copper, should be used in this receiver, as when used as a wave-trap. The whole tuning unit has to have as little high-frequency resistance as possible.

Here is a point to point wiring list. Join left-hand free end of coil to back holding nut of detector and also to the moving vanes of the variable condenser. The other end of coil winding is connected to the following points: Moving plates of condenser, one terminal of choke coil, one terminal of fixed condenser and then to the earth terminal at the top of panel on left. The other end of choke joins to the centre lug of the jack. The top lug of the jack runs to the other end of the detector. The third or frame of the jack is connected to the free terminal on fixed condenser. On the aerial terminal is joined a length of flexible wire with a small metal clip fastened to the other end so that the clip can be moved along the variable tapings on the coil until the best position is found. When completed thus far we are all ready for a trial run. A plug will have to be attached to the 'phone cord and inserted into the jack. Join up the aerial and earth to their respective terminals. By tuning the variable condenser the local station should come in strong and clear.

### As a Wave-Trap.

**WHEN** used as a wave-trap the aerial is still connected to the aerial terminal, but the earth terminal is joined, by a length of wire, to the aerial terminal of the set. The ground or earth is connected to the receiver as usual. When it is being used in the capacity of a wave-trap the 'phone plug should always be taken out. This automatically breaks the detector circuit and leaves just the coil and condenser free. To operate, set the receiver dials to the readings of a distant station. The local will be heard in the background more or less stronger than the desired station. Now turn the variable condenser

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on the trap, and it will be found that the interference is cut out and distant stations come in without a trace of the local. It will be noticed in some cases that the aerial condenser on the receiver has a different reading than when used without the trap. This is due to the effect of another tuned circuit—the aerial lead.

#### For Use With a Valve Set.

THE next part to be constructed is the connector, for use when using the last one or two valves in the set. Care must be taken to see that all the following connections are made the correct way round. It wouldn't do to say what might happen if a mistake was made, especially if the receiver was earthed as well as the crystal set.

It is assumed that the reader has at least one valve with a burnt-out filament! Break away all the glass and clean the solder from the tips of the pins. A small hole can be seen running down the valve legs, and it is through these that connections are made. About a yard of twin flex is obtained. Clean the wires at each end, and tin the ends to facilitate soldering. Now, look down on the valve base, with the legs underneath, and the pin at the back, push one wire down the plate leg (the right-hand top corner), the other wire, push in the hole of the

filament positive leg (the right-hand bottom corner). Take a note of the colours. In some plugs it is quite easy to see which is the tip and which the sleeve connection. (Igranix patent plug is recommended.) The wire fastened to the plate leg in the valve socket is soldered (soldering is preferable, as no mistakes are made), to the sleeve connection of the plug. The filament positive lead joins on the tip of the plug. If coloured flex is used it is quite simple to follow these instructions. So much for this part of the business.

CONNECT up the crystal set as though the phones were to be used. Now push in the adaptor plug, and take out the detector valve of the big set. In its place insert the adaptor socket. Switch on and listen. The R.F. valves can then be either turned out or taken out of the set all together. If the volume is too much with two audio valve, this adaptor can be plugged into the first audio socket, and have merely one amplifying valve on the crystal.

If, in any of these constructional articles there are any difficulties encountered by the builder, the writer will be pleased to help to make it clearer, and would appreciate any reports of the results of the constructor's efforts.

### List of Components Needed For Combined Crystal and Wave Trap

- 1-lb. 20 s.w.g. wire d.c.c.
- Strip of celluloid, 10 inches x 6 inches.
- 1 Variable Condenser, .0005 up.
- 1 Semi-Permanent Crystal Detector.
- 1 single filament Jack (Igranix No. 65).
- 2 Terminals.
- 1 Choke (or secondary of burnt-out transformer).
- 1 Condenser, 1 m.f.d.
- 1 Spring Clip.
- Ebonite Panel, 9in. x 6in.
- Baseboard, 9in. x 8in.
- 2 Terminals.

### Tips and Jottings

#### The Pentode Valve.

THE pentode is a five-electrode power-output valve with a high magnification factor, but in which the usual low mutual conductance associated with high magnification valves has been avoided. One of these valves can replace two audio valves in the average receiver, or where there is only one audio stage, a pentode in place of the ordinary valve will mean much louder signals. Most listeners will, of course, replace the last valve with a pentode when it is desired to try the effect of the new audio valve.

#### Increasing B Eliminator Voltage.

IN the case of a B eliminator not delivering sufficient voltage for the plate of a super power-valve, the output voltage of the whole eliminator may be raised by the simple expedient of placing a double-wound step-up transformer at the input, so that according to the step-up ratio the voltage to the eliminator would then be 250, 270, or more, and the output would

be correspondingly increased. The ratio of an eliminator transformer on 230 volt supply is usually about 1 — 1, so that the additional step-up transformer would not have a ratio of more than 1 to 1.25 or 1 to 1.5. Unless the eliminator contains high test condensers they would have to be charged for a type to stand up to the higher voltage.

#### Raytheon "A" Rectifiers.

SEVERAL correspondents have enquired as to the method of using the Raytheon cartridge for A battery charging. There have been some reports of failure with these rectifiers, but they appear to have been due to overloading. The manufacturer's statement of the amount of current they will pass is rather liberal, so that say two-thirds is a safe working output. For their use a good plan is to construct the A battery charging transformer described on March 2nd, but without filament winding, and with 120 turns secondary tapped in the centre giving 8 to 9 volts each side, regulated by one or two taps at the outside ends. For half-wave, using only one cartridge, only one half of the secondary would be used, giving one amp. Full wave,

using two cartridges, would give two amps. without overloading.

For full wave the centre tap is negative. The case of each cartridge is connected to a respective outer end of the secondary. To each small end of cartridge is connected a 10-amp. fuse, the outer ends of which are connected together to form the positive output. For half-wave the cartridge is similarly joined to one side of secondary, its thin end being positive, whilst the other lead includes a 10-amp. fuse, and is the negative.

#### Connecting B to C.

IN the construction of a receiver the B battery negative lead is usually connected to the A plus terminal. The main object in this is to obtain a few volts higher potential on the B battery. Less risk of "blowing" the valves would be run if B minus was connected to A battery negative. The

few volts lost would be negligible. In the majority of sets the A minus is direct to earth. If by any chance the B plus terminal touched the earth or aerial wires or fell over, catching the C battery, then the B battery would short circuit, but the valves would still be whole, which would not be the case if B minus was on A plus and the filament switch was turned on.

#### New Linen Diaphragm Speaker.

BY the time this issue is out of the press the new Linck diaphragm speakers will be on the market. These will be available as kit sets, including unit, linen, with wooden frame, and "dope" to treat the material after fixing it on the frame. Units alone will also be obtainable, and these will prove eminently suitable for the home construction of cone or double roll speakers.

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	147 Queen Street, Auckland.
BURGESS RADIO BATTERIES,	All Radio Dealers.
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	8 Darby Street, Auckland.
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GREBE RADIO .....	Howie's, Dilworth Building, Custom st., Auckland.
MULLARD VALVES .....	All Radio Dealers.
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RADIOLA RECEIVERS and Expert Radiola Service.	Farmers' Trading Co., Ltd., Hobson Street, Auckland.
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CROSLEY ELECTRICAL AND BATTERY MODELS .....	The Forrest-Crosley Radio Co., Ltd. Cuba Street, Palmerston North.
GAROD, CROSLEY, RADIO AND ACCESSORIES .....	The Hector Jones Electrical Co. King and Queen Streets, Hastings.
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RADIOLA DEALER AND SERVICE .....	G. C. Carrad. 140 The Avenue, Wanganui.
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## The Construction of the Pentode Valve

### A Power Valve With Unequalled Amplification



It has been stated by a wireless correspondent to a London paper that there are over 1200 different types of valves on the market for the amateurs to choose from. Little wonder, then, that the man who has just dropped a valve is rather puzzled when he has to choose one as a replacement from this selection. We are constantly hearing of a new valve with improved characteristics being offered to the public and before we venture to speculate on a new valve with tremendous claims, we generally wait until a friend has tried one out. There is one valve, however, which can be purchased without waiting to hear how Mr. So and So got on last night with his.

This is a valve for the last stage called the Pentode, the one to be described being the B443, made by Philips Lamps, Ltd. A similar valve is made by Mullards, PM22, and the following remarks as to general characteristics are equally applicable to it.

The control grid acts in the same way as the usual grid in the three-electrode valve. Surrounding this is another grid with a lead brought out to the small terminal on the side. Between this grid and the plate is yet another grid. This is called the "earthed grid," and is connected inside the valve to the centre of the V-shaped filament. Its use will be described later. The plate surrounding the whole is connected to the usual plate pin in the base.

Negative grid bias is applied to the inner or control grid as is usual with every other type of power valve and with 150 volts on the anode, 15 volts negative bias is required on the grid. To the second grid a high potential is applied, and this is done by connecting the small terminal on the cap by a piece of flexible wire to the B plus amplifier terminal. The earthed grid at first appears to have no value, as no connection is made to it outside the valve. Under working conditions the plate is undergoing a bombardment of electrons given off by the filament. So-

### Forthcoming Features

"Pentode" will describe in future issues:

1. Shield Grid 5-Valve "Browning Drake."
2. "All-From-Mains" Crystal Amplifier.
3. Pleated Diaphragm Speaker.
4. Whole-wave Crystal Set to Work Loudspeaker.

WATCH FOR THESE ARTICLES—THEY WILL BE WORTH WHILE.

When the radio enthusiast reads of its characteristics he will wonder if the writer is often given to such hallucinations, and he will have every excuse when it is stated that here is a super-power valve with an amplification factor of one hundred. Much has been said of the screened grid high frequency valve. It has been tried and has proved its merit. Well, here is a screened grid power valve.

#### The Internal Construction.

AS its name implies, the Pentode has five electrodes. To look at, it is the same as any other valve except that it has, at the top of the base, between the glass and moulded cap, a small terminal.

If one could see inside a big difference would be noticed between its construction and the assembly of the triode. Instead of the usual single grid there are three grids. The necessary extra supports give the whole a very complicated appearance and one wonders at the workmanship displayed in getting the three grids and filament surrounded by the plate. The valve is supplied with the standard American base and is easily adaptable to any set using one or two stages of low frequency amplification.

It has been stated already that there are three grids. The inner or con-

called secondary electrons are reflected by the plate and tend to return in the opposite direction to the second grid, which is also at a high potential. The use of the earthed grid is to prevent this return flow of secondary electrons, which if allowed to take place would upset the working of the valve. The earthed grid being at earth, potential absorbs these stray electrons and leads the charge back to the filament.

Four volts are applied to the filament of this valve. Those readers who are using 4-volt valves in their sets will have no trouble. Just plug the valve into the last socket and connect, with a piece of insulated wire, the small terminal on the side to B plus amplifier or to the highest value used on the B battery or eliminator.

#### Fitting the Pentode.

A LITTLE difficulty may be experienced in adapting this valve to a receiver using 6-volt valves. The Pentode would soon be useless if 6 volts were run for any length of time through the filament, and a resistance will have to be used to bring the voltage down to four. As the valve takes .15 amps the value of this resistance will have to be about 14 ohms. Unless a 20 or 30 ohm rheostat is used to control the last audio valve only, the additional resistance will have to



# Far-reaching Effects of Two-way Telephony

ONE by one the great stretches of continent and ocean are being conquered and regular reliable services on telephony are being established. Only a short while ago regular two-way communication was established between England and America. Now another expanse of ocean has been traversed and Australia talks to America and Java.

## Recent Experiments.

LOCAL listeners have for some time been reporting the increasing perfection of the tests between 2ME (Amalgamated Wireless, Sydney) and W2XAF (Schenectady, New York). Remarkable tests have been carried out. About a week ago the officials of the Sydney station carried on a conversation with the announcer at Schenectady, nearly 10,000 miles away. The signals remained perfectly steady for an hour, and the men spoke to one another as over a telephone line connecting two neighbours.

This was one of the first successful sustained conversations held over that vast expanse of water—the Pacific.

"HULLO, Mr. Farmer," called the American. "This is station W2XAF of the General Electric Company, Schenectady, U.S.A., testing with 2ME, Sydney, Australia."

"Hullo, W2XAF. Hullo, Mr. Hitt. This is 2ME here. Just give me a few moments until I tune you in," was Sydney's reply.

"I say," called the announcer in New York, "it certainly is a thrill to talk to another country like this. Your signals are coming in here beautifully now. You seem to stay consistent. Your wave does not go up and down at all."

"Hullo, Mr. Hitt. You are coming in here in tremendous strength; so loud that I will give you a reading on the micro-voltmeter," Sydney replied.

"That's good. I must be giving you enough juice to charge your A batteries with," was the American's humorous reply.

Greetings from various other people in Sydney followed, and then a long technical discussion between the operators.

After an hour the signals began to waver, and finally became indistinct and faded out. This, it is suggested, was due to the heavy rain that fell in Sydney at the time.

## Successful Conversations.

FOLLOWING this, a further series of conversations has taken place. To create general interest, for those conversing have a huge unseen, unheard audience, the talk has to be carefully chosen. The American elections proved quite popular, and enlightening.

The conversations are creating general attention and excitement. Folk are travelling hundreds of miles to talk across the Pacific. In America the conversations are being rebroadcast on long wave by WGY.

FOR the purposes of a check-up, the following are the names of the speakers heard from 2XAF:—Hitt, wireless operator; Rowland, General Electric Company; Dow, Australian Trade Office; South, of the Associated Press; Geber, of the United Press;

Stokes, of the "New York Times"; Rochester, manager, of Vancouver; Shaw, of the Keene, New Hampshire "Sentinel"; Hawkins, "New York Tribune," and Rothman, Australian Press Association.

## The 10-Meter Band.

THE ultra-short waves, which are receiving more and more attention, are to be called into operation in the near future, and tests on 10 meters are being conducted. The principal difficulties on this wavelength are the direction of the beam and the time. However, a new transmitter is being erected in Chicago by which experiments are to be conducted.

## New Zealander Takes Interest.

AS in every other aspect, New Zealand was not for long "left out of the picture," for a Gisborne man, Mr. Ivan M. O'Meara, carried out tests on 10 metres and succeeded in establishing two-way code communication with Californian station. This amateur is conducting a series of important tests on this low wave and their result is keenly awaited.

For some considerable time ten meters has been considered too low to be of any commercial value, but in Mr. O'Meara's opinion the time is not far remote before there will be a regular ten-meter wave service.

Mr. O'Meara has maintained a two-way communication with an Adelaide amateur, which is a feat by no means common among amateurs in these two countries.

## Communication with Java.

TWO-WAY communication has not been confined to the States, and the latest cable message states that Sydney people have been enabled to talk to Schenectady and Java. The reception, it is stated, was clear, and items of news exchanged as if talking from one town to another near-by town.

## Great Results to be Expected.

THERE is no doubt that these experiments have a definite bearing on the future. Now in the experimental stage, they will, ere long, be placed on a commercial footing which will mean a great deal to the relationship of the countries concerned.

For long Australia and New Zealand have been considered as important islands only, but now that we can talk with our great neighbours it will be realised that we have, as well as they, a live existence—a nationality.

Items of every day occurrence of which the interest is mainly dependent on the factor of recent occurrence will be passed over the sea as though from one backyard to another.

IT is a common saying of people meeting for the first time someone whom they have heard much about and perhaps had dealings with to say, "How different from what I pictured." On conversing an entirely new opinion is received. One sees and appreciates the other's point of view.

So it is with this new communication. Through talking with our cousins we are going to learn much that we had not dreamed of before. American history, geography, civics and ideals will hold a charm for us. Likewise, it is to be hoped, ours for them!

be put into the circuit. Perhaps the easiest way to do this is to incorporate another variable rheostat in the receiver. This can be done in the following manner:—

Trace out the filament wiring to the last valve and break the negative lead close to the point where it joins the valve socket. A baseboard mounting rheostat of 20 ohms can be screwed to the baseboard, and the two terminals connected between the spare wire and the valve socket. In this way a variable resistance is in series with the last valve and can be adjusted to take the 4-volt pentode.

With half the rheostat turned on a resistance of 10 ohms is obtained. Turned one-quarter on a resistance of 15 ohms is in circuit. A point just above this should be chosen and this rheostat can be left permanently in that position. By inserting the resistance in the negative lead an additional two volts grid bias is obtained, and this should be allowed for when adjusting the C battery. Instead of 15 volts C battery at 150 volts B battery, only 13 should be used.

As this is a power valve with a large amplification factor, care should be taken not to overload the input. Under correct working conditions, one pentode is equal in volume to two stage using ordinary valves. Using a gramophone pick-up plugged into the detector socket of a receiver with two audio

stages, reproduction was given far louder and of better tone than when the same pick-up was connected to a three-stage amplifier using a power valve of the ordinary type.

Just as the screened grid is superior to the general-purpose valve for high frequency work, so is this new pentode better for power amplification.

Research is giving new discoveries every month, and, who knows, perhaps we will have the cold or filamentless valve one of these days.

BELOW is given the characteristics of the B443 Pentode as supplied by the makers:—

Fil. Voltage .....	4 volts.
Fil. Current .....	.15 amp.
Anode Voltage .....	50-150 volts.
Screen Grid Voltage ...	50-150 volts.
Total Emission .....	50 m.a.
Impedance .....	55,000 ohms.
Amplification Factor ...	100.
Mutual Conductance ...	1.8 m.a./volts.
Normal Anode Current	12 m.a.
Grid bias at 150v. on anode .....	15 volts.

A POCKET radio set without batteries, aerial or valves has been designed by an American constructor. It can be used effectively up to a distance of ten miles from any broadcasting station.

## Parcels by Rail

### ANOTHER CONCESSION.

The Railway Department has decided to remit the extra charge on parcels for which the carriage is not prepaid. The use of freight stamps on parcels is now optional.

The Railways give the quickest, safest and cheapest parcels service.

"MATER" (Kelburn) drops me an enthusiastic note about the children's sessions by 2YA, Wellington. She remarks: "My boys listen with the greatest interest to the fine manly advice the radio uncles give the various children. They weigh his words carefully and their comments would gladden the hearts of the uncles if they could hear it. I think the children's sessions must be having a wonderful influence on juvenile listeners—a truly beneficial influence. Our wireless set has brought a new interest into our home, and the children's sessions are awaited eagerly each evening."

A MELBOURNE radio writer makes the following excellent suggestion:—"In the country, when the danger of interference from a nearby station is reduced, larger aerials can be used. The factor governing the size of the aerial then becomes the amount of interference which is caused by static. It will often be found wise to erect two aerials in the country. One should be long and high, and should be used whenever interference is not caused by static, while a much smaller one can be used in sultry and hot weather, when static is prevalent."

THOSE Wellington listeners who have pleasant recollections of Jack Canot as the "dame" in visiting pantomimes and in comedy roles in musical comedies, must have enjoyed his vocal items from 2BL, Sydney, recently. The festive Jack sang "straight" songs most tunelessly before the microphone.

A PHOTOGRAPH is to hand showing the Don Lee—KHJ (Los Angeles) Symphony Orchestra, which comprises 23 performers and the conductor. This is one of the largest orchestras in the United States under exclusive contract to an "independent" radio station. KHJ is about one or two metres below 4QG, Brisbane.

THE recent long-distance short-wave telephonic tests between 2ME, Sydney, 2XAF, Schenectady, and ANE, Bandoeng, Java, were heard in Wellington by Mr. S. W. Pierce, of 8 Shannon Street. Some of our short-wave amateur listeners are accomplishing very excellent work.

THE Australian stations lately have given us a surfeit of political addresses, and they are damping interest in some of the trans-Tasman stations. Fortunately, through co-operation, no two stations in one Australian city broadcast political speeches on the

same evening. So if 2FC, Sydney, is giving us political "cackle" we can still get music from 2BL, Sydney.

HEARD a discussion the other day among half a dozen radio music-lovers as to the most enjoyable item in a certain radio programme. The unanimous verdict went to "O Mimi tu Pin" (from "La Boheme") sung by Beniamino Gigli and Giuseppe De Luca. There were several fine records in the programme, yet these six critics selected the above item.

MR. Claude P. Grey, of Shannon, has received confirmation of his reception of a programme from WENR—WBCN, Chicago, 50,000 watts, on August 19. These Chicago stations are now giving regular weekly features from midnight Saturday until 3 a.m. Sunday, which is equal to 6 p.m. till 9 p.m. Sunday, New Zealand time.

MR. de Mauny's orchestral concert proved the most artistic orchestral performance yet put across by 2YA, Wellington. Listeners are appreciative of the action of the Broadcasting Company in opening up 2YA on its silent night, specially to broadcast this great musical treat.

MR. de Mauny's orchestra certainly displayed delightful musicianly skill, and their combination was proof of the efficiency of the conductor, and good practice. The items were, if anything, above the musical taste of the majority of the listeners with whom "Switch" has discussed the subject. Suggestions were made that the instrumental items should have been interspersed with occasional vocal numbers by a male and female artist of standing. The orchestral items might also have included two or three compositions a little less "high-brow." One musician mentioned the inclusion of a grand opera overture which is of a popular type.

ALL broadcast listeners will be interested in the movement in Wellington to permanently establish Mr. de Mauny's Symphony Orchestra. The proposal is to give three concerts a year for subscribers, but probably popular demand may tempt the organisation to double that number of concerts.

## Notes and Comments

By "Switch"

THE heavy winds to which Wellington is subject frequently deprive listeners of their aerials through their masts being carried away. A listener in the Mount Victoria area had his lead-in end mast snapped during a recent blow, but he did not disappoint his guests that night; his set operated off an indoor loop as an alternative to the outside aerial.

SOME of the Wellington radio traders have decided to exploit election night to its utmost. As 2YA, Wellington, is going to do the thing thoroughly, and progress results are to be announced as soon as they come to hand, broadcast listening should receive another tremendous boost. Traders propose to have loud-speakers placed so that the public can listen to the announcements from 2YA. It is going to be a big night for radio.

AN amusing episode occurred during the relay by 2YA, Wellington, of Mr. de Mauny's orchestral concert. A lady, whose voice reached the microphone, was heard protesting against being moved from a seat which apparently was reserved by someone else. Her remarks provided amusement for listeners for hundreds of miles around.

IT is the fate of all broadcast stations to go off the air accidentally through some unforeseen circumstance, and then it is that some listeners commence to tinker with their sets; imagining that something has gone wrong inside. A friend suggested that 2YA, Wellington, should hoist a red light from one of its masts when a breakdown has occurred. The same suggestion was made at a meeting of the Wellington Radio Society, but as the majority of listeners are not within view of 2YA a humorist suggested that a better method would be to fire a cannon!

THE howling valve pest has shown a slight abatement in some areas of Wellington, but it is difficult to account for this improvement. Some folk attribute it to the decrease of one and two-valve sets, more valves being added to the smaller sets so that listeners get distant stuff without having to strain their sets. The champion howler, however, was on the air on Tuesday night, October 30. He got on to 2BL, Sydney, immediately 2YA closed down, and he howled there continuously until 11 p.m. exactly. If this meets his eye it is hoped he will take the hint.

THERE is an increasing interest by Wellingtonians in the electro-dynamic loudspeaker, which is generally admitted to be the last word, so far, in speaker design. Some ingenious listeners are building their own electro-dynamics from imported parts. Those who have heard a high-class electro-dynamic (or "moving coil") loudspeaker will find a new interest in radio. Naturally, like all loud-speakers the electro-dynamics vary in quality.

THOSE who operate the console type of electro-dynamic loudspeakers should be extremely cautious in making any adjustments when the current is passing through them. "Switch"

saw a friend receive a shock from 750 volts from the "innards" of one of these speakers a few days ago. The shock proved a most unpleasant experience. Ordinary care would have precluded such a happening.

IT frequently happens that after having installed a receiver, a listener purchases a second one of a different kind, using the two sets in the one house. A second aerial to operate the second set in a different room is often erected. In these circumstances there is frequently a feeling of uncertainty whether a second license should be taken out in respect to the second receiver. The position adopted by the Commonwealth Postmaster-General's Department is that if one family has installed two different receivers in the same house the one license will cover the two. If, however, there are two separate families occupying a house, each using a wireless set, each family must obtain a license.

THE amalgamation of the concerns operating the Melbourne broadcasting stations, 3LO and 3AR, is registered as the "Dominion Broadcasting Pty., Ltd." The use of the name "Dominion" is unfortunate, being more applicable to a New Zealand organisation, whereas "Commonwealth" would have been perfectly appropriate.

A 2FC (Sydney) correspondent wrote from Auckland (N.Z.) that he had perfect reception of a Sydney programme the other night, on his crystal set. The management of 2FC remarks: "He goes on to give the items heard, quite correctly, and is evidently convinced that he has something very wonderful in the way of crystal receivers. We do not wish to dampen his enthusiasm, but he has evidently never heard of re-radiation. This is a phenomenon which often accounts for the seeming miracle of a crystal set being able to pick up a programme transmitted hundreds of miles away. The explanation is simple. It means that somewhere near where the owner of the crystal set resides is another wireless enthusiast who possesses a powerful valve set. As occasionally happens, the crystal set picks up the programme from the valve set." Well, despite the theory of re-radiation causing crystal long-distance reception, "Switch" knows of incidents which tend to prove that certain long-distance feats with crystal sets were not aided by re-radiation. The extreme isolation of the crystal sets referred to proves re-radiation was not "somewhere near."

A NEW SOUTH WALES listener reports:—"I am in receipt of confirmation of my reception of two Indian stations, 7CA and 7BY. These stations are on the air at about midnight (2 a.m. New Zealand time) and on favourable nights can be heard at good strength until about 2 a.m. (4 a.m. New Zealand time). On Sunday nights from about 11.30 p.m. (Sydney and Melbourne time, 1.30 a.m. New Zealand time), the Calcutta station broadcasts a church service, generally Church of England. This is followed for about two hours by an Indian programme. The week-night programmes generally run a little later. The Indian Broadcasting Company advises that the wavelengths are: Bombay station, 357.1 metres, and Calcutta, 370.4. During the last month the call-signs of both stations were altered. 7CA (Calcutta) is now VUC, and 7BY (Bombay) is now VUB."

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# Children's Sessions

## AT 1YA.

**TUESDAY, NOVEMBER 13**—Ho! Ho! Old King Cole and his merry fiddler are with us again. They have all sorts of merry songs and sketches to amuse the Radio Family, so look out for a jolly hour. Uncle George will also be there with bedtime stories.

**WEDNESDAY**—Uncle Tom as usual, full of original stories and musical ditties. Cousins will have songs and recitations to give, too.

**THURSDAY**—Peter Pan in charge, and the pupils of Miss Blamires will be present, with an entertaining programme of duets, songs and pianoforte pieces.

**FRIDAY**—Nod and Aunt Jean in their usual cheery style, with stories, songs and birthday greetings. Cousins will sing and the gramophone man will be present with records and a little talk about them.

**SATURDAY**—We are sure of an interesting hour to-night, as Mrs. Carte-Lloyd is bringing her clever little pupils to the studio. They have plays, sketches and monologues, and Cinderella will have stories and birthday greetings.

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

## AT 2YA

**SUNDAY, NOVEMBER 11**—The Children's Song Service will be conducted by Uncle Ernest, assisted by St. Mark's Sunday School choir, under Mr. E. W. Marks.

**MONDAY**—Three little cousins to-night, who will sing and recite. Uncle Jeff will give birthday greetings and puzzles, so have pencils and paper all ready. Aunt Gwen will be there, too, with a good-night story.

**TUESDAY**—The pupils of Mrs. Theo Hills have a nice little programme this evening. There will be recitations, musical monologues and songs. Listen for the cock at six o'clock and then Big Brother Jack will greet the little birthday children.

**THURSDAY**—Three little cousins to-night, who give many a happy hour. The pianists are pupils of Mrs. E. Mackay and little Cousin Ailsa will sing some of her charming little songs. Cousin Claude has another of his wonderful Maori stories and Aunt Gwen will be ready with the birthday greetings.

**FRIDAY**—There is a treat in store to-night for little boys and girls. The wolf cubs from the Hutt Valley will be in the studio under the District Cub Master, J. Bugg, assisted by Mr. Royal Nelson. Listen for the cubs' grand howl at the end of

the hour. Uncle Ernest will be here with the birthday greetings and one of his jolly stories.

**SATURDAY**—The little musical cousins will enjoy Cousins Dora and Marjorie's 'cello and pianoforte solos to-night. Then there will be stories and perhaps a song, and of course Uncle Toby and Aunt Gwen will talk to you and send birthday greetings over the air.

## AT 3YA.

**MONDAY, NOVEMBER 12**—Boots! just boots! Hear what Scatterjoy has to tell you on the subject, and you will decide that that homely article, a boot, is surrounded with unusual interest. "Cobbler's Song" will be sung, and Cousins Audrey, Kathleen, Esther and Gladys will provide songs and humorous sketches.

**WEDNESDAY**—Mother Hubbard and Uncle Peter with songs and stories, jokes, and the favourite Maori legends about the Port Hills.

**THURSDAY**—To-night Uncle Hal has a new bag full of tricks for the little ones. Cousin George is bringing his accordeon and Cousin Natalie will play the piano for us.

**FRIDAY**—Big Brother, and the "Cheerio Lads" from the Y.M.C.A. all on deck, with songs and stories. These lads are old friends now and you can all join in their choruses.

**SATURDAY**—Chuckle and Aunt Pat, helped by the girls from St. Saviour's Orphanage, will keep you all happy and entertained during this bedtime hour.

**SUNDAY**—The Children's Song Service, with Uncle David in charge, and the scholars from St. Andrew's Presbyterian Sunday School will sing the hymns.

## AT 4YA.

**TUESDAY, NOVEMBER 13**—Miss Noeline Parker's pupils will be on the air to-night in song and recitation from A. A. Milne. Big Brother Bill has a story to tell about fireworks. And the radio postie will be about his business. 4YA will be worth your listening-in before going to bye-bye.

**FRIDAY**—The Albany Street Boys' Brass Band on the air to-night, and everybody knows whether they are worth listening to or not. Judging from the pleased comments, they certainly are. Brother Bill and Aunt Sheila will be on the bridge. Oh yes, one thing mustn't be forgotten, did anybody tell you the story of the submarine? Well, Brother Bill will tell it to-night.

**A**N unusual application of "wireless" is reported from America, where a tuned circuit and metres, as used for radio, are employed to check the output of chewing-gum machines.

## Rubbing It In

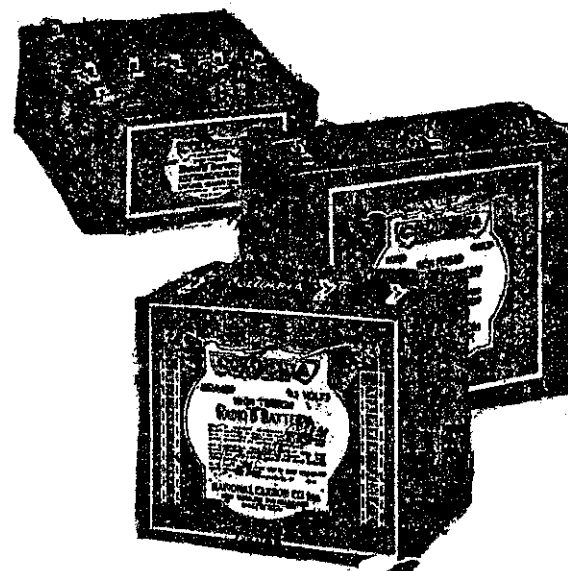
### 3LO and 3AR Criticised

**SOME** of the Australian listeners rub it in about the programmes by their much vaunted stations. A prize for criticism offered by the Melbourne "Listener In" was awarded to Miss Rowland, of Fairfield Park, for the following comment:—

Surely it is time that a strain of originality was introduced into the programmes of 3LO and 3AR. Nowadays we get nothing but repetition. A jazz band continually informs us that "The Song is Ended" (would that it were), and the Barcarolle from "Tales of Hoffman," has lost its bite. A few Sundays ago a band selection of Handel's "Largo" was followed by a contralto

rendering of "Ombra Mai Fu," so that when a baritone declared "It is Enough"—we cordially agreed with him. "Passing By" and "Drink to Me Only" have been languishing (as solos), for the best part of a century, but with any bad luck at all you will hear them at least four times a week, in settings for sopranos, contraltos, baritones, and tenor. During the war period there was a black list in the artists' room at every camp and hospital—giving the names of songs that had been "done to death"—and asking artists not to sing them. Surely this would be a good plan where radio artists are concerned!

**DURING** a recent campaign against opium in China, a number of Chinese speakers broadcast talks on the evil of the narcotic habit. The talks were broadcast from the Kellogg station in Shanghai.



## Improve Your Reception with Powerful Columbia Batteries

**C**OLUMBIA Radio Batteries are made under direct supervision of one of the greatest research laboratories of the world. Only the highest quality materials are used. Every battery is thoroughly tested after every stage of manufacture. That is why Columbia Radio Batteries are the most dependable, the most satisfactory and give the longest service.

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Auckland

MR. F. W. SELLENS (Northland) writes:—

The following is from "The Wireless World": "Is 5SW still experimental? Letters which appear from time to time in the columns of 'The Wireless World' give eloquent testimony to the delight with which 5SW, the Chelmsford short-wave station, is heard in distant corners of the world. But the station is still experimental, and it is rather surprising that the B.B.C. is at present making no systematic attempt to collect reports. When 5SW first opened we were told that expert observers in different parts of the world were to render carefully considered reports on 5SW's signal strength at different times of the day. On inquiring at Savoy Hill, I found that this part of the scheme appears to have fallen in abeyance. Are we to take it, then, that 5SW has now passed the experimental stage and is now the fully-fledged Empire broadcasting station of Great Britain?"

In reference to the above, when announcing from Chelmsford, 5SW is still referred to as the short-wave experimental station, etc.

If conditions are favourable on Armistice Day, reception of the service broadcast from London through 5SW should be received here fairly well. If, as is suggested, this service is commenced at 10.45 a.m., which is equal to 10.45 p.m. here, signals should be readable at first, improving as time goes on. 5SW is much better now during its midday (midnight here) session than it was two or three months back.

**T**HE duplex telephony tests between 2ME, Sydney, and 2XAF, America, have been heard several times since last writing. Their pre-arranged schedule has not been strictly adhered to, except as to the days—Monday, Wednesday and Friday. 9 p.m. till 11 p.m. was to be the time, but it is sometimes earlier and often later.

Reception from 2XAF, which is very good when they close down at 5 p.m. (midnight there) in the ordinary course of events, continues for some time. After a while, signal strength weakens, again reaching good volume about 10 p.m. and increasing as time advances. This condition appears to prevail in Sydney, as the Australian station is able to carry on the conversation easier, with a better percentage of readability later in the evening.

2XAD and 5SW still carry on their early morning duplex telephony tests. The Chelmsford station is always the best at this time.

The short-wave stations of WGY, 2XAF and 2XAD are now having regular television tests for half an hour after their ordinary programme for the evening has concluded.

## Round the World on Short Wave

Notes of special value to short-wave enthusiasts are contributed weekly to the "Radio Record" by Mr. F. W. Sellens, Northland, Wellington. Observations from others are welcomed.

Static has been very bad during the past week, spoiling reception.

**Saturday, October 27.**

KDKA and 2XAD were putting over the same programme from 2 p.m. when first tuned in. After a political talk, the National Broadcast and Concert Bureau supplied the musical items. At 4.10 p.m. KDKA continued from the Italian room of the William Penn Hotel. Signed off at 4.37 p.m. Strength R2 at 2 p.m., increasing to R8 at 4 p.m. 3CM, Christchurch, working another amateur, came in at R7 very clear and steady on 32 metres at 2.15 p.m. PCJJ commenced their weekly New Zealand and Australian transmission at 4.3 p.m. with the National Anthem at R4 with static about R5, spoiling reception. Strength of signals increased to about R8 at 6.58 p.m., when they closed down after wishing everybody a pleasant week-end.

RFM was heard at good strength during the evening, but static was stronger.

**Sunday, October 28.**

It was after 3 p.m. before KDKA was readable. They were broadcasting dance music from the William Penn Hotel. At 4 p.m. messages from friends were read for members of the Byrd Expedition.

2XAF was also late in reaching readable volume. Dance music was heard from the Crystal Room, De Witzler Hotel Orchestra. The programme was broadcast by stations WGY, Schenectady, and WHAM.

In closing they announced that special television tests would be carried out each evening for a few weeks.

RFM was tuned-in at 9.55 p.m., when a violin solo came in very well, but spoilt by static. The usual talk session followed.

Amateurs heard during the day were 2BO, 2BT, 2BI, 2TJ, 3CM, New Zealand, and 7CW, Hobart, Tasmania.

**Monday, October 29.**

7LO, Nairobi, at 6 a.m. was R4-5, increasing to R8 at 7 a.m., when their clock was heard striking 10 p.m. Static as usual was bad.

bourne. Signals were R8, clear and steady.

3ME, Braybrook, Victoria, starting at 7 a.m., and went over to 3LO, Melbourne.

2ME were "putting over" 2FC's programme early in the evening, and later carried on duplex telephony tests with

2XAF. Static and morse interference was bad early in the test.

3AR, Christchurch, was also heard.

**Tuesday, October 30.**

At 5.45 a.m. 5SW were R7-8, with gramophone records, testing with 2XAD. Reception was bad between the stations, apparently too weak for the loudspeaker, as 2XAD could not be heard through 5SW as usual. 2XAD was R4 direct, 7LO, Nairobi, was R6-7 from 6 a.m. till 7 a.m., RSR at R8 was very clear on about 37.5 metres. Short talks were given in German, commencing with "Achtung — RSR," etc. In between talks the metronome being heard with its tick tock. 5SW at 7.30 a.m. were giving what appeared to be a lesson in French. Volume R7, rapid fading. 2XAD at 7.30 a.m., with musical items were R3-4.

A Victorian amateur was heard early in the evening at R4, fading badly.

**Wednesday, October 31.**

PCJJ was best when first tuned-in at 5.30 a.m., at R9. Signals slowly became weaker till 8 a.m., when they were R5.

7LO, Nairobi, came in at R4 at 5.30. Static and morse at R7 spoilt reception.

RSR was very loud and steady. Only German talk heard.

Big Ben was R8 at 7 a.m. Static and rapid fading spoilt a talk by Lord Langenburg (?). Volume had decreased quite a lot by 8 a.m.

RSR was again heard at 7.10 p.m. at R5. 2ME at 10 p.m. were relaying 2FC, later calling 2XAF. As Australia were not receiving America very well, some records were put on for fifteen minutes.

2ME was R9 and steady, while 2XAF were R6 and fading badly. Conditions must have improved later, as, according to Press reports a successful test was carried out.

**Thursday, November 1.**

A very rough morning. All morse stations coming in with plenty of punch and plenty of static on nearly all wavelengths.

7LO, Nairobi, R5, with morse station on top at R8.

RSR, plenty of talk with long intervals.

PCLL, on about 38.5, was R8 and very steady. Gramophone records were heard, with some Dutch talk between items.

ANE, 15.93, was the only station free of static, but fading was bad. R5 fading to R2.

5SW was R5 with Ben Ben. Rapid fading and static spoilt reception.

At 10.10 p.m., 3GR, Bendigo, Victoria, was quite good and steady at R5, 90 per cent. readable.

RFM was smothered by static.

**Friday, November 2.**

From 5.30 till 6 a.m., 5SW (R8) and 2XAD (R3-4) were testing. Records were played with talks between.

The Englishman was 100 per cent. readable, the American about 50 per cent.

PCJJ at 5.30 was received at R9, and was very steady. They went off the air, or faded right out, several times

between 5.30 and 6.30 a.m. Am inclined to think they went off the air, as they are not subject to severe fading, but the rapid variety.

ANE at R4 were steady and clear on duplex telephony.

7LO was quite audible through the static.

5SW was good strength, with Big Ben (but very unsteady).

2XAF were still on their television test at 5.45 p.m., when reaching home, and continued till 6 p.m.

2ME and 2XAF had an interesting talk later in the evening. During a talk about animals peculiar to Australia, Mr. Farmer, of 2ME, said that they were sending over some kangaroos to 2XAF, not live ones. Later, Mr. Hitt, of 2XAF, asked Mr. Farmer to listen; he then said he had just struck a match to light a cigarette. The sound was distinctly audible.

At 12 p.m., 2XAF was R9 and 2ME stronger, both very clear and steady. Closed down at 12.40 a.m.

At 12.30 a.m. Big Ben came through at R7, followed by organ music without any announcement. Static bad and rapid fading.

## New Sea Route

**A** NEW sea route from the Canadian West is to be opened in 1930, via the Hudson Straits to the Atlantic Ocean. A railway is nearing completion running north-east from Winnipeg to Fort Churchill. An aerial survey of weather conditions and ice traffic is being made, and during the last Northern summer four permanent radio stations were installed in this district, which lies directly south of the Arctic Circle.

To reduce the cost of grain transportation this new sea route has been deemed necessary. It is now in its final stages of completion. Radio has and will play a big part in its use, and a large number of Government operators and the latest equipment for ship-to-shore communication went to the far North last summer.

**T**HREE temporary stations along the Hudson Straits were installed in 1927, when the aerial survey went north. They kept in constant touch with Ottawa, sending valuable information on the daily surveys made from the air.

It is significant that each of these stations, in addition to its regular equipment, will be equipped with direction-finding apparatus. This follows the Canadian Government's policy of equipping its shore stations with the latest means of guiding mariners. This apparatus will be similar to that installed at the various stations on the Canadian Atlantic and Pacific coasts.

An officer in charge and three operators will be stationed at each port. These will be relieved every year. They will communicate with ships coming and going out in the same way that shore operators in more civilised waters are accustomed to.

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