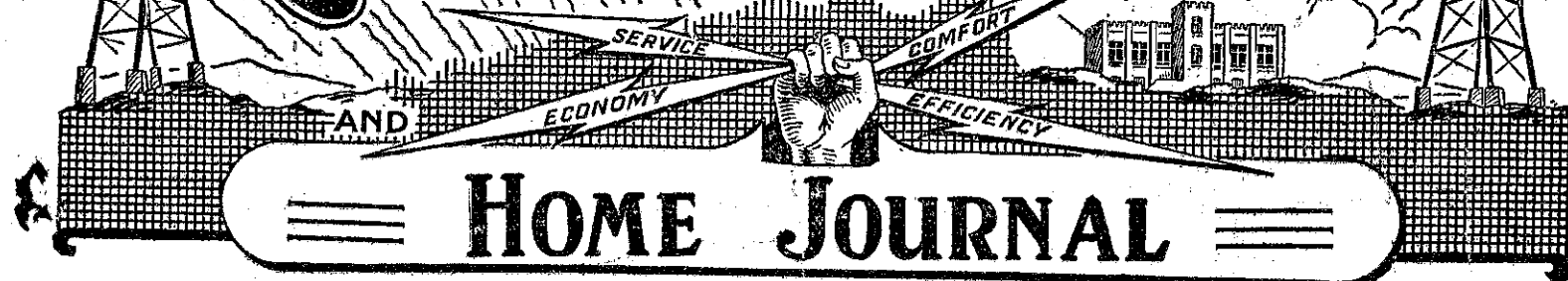


PUBLISHED WEEKLY

THE RADIO RECORD



Vol. IV., No. 42.

WELLINGTON, FRIDAY, MAY 1, 1931.

Price, 3d.

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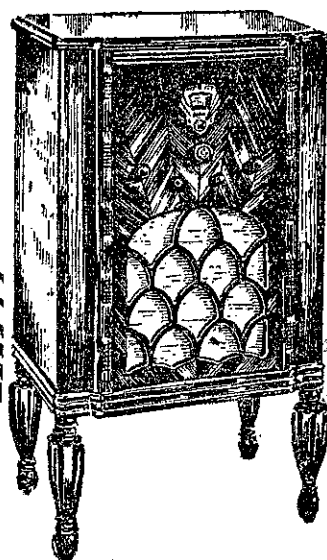
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First Trophy for Distance Reception Presented

A VERY pleasant ceremony took place at 2YB on

Pleasant Function at 2YB

Wednesday, April 22, when the "Radio Record" DX Cup was

presented to its first winner, Mr. Spence R. Ellis, of Okato. Arrangements had been made for the presentation to be made by the North Taranaki Radio Society, who kindly consented to broadcast the ceremony.

Unfortunately conditions were not the best, as not only was 2YB troubled with a nearby station on approximately the same frequency, but static was particularly bad. However, already enthusiasts in many parts of New Zealand have reported reception of the ceremony. Many interested visitors were present in the studio at the invitation of the Radio Society.

In making the presentation Mr. Payne, vice-president of the society, sketched the history of the Cup. He remarked that some time ago the "New Zealand Radio Record" had decided to present a cup, to be known as the "DX Cup," for competition among New Zealand radio listeners striving to conquer distance. The winner of the first period was a Taranaki man and a member of the North Taranaki Radio Society and to station 2YB had fallen the honour of making the first presentation of the "Radio Record's" beautiful silver cup. "It affords me, as vice-president of the society, considerable pleasure in asking Mr. Ellis to come forward and receive the Cup," continued Mr. Payne. "The 'Radio Record' has reason to be pleased with the response to its offer. There were no fewer than 25 entrants, and Mr. Ellis's accepted log of 89 stations was surely highly creditable. The log included 68 American, 10 Australian, 8 Canadian, 2 Japanese and one Chinese stations. It is the more creditable when one considers that absolute verification was insisted upon by the donors of the Cup. We are indeed proud to acknowledge Mr. Ellis as a member of this society."

"It is interesting to note that the second place was won by another Taranaki competitor, Mr. A. Greening, of Inglewood, with a total of 82 stations."

"In handing the Cup to Mr. Ellis, I trust I may express the hope that he will not rest on his laurels but, in the interests of science, will set out to better his own record."

In reply, Mr. Ellis thanked the North Taranaki Radio Society for their kindness in arranging the function and took the opportunity of thanking them for the very great interest and voluntary amount of work done on behalf of listeners in Taranaki.

"I APPRECIATE very much the remarks of Mr. Payne," said Mr. Ellis, "and can assure all that I am a competitor for the next DX contest, and will do my best to keep the 'Radio Record' Challenge Cup for Taranaki. I hope my friend competitors and DXers are listening, as I desire to congratulate Mr. Greening, of Inglewood, the runner-up, who made such a splendid effort and was only 8 verifications behind myself."

"I desire to extend my congratulations to Mr. L. Peters, of Pahiatua, on being the first DXer to receive a verification from a European station. Recognition seems to be due to Mr. Guy Holmes, of Masterton, Mr. George Inglis, of Havelock North, and Mr. Cyril Blucher, of North Auckland, as these gentlemen with myself were the first to blaze the trail in forming a DX Club which is so popular among radio enthusiasts to-day."

"In conclusion, I would like to thank particularly the 'Radio Record,' who made the Challenge Cup contest possible by their donation of the Cup and the keen interest and courtesy extended to competitors. During the Easter holidays I was in Hawke's Bay and visited Mr. George Inglis, of (Concluded on page 2.)"

Station Staff of 2YB

Back row—F. Huggard; H. A. Lee; L. F. Binns, technical staff; W. H. Quickfall, hon. sec.; W. R. Johns, announcer; J. Corney; S. A. Pruden, technical staff; H. Morey, accompanist.

Middle row—Miss Larkin, children's sessions; F. T. Davies, president and station director; Mrs. Larkin, Aunt Rene, children's sessions; A. B. MacDonald, former musical director; E. Payne, vice-president and director of children's sessions, Uncle Ted; Mrs. A. B. MacDonald, Aunt Gretchen; J. A. Pigott, technical director; Mrs. Troit, former station secretary.

Front row—G. Fairbrother and Will Clark ("Ginger"), messengers.

Absent—Miss Clark, station secretary, and G. Champion, sports announcer.

—Taranaki Daily News Photo.



DX Cup Presentation

(Continued from page 1.)

Havelock North, and I think his record of verifications is wonderful when one considers he has only a four-valve battery set. I desire to congratulate short-wavers on the formation of a Short Wave Club, and hope they will initiate a similar competition for their members.

Mr. Colin W. Smith, who was present representing the "Radio Record," then addressed a few words to the gathering. He briefly thanked the society for having arranged the very pleasant function and congratulated Mr. Ellis upon his splendid perform-

ance. He remarked that the North Taranaki Radio Society was doing wonderful work and merited every support. "Mr. Ellis has had a long connection with DX work," remarked Mr. Smith, "On looking back through some old files of the 'Radio Record,' I notice many years ago Mr. Ellis won the first competition that the 'Radio Record' held for radio enthusiasts. A prize was offered for the most improved results obtained by installing a certain earth system, and Mr. Ellis was the winner."

That ended the official proceedings, but quite a pleasant hour was spent by those who were present, and when Mr. Ellis was leaving he was wished the very best of luck.

Taranaki surely wishes that this unique honour will be held in the district.

Trans-Pacific Radio Telephone

Important Links

AS yet unconquered by the telephone, the Pacific Ocean will be brought within the world's network of radio-telephone channels in about one year. Receiving and sending short-wave stations similar to those in trans-Atlantic service are to be built shortly in Central California by the Trans-Pacific Communication Company Ltd., a subsidiary of the American Telephone and Telegraph Company.

The Trans-Pacific Company announced on November 11 the purchase of 640 acres of land at Dixon, near Sacramento, as the site of the sending station, and 540 acres at Point Reyes for the receiving station. Erection of the stations will begin early this year, and service between the United States and Hawaii is scheduled for January, 1932.

With the completion of these stations, Honolulu and possibly at least one other trans-Pacific city will be hooked up by regular service with any

operate on wavelengths between 14 and 44 metres.

In connection with radio telephone service it is of interest to know that a new record for the longest telephone call yet made over a commercially-operated circuit was set recently when the first call went through from Los Angeles to Sydney, Australia, over wire and radio circuits totalling twenty-one thousand miles, via the trans-Atlantic circuit.

The America-Australia service had been opened by the Bell system the latter part of October. The man at the telephone in Los Angeles was not aware that he was breaking a record. He had reason to talk with someone in Sydney, Australia; and did so, quite casually and successfully.

In spite of its great length and the fact that it is composed of both wire and radio links, this circuit enabled individuals in Los Angeles and Sydney to converse on the telephone as though they lived across the street from each other.

Research in Fading

American Efforts

SOME of the most baffling problems of radio, among them static and fading, will be tackled with new equipment with the erection of two new experimental stations for the use of the United States Bureau of Standards. A Bill authorising the expenditure of \$30,000 for their erection has just been passed by Congress and signed by President Hoover. Efforts are now being made to put through an appropriation at the current session.

The authorisation covers the purchase of additional land and equipment for the setting up of a special radio research laboratory and the erection of a transmitting and receiving station at some distance from each other.

Detailed study will be made of the variations which radio waves undergo between the transmitter and receiver, according to Dr. George K. Burgess, Director of the Bureau of Standards. The work will be under the direction of Dr. J. H. Dellinger, chief of the radio section.

"The studies most urgently needed on radio waves have to do with fading, one of the most serious limitations on broadcasting; changes in direction of great importance in navigation of ships and aircraft; and the behaviour of short waves or high frequencies," Dr. Burgess said.

Research will thus be conducted in both the communication and the broadcasting fields. Two additional transmitters will be made available by the fund, also for extending the standard frequency service, by which broadcasters may check their frequency stability and prevent "wobbling" to make it continuous.

This service would do much to eliminate much of the present interference, according to Dr. Dellinger, and would serve to improve the technical operation of broadcasting stations.

HAVE you renewed your subscription to the

"Radio Record" and "Home Journal?"

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Illustrating 70.L
with 4 Tone Control
Full Vision Dial

DX COMPETITION.

Entries for second period close June 30.

Certificates for winners in each district.

Verifications are required for every station logged.

of the twenty million telephones in the United States. The Hawaiian stations are to be constructed by R.C.A. Communications, Inc., and will serve subscribers of the Mutual Telephone Company in Hawaii.

The swiftness of modern life is well illustrated in closing this trans-Pacific gap in the world radio telephone network, which will then have encircled the globe in less than five years.

World-wide Communication.

THE first inter-continental and trans-oceanic circuit was opened in 1927 by the American Telephone and Telegraph Company and the British Post Office between New York and London. In time world-wide communication will unquestionably be a fact. After the telephone was invented in 1875 by Alexander Graham Bell it was not until forty years later that San Francisco talked to New York.

Already there are a dozen network circuits operating in other parts of the world. The shortest is 3011 miles, New York to London; and the longest 9120 miles, London to Sydney. Three more are under construction and eight additional are projected, including the trans-Pacific. The complete circuit of the world by telephone from San Francisco through Sydney, London and New York, and back to San Francisco, is 21,475 miles.

This is the first step in the move of the Bell system to connect its United States network with Far Eastern countries in or bordering on the Pacific. The project contemplates eventual establishment of services to Japan, Australia and Philippines, and Alaska, as well as to ships at sea.

The transmitting station at Dixon will have a 20-kilowatt transmitter, similar to those used in the trans-Atlantic telephone service. It will

Dunedin Radio Exhibition

Series of Relays and Rebroadcasts at Opening



THE third annual Dunedin Radio Exhibition opened on Wednesday, April 21, and continued for three days. It was a display that for general arrangements and variety of exhibits excelled the two previous shows. The exhibition was organised by the Otago Radio Association in co-operation with the radio dealers and the Broadcasting Company. The whole of the evening concert programmes were the responsibility of the Broadcasting Company.

As two halls were required, the exhibition was held in the Pioneers' and Early Settlers' Halls. The display of sets could not fail to bring home to all visitors the present perfection of radio equipment. Sets to suit all pockets were on view—from tiny crystal sets to imposing cabinets. While battery sets seem still to be popular, there was naturally a marked predominance of the all-electric.

Sitting before a microphone in 2YA studio, the Hon. J. B. Donald, Postmaster-General, officially opened the exhibition. His remarks were broadcast by 2YA, picked up at 3YA, and then relayed to 4YA. 4YA's transmission was in turn broadcast at the exhibition.

"Mr. President, Ladies and Gentlemen in Dunedin,—

"I HAVE much pleasure in responding to the invitation so kindly extended to me, to offer a few remarks upon the opening of the Third Otago Radio Exhibition," said the Minister.

"The science of radio communication in all its phases is undoubtedly being developed on sound lines; and to-day has reached such a stage of progress that it is difficult to forecast what the future may have in store. At the outset I desire to say that it is quite recognised that societies such as the Otago Radio Association perform a useful function in keeping the public abreast of advances that are being made, and in assisting to create interest in the technique generally of radio communication.

"In New Zealand, which may be called one of the outposts of our Empire, the immense value of radio as a means of world communication is peculiarly appreciated. I need only refer to broadcasts of outstanding events in other parts of the world which are now becoming quite frequent, and may even be considered to be an established part of our broadcasting system.

"Though not altogether germane to broadcasting, the opening of the radio-telephone service between New Zealand and Australia, and the projected extension of the service at an early date to the United Kingdom and other countries, may be accepted as examples of the progress being made in radio communication and the bridging of the wide distances separating New Zealand from other countries. The broadcasting service is now accepted as prac-

tically a permanent factor in our social life. By its means, entertainment and instruction may be brought into the homes of almost every one, no matter how isolated may be their situation.

"As an indication of the growth of receiving licenses in New Zealand during the past five years, I would quote the following figures:—

March 31, 1926 ..	3,588
" 1927 ..	18,162
" 1928 ..	39,315
" 1929 ..	44,616
" 1930 ..	53,192
" 1931 ..	62,453

"These figures may be taken as positive proof of the popularity of broadcasting as a national service, and may perhaps be regarded as further proof of the fact that the best radio apparatus may be obtained in the Dominion. I am not in a position to view at the present moment the various types of apparatus on view in your exhibition, but perhaps in a few years, or less, the new and marvellous service of television will enable a view to be obtained from this studio.

"I have no doubt that the best efforts of those concerned in the manufacture and supply of radio apparatus will be concentrated upon producing sets which embody the most up-to-date features and at a cost within the scope of moderate means.

"I wish all success to the exhibition, and trust that it will be the means of further popularising broadcasting in the Otago district, and now have much pleasure in declaring the exhibition officially open."

Editor-Announcer of R.B.C. Speaks.

MR. JOHN BALL, editor-announcer of the Radio Broadcasting Company, then spoke:—

"IN the absence from the city of Mr. A. R. Harris, general manager of the Broadcasting Company, I would take the opportunity on his behalf of extending to the radio dealers of Dunedin the greetings and best wishes of the Broadcasting Company for the success of the exhibition which they have organised. In Dunedin, exhibitions always are a success, financially and otherwise, and the one that has been opened to-day by the Hon. Donald will be no exception to the rule.

"As usual the Broadcasting Company is co-operating with the radio dealers, and has taken up the responsibility of providing the evening concert programmes. Dunedin is first in the field with the 1931 exhibitions. The dates for Auckland and Wellington have already been announced, and Christchurch will no doubt follow suit. Every year sees increased interest in broadcasting. There are now over 60,000

licensed listeners—or there were, on March 31. Five years ago, when the Broadcasting Company first began operations, there were not as many thousands as could be counted on the fingers of one hand. That alone is an indication of the growing importance of the broadcast service.

"Broadcasting is the greatest economic and social factor in the life of the people to-day. It is the greatest and most economical of entertainers for the home. In times of prosperity radio shares in the boom, in times of depression it should be more than ever in demand, for it provides entertainment at a minimum of cost—at one penny a day. And entertainment is not a luxury but a necessity.

"One of the reasons why people like to listen to the radio is because it is cheerful. They can always hear some programme that will lift them out of the gloom that sometimes comes with business depression and unemployment. Everybody would like to forget that once in a while and think about something cheerful. Radio gives them this something. It is to be noted that all the modern things which make life worth the living have come as a result of scientific research. While business has been halting, science has been marching forward, and has been getting

(Continued on page 29.)

2YA Listeners bid
Au Revoir to
Hy-Wide and
Handsome



Next Week
2YA begins
a new series
of International
Programmes,
but these two
vaudeville artists
can still be heard
from 1YA and 4YA.
Listen for the new
2YA series this week.

The New Zealand Radio Record —AND— Home Journal

(Incorporating the "Canterbury Radio Journal.")

P.O. BOX, 1032, WELLINGTON.

Published Weekly. Price 3d. Subscription Post Free in advance, 12s. 6d. per annum; booked, 15s.

Literary communications should be addressed: "The Editor"; business communications to "The Manager"; technical communications to "The Technical Editor."

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

RADIO PUBLISHING COMPANY OF NEW ZEALAND, LTD.
P.O. Box 1032, WELLINGTON.

WELLINGTON, FRIDAY, MAY 1, 1931.

RADIO LISTENERS' LEAGUE.

WHEN radio first became popular in this country, and the Radio Broadcasting Company was struggling with a small revenue to give a service satisfactory to the public, leagues of listeners were formed in different parts of the country to act more or less as whippers-in of the Company, and energise effort for the improvement of programmes. These were supported by groups of enthusiasts, who advanced their ideas as to the course the Company should take. The Radio Broadcasting Company, anxious to please its listening clientele but handicapped with the wherewithal to provide all that was asked, did the best that it could to meet the demands for expansion. As time went on, it was able by increased revenue to enlarge its service, until the general all-round efficiency of the service reduced the need for continued energetic advice and the "leagues" of those days died a natural death.

WITH the inception of a number of B Class stations throughout last year, an effort has been made to revive interest in listeners' leagues, and institute a Dominion-wide organisation. This movement was started in Dunedin, in which centre there are a large number of B Class stations. The league was launched at the time the B Class stations were in difficulties with Performing Right Association, and through their then failure to come to terms seemed likely to be compelled to close down. On a wave of enthusiasm thus organised, the movement was launched and efforts made to "carry the gospel" into other parts of the Dominion.

ON Wednesday night last the initial meeting to establish a Wellington branch was held in trade premises. Although there are in Wellington city and district 14,000 to 15,000 licensed listeners, thus representing households of probably 70,000 to 75,000 people, the attendance at the meeting was approximately 50, of whom a definite number were intimately concerned in the organisation. This small attendance may be taken as a distinct compliment to the general satisfaction felt by listeners with the services now given by 2YA and other stations. Possibly listeners feel that the various committees

such as the Church Committee, the Musical and Dramatic Committee, and the Children's Committee, which have been formed by the Company among those specially fitted in those fields to offer advice on their special subjects, meet the position of moulding services to listeners' needs. Those committees certainly do good work. In establishing them, the Company felt doubtless that by collecting experts in each field together in one committee, it would secure the best advice upon which to build its programmes. With that in view listeners, as indicated, probably felt there was little need for further organisation.

THE "Radio Record" desires nothing more than to see the progressive expansion and development of radio, and the attainment of saturation point in the Dominion from the radio listening point of view. Anything, therefore, that will advance radio deserves fair treatment and support. We have our doubts, however, as to whether those primarily responsible for the organisation of the Listeners' League are entirely disinterested. The organiser is the secretary of the B Class Stations' Association, and that Association is naturally concerned to advance its interests by all possible means. The duality of office might therefore be compromising. It might easily be that the side interests represented by these B Class stations might later desire a policy inimical to the best interests of radio listeners in general and the secretary of one body and the organiser of the other might then find it difficult to decide just where he was. For instance, if the B Class stations demand a part of the listeners' fees, or desired the Government to appropriate money from listeners' revenue to relieve the B Class stations of copyright fees payable to the Copyright Association, it would, we think, be a course of action calculated to weaken the existing radio services. We do not feel satisfied that sooner or later some such demand as this will not be made, and therefore listeners are, in our opinion, well advised to view this League and its sponsors with some suspicion. Mr. Owen, elected president of the League, is well known in radio circles, having filled that position in a league now apparently defunct. Mr. Leslie Jones, also active in the organisation of the League, brings his reputation of interest in radio forward from the past. He certainly showed vitality and energy beforehand, and if listeners desire a repetition of the policies then urged, doubtless the necessary support will be forthcoming.

"And So To Bed"

Samuel Pepys in Radio Form

A THREE-ACT comedy, "And So to Bed," founded on the diary written by the famous Samuel Pepys, will be broadcast from 1YA on Tuesday evening, May 5. The studio presentation will be under the direction of Mr. J. W. Bailey, who will lead a strong cast.

The following note, written by the author of the comedy, J. B. Fagan, is very interesting: "For many years I had been fascinated by the idea of putting Pepys on the stage in a full-length play. I came to the conclusion that any attempt to dramatise the diary, or a part of it, would probably result in a scrappy type of chronicle play which would fail to give a living portrait of the diarist. So I began where the diary ended, and placed my play in June, 1669, a few days after the last entry. "There is no historical foundation for the happenings in 'And So to Bed,' but there is a seed in the pages of the diary from which they might have grown, and did grow in my imagination. I think I may claim to have drawn Pepys' portrait faithfully from his own revelation, and that there is little he says and does in my comedy which could not be paralleled in the pages of the diary. To those who may object that I have not shown the grave sober Pepys, the Secretary of State, the father of British Admiralty, I can only say that I happened to catch him as the amorous rogue on an afternoon that was all comedy. And that if I have not extenuated, I have set down naught in malice."

WHY?

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BURGESS RADIO BATTERIES

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THE MASTER VALVE

Embodies all improvements known to Valve Manufacturers.

Programmes and Personalities

No Football Broadcasts for Canterbury

Union Demands Large Fee

Australian Programmes

Times Corrected for N.Z

Thursday, April 30.

STATION 2FC.—9.40 p.m., 10.28 p.m., 11.2 p.m., and 11.25 p.m.: St. Andrew's Choristers. 9.57 p.m. and 10.55 p.m.: Signor Torzillo, harpist. 10.4 p.m. and 11.27 p.m.: Ethel Lang, entertainer.

2BL.—9.30 p.m.: "The Man Who Stayed at Home," a three-act play presented by the A.B.C. Players.

3LO.—9.30 p.m.: Modern Italian music. 10 p.m.: Dance items, interspersed with novelty numbers.

3AR.—9.45 p.m.: Transmission from the Soldiers' Institute, Ballarat, of a concert by the Ballarat Soldiers' Memorial Band, and assisting artists.

Friday, May 1.

STATION 2FC.—9.30 p.m.: Handel's "Sonata for Two Violins and Piano." 9.40 p.m. and 9.52 p.m.: Isolde Hill, soprano. 9.46 p.m.: Muriel Edsall, pianist. 9.58 p.m. and 10.26 p.m.: Sydney String Quartet. 10.45 p.m.: Relay from 3LO, Melbourne.

2BL.—9.37 p.m. and 10.45 p.m.: Walter Kingsley, baritone. 9.44 p.m.: Olive Amadio, saxophonist. 9.51 p.m. and 10.52 p.m.: Dorothy Hall, entertainer. 10.11 p.m. and 11.22 p.m.: Sadie Anderson, popular vocalist. 10.28 p.m.: Alard Maling and Fred Whaithe, novelty instrumentalists.

3LO.—9.30 p.m.: Choral music and Beethoven recital. 10.45 p.m.: Brass band recital by Collingwood Citizens' Band.

3AR.—9.50 p.m.: Community singing, transmitted from the Town Hall, Ballarat.

Saturday, May 2.

STATION 2FC.—9.30 p.m.: The Professional Musicians' Symphony Orchestra will present a concert from the Sydney Town Hall.

2BL.—9.37 p.m. and 11.14 p.m.: Alfred Wilmore, tenor. 9.44 p.m.: Les Harris, saxophonist. 9.47 p.m. and 11.0 p.m.: Grace Quine, popular vocalist. 9.54 p.m. and 11.30 p.m.: Wally Baynes, comedian. 10 p.m.: Description of boxing contest at Sydney Stadium.

3LO.—Relay of programme by 2FC, Sydney.

The 1931 "Radio Guide" is now available.

160 pages brim full of useful and interesting information.

Price 2/6. All Booksellers and Dealers. Box 1032, Wellington.

(See advertisement on back cover.)

MISS MAYNARD HALL, "Aunt Pat," children's sessions' organiser at 3YA, is at present on a month's sick leave. During her absence, "Ladybird" (Mrs. R. J. McLaren) is acting in her stead.

ALL the New Zealand stations will broadcast the results of the municipal elections, to be held throughout the Dominion on Wednesday, May 6.

THE students of Canterbury University will celebrate Capping Day in the time-honoured way on Tuesday, May 5. There will be a procession and speeches by the dignitaries reigning for the day. The celebrations take place in the morning and will be broadcast by 3YA.

ON the invitation of the Broadcasting Company to appoint a representative on the IYA Musical and Dramatic Committee and the IYA Children's Session Advisory Committee, the Auckland Radio Dealers' Association has appointed Mr. C. A. Tucker, the president of the association. Mr. Tucker is a keen music enthusiast and he will be welcomed to both committees.

EVERY Wednesday IYA broadcasts the community sing in the Town Hall from 12.30 to 1.30 p.m. These sing-songs, which will continue throughout the winter, were extremely popular last year.

MR. WILL LAWSON, the well-known journalist and author, will speak from 3YA on Friday, May 8, on "Impressions of a trip to Manila, Hong-Kong and Japan."

THE New Zealand Wrestling Association seems to have no reason to regret having permitted the broadcast of its matches last year. The year closed with a profit of £112/15/10, and cash in hand £642/16/2. Prize-money amounting to £3151 was paid out.

THE distinguished Chinese, Dr. T. Z. Koo, a graduate of St. John University, Shanghai and of Oxford, will broadcast a talk from 3YA on Monday, May 18. He will speak on "China Speaks to New Zealand."

AN American correspondent, writing to the Broadcasting Company requesting confirmation of his report regarding reception of 2YA, adds to his letter the following postscript: "The State with wide open gambling and six-week divorce: Come to Nevada."

ARE YOUR HANDS TIED?

Are you bound down because you have never learned to do any one thing well? To thousands of men like you—hands tied, but eager to break free—I.C.S. training has brought success. No matter where you live, the I.C.S. will come to you. No matter what your handicaps, or how small your means, we have a plan to meet your circumstances. Without cost or obligation let us prove that we can help you to get a better job and a bigger salary. Write or call.

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THE Canterbury Rugby Union recently decided that the Broadcasting Company should be charged a fee for permission to broadcast matches, and after the matter was discussed in committee by the Union at its last meeting the decision arrived at was that a fee of £500 should be charged in respect to the local competition and inter-provincial matches. The fee did not cover any matches managed and controlled by the Union on behalf of the New Zealand Rugby Union or other organisation outside of the Canterbury Union.

In commenting to a reporter on the Union's decision, Mr. A. R. Harris, general manager of the Radio Broadcasting Company, said:

"The terms imposed by the Canterbury Union leave nothing more to be said. The Union's wishes are quite clear, and we leave it at that. Notwithstanding all the arguments which may be advanced and the claims of people unable to attend matches, the Union is resolutely determined that its matches shall not be broadcast. Broadcasting is primarily intended to serve people who, for reasons of distance, and other reasons beyond their control, are unable to witness the play yet are just as keenly interested as those able to attend. These people should surely be entitled to some consideration by the Rugby Union, and in this regard the Broadcasting Company offered its service without cost to the Union. However, it is evident that the Canterbury Rugby Union does not want its matches broadcast and its terms have been drawn up accordingly."

Testing Radio Voices

New American Scheme

STUDIO equipment that permits a singer to hear herself as others hear her over the radio has been installed by station WGY at Schenectady, in the United States.

Every singer, before she is permitted to broadcast, must give an audition, and it is customary at such auditions for the musical director to listen to the voice as reproduced by a loudspeaker. In this way it becomes possible to judge the voice, not for real quality, but for its suitability for broadcasting. Experience has shown that an excellent concert voice may be a complete failure after it has passed from transmitters to receivers and loudspeakers. Some singers, when told that their voices are not suitable for radio, accept the decision with good grace. Others regard this explanation as a polite way of refusing them an opportunity to be heard by wireless.

Station WGY has solved this difficulty by installing a film sound recorder as part of the studio equipment. When this film is reproduced through a loudspeaker the voice is heard exactly as it would be heard through a loudspeaker after it has been picked up from "the air."

When a singer appears at WGY for an audition, and if there is any doubt about the suitability of her voice for radio, a film record is made as she sings. The recorder is in another room, connected to the microphone by wire. If, after hearing the film record, the radio critic finds it necessary to let her

hear the record, invariably the singer accepts the evidence of her own sense and thanks the management of the station for saving her from a performance which must have been below her standard, and which might result in loss of concert engagements instead of increasing professional prestige.

The film sound record also proves valuable in training announcers. The announcer's voice is recorded, and he, hearing the reproduction, has a chance to correct faulty speech, over-emphasis, or wrong inflection. The director of the orchestra is afforded an incomparable medium to experiment with the placing of instruments with respect to the microphone. The same group may play the same selection two or three times, changing the position of the instruments each time. Unusual effects may thus be produced.

The equipment also permits the recording of mixed programmes during rehearsal. The director, listening to the reproduction, may find imperfections which escaped notice in the studio.

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Radio Listeners' League

Formation of Wellington Branch

DESPITE abundant advertising, and a thorough method of organisation, the public meeting held at Wellington on Wednesday evening, April 22, in Nimmo's concert hall, to form a Wellington branch of the New Zealand Radio Listeners' League, proved somewhat disappointing. Only about 50 persons were present, and a proportion of these appeared to have attended mainly to hear the free gramophone concert which was advertised to form part of the evening's proceedings. At the conclusion of the meeting more than half of the people, apart from those associated with its organisation, left without joining the league, although they were actively canvassed by members of the committee.

Mr. J. H. Owen occupied the chair. He mentioned that apologies for absence had been received from Dr. G. F. V. Anson, Messrs. Martin Luckie, and H. D. Bennett. In his opening remarks the chairman, reading from notes, briefly outlined the objects of the league and the purpose for which the meeting was called. Mr. Owen said that membership was open to all, whether radio licensees or not. He then introduced Mr. Harold Booth (of Dunedin), Dominion organiser of the league, to explain the objects and policy of the New Zealand Radio Listeners' League.

Mr. Booth's Address.

MR. BOOTH said that in view of the fact that the Radio Broadcasting Company's contract would be expiring at the end of the year, and as the Postmaster-General had expressed his intention of bringing down new regulations, the time was opportune for the radio licensees to form one representative organisation for the whole of New

Zealand, so that those who paid the piper would have some say in calling the tune. For instance, he said, if the Government decides to form a Board of Control of broadcasting the radio licensees should have at least one representative on that board. No person connected with the radio trade could take office on the executive of a branch of the league, and membership of the branches was open to all comers whether radio licensees or not. Mr. Booth admitted and deplored the fact that the larger proportion of radio licensees had not yet joined the league. It was not sufficient to convince the radio licensees that the league was necessary; it was essential that they should have a big membership roll. It was proposed to call a Dominion conference of the various branches of the league about next August to form a national policy, and to offer suggestions to the Government as to what should be done. The league was a non-political body, but it was difficult to keep politics out of an organisation of that character. The league was formed to protect the rights of radio licensees.

They had been accused, said Mr. Booth, of being out to boost the trade or the "B" class stations. They were not going to boost either the "A" or "B" class stations. The question of these stations, however, came within the scope of the league's constitution, which provides that the league can be prepared to take in hand those matters. Eleven branches of the league had been formed in New Zealand, but, said Mr. Booth, he could not say whether they

were large in membership or not, but the executives were enthusiastic and the membership was growing.

Among the main objects of the league, Mr. Booth explained, was to enable all interests of the radio licensees to be concentrated at one central place of advice; to obtain a satisfactory broadcast service for all places in the Dominion from all New Zealand stations or "outside"; to ensure protection from interference due to leakages from power boards' supplies, X-ray and similar sources of interfer-

ences of opinions as to the merit of increasing the power of those stations. They must obtain expert advice on that matter. There was also no guarantee that the present cost of the listener's license fee would not be increased. Moreover, any assurance of the present Government was not binding on its successors.

Mr. Booth appealed for a strong membership of the Wellington branch, as the listeners in Wellington were at the seat of Government and readily accessible. In Otago, where they had about 6000 licensees, they had a membership of 2000. In Wellington, where there were somewhere between 14,000 or 15,000 listeners, they should have a membership of at least half that number.

Organisation Too Wide.

Mr. I. M. Levy obtained the permission of the chairman to refer to a matter mentioned by Mr. Booth in his address. Mr. Levy pointed out that a serious blunder had been made in admitting all and sundry into membership of the league, whether they were radio licensees or not. He said that when they approached the Postmaster-General and claimed to represent the radio licensees, those whom Mr. Booth had said "paid the piper and should call the tune," no one could say how many of those whose names went to swell the membership roll had the right, as payers of radio license fees, to make representations to the Government. A fatal mistake had been made by admitting all and sundry to membership of the various branches of the league; it was fundamentally wrong in practice and in principle. They could not reasonably hope to deceive the Postmaster-General when they represented to him that their membership roll comprised so many when the plain fact remained that the membership of the league was not restricted to those who paid the radio listeners' license fees. The chairman had invited those present to enrol their neighbours when they came in to listen to broadcast programmes. This method of swelling the roll of membership, Mr. Levy stated, looked uncommonly akin to "roll-stuffing." Undoubtedly a considerable number of "outside" people had already been entered as members of other branches of the league; the constitution provided for it and their membership had been solicited. In his opinion, Mr. Levy said, the league's prestige was already discounted throughout New Zealand.

Mr. Levy's remarks were briefly endorsed by two others.

Quite a Debate.

Mr. Booth replied that he had a full list of every registered radio licensee throughout New Zealand, and he had checked the membership rolls of the branches and found that only a few who did not hold radio licenses had been admitted to membership.

Mr. Levy remarked that Mr. Booth's reply did not tally with the statement he had made earlier in the evening—that eleven branches of the league had



MILLCENT O'GRADY,
a charming lyric soprano singing from
Christchurch on May 6.
—Steffano Webb, photo.

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22 BLAIR ST., WELLINGTON.

ence; to ensure a proper separation of the wavelengths of the various broadcast stations to prevent clashing (Mr. Booth here mentioned that at times he could not get one station without simultaneously hearing four or five other stations); to enlighten the public on the benefits of radio; to obtain legislation to protect radio; to render all possible assistance in the development of radio; to support the establishment of a Board of Control and to have at least one radio licensee's representative on the board. Mr. Booth urged that there was only one way to obtain these objects and that was by organisation. The existing radio clubs and associations could affiliate with the league. It was no good for the league to claim to represent the 61,000 radio licensees if the membership of the league comprised only a few hundred.

Continuing, Mr. Booth said that the league had to consider whether Government control of broadcasting was in the best interests of licensees or not. At the present moment the Postmaster-General's proposals were too indefinite for criticism. There should be no hasty decision to increase the power of the existing "A" class stations. There were

Analysis of Broadcast Service for Year Ended March 31, 1931

Nearly 10,000 hours of Transmission

Class of session.	1YA.		2YA.		3YA.		4YA.		Total stations.		Percentage.	
	No. of sessions.	Hours.	No. of sessions.	Hours.	No. of sessions.	Hours.	No. of sessions.	Hours.	No. of sessions.	Hours.	No. of sessions.	Hours.
Afternoon	274	474.00	283	526.44	281	467.28	285	479.02	1123	1947.14	18.0	20.9
Children's	310	292.30	319	290.14	315	286.07	311	288.26	1255	1157.17	20.0	12.3
Dinner	264	264.00	272	272.00	265	265.00	263	263.00	1064	1064.00	16.9	11.4
News and instruction	261	248.30	261	240.15	263	248.42	259	232.01	1044	969.28	16.8	10.3
Entertainment	313	755.49	324	804.54	319	785.20	321	778.29	1277	3124.32	20.4	33.4
Church services ...	56	88.42	55	82.20	57	81.58	56	80.88	224	333.38	3.6	3.8
Sporting relays	71	246.42	34	114.45	35	146.27	40	126.55	180	634.49	3.0	6.8
Overseas rebroadcasts	8	11.19	7	11.16	8	9.24	8	11.04	31	43.03	.5	.5
Miscellaneous	9	14.48	21	51.20	15	28.22	5	4.32	50	99.02	.8	1.1
Total	1566	2394.60	1576	2392.28	1558	2317.28	1548	2262.87	6248	9371.83	100.0	100.0

Children's Sessions

AT 2YA.

Monday, May 4.—Uncle Jeff will be in the studio to-night with Kipling Lady and Cousin Eric. In honour of Kipling Lady there is to be a special Kipling Evening, when Cousin Eric will sing you songs about "Kangaroo and Dingo," "I Keep Six Honest Serving Men," "Rolling Down to Rio" and "The Riddle."

Tuesday.—We are to have the pleasure to-night of being entertained by a little party of children from Miss Helen Gardner's Studio, and Uncle Toby and Jumbo will be the Birthday Men to send you greetings from 2YA.

Wednesday.—Aunt Daisy's night to-night, and the "Cheerful Chirpers," who will rouse you up if you are feeling a little blue. They will have a little community sing. Aunt Daisy will read the "Meeting-Pool" story, and give the birthday greetings.

Thursday.—"The Optimists" with their cheery voices will sing, play games, ask riddles and take you for a Radio Train journey to Elf Land.

Friday.—Another large band of College Boys will come to the studio to-night. This time it is from Scots College. They are providing delightful chorus work, conducted by Mr. John Bishop.

Saturday.—Would any of you like to join Uncle Jasper and Aunt Molly to-night and go in a magic balloon to Rarotonga and Tahiti and see all the beautiful flowers that grow there? There will be a row of coloured fishes, and, if there is time, a long motor drive all round the island.

Zealand Radio Listeners' League be granted representation thereon."

Courtesy motions of appreciation of the work of the Dominion organiser of the league, and others who had rendered good services, closed the meeting.

A few members were enrolled subsequently.

Sunday.—The Children's Evening Song Service will be conducted by Uncle George, and the Children's Choir, from St. Aiden's Anglican Church, will assist by singing hymns. They will be conducted by Mrs. Wahlers.

FROM 3YA.

Monday, May 11.—Stories for the children to-night by Cousin Margot and tales of the jungle by Mystery Man. Gwen will play on her zither and sing.

Wednesday.—The Optimists are going to sing jolly solos and choruses, with Uncle John to tell his stories and Cousin Beatrice to sing and play.

Thursday.—Uncle Frank will sing and also tell stories to the little folk; so will Ladybird and Uncle Dick.

Friday.—Hello, Chuckle! So you have stories for the children and songs too.

Saturday.—Here is Uncle Claude with his pupils to entertain with song and story.

Sunday.—The Rev. J. Rich is in charge this evening, and the children of the Merivale Sunday School will sing the hymns.

DURING the winter months there will be weekly radio talks from 3YA. Up to the present, fortnightly dialogues by Mr. D. Cossgrove ("Aerial") and Mr. W. Melbourne have been taking place, and have been proving so popular and useful to listeners that they will in future be a weekly feature.

Radio Fire Alarm

An Ingenious System

THE little village of Jutphaas, near Utrecht, faced with the problem of giving fire alarms without disturbing the whole district, recently solved the difficulty by enlisting the aid of "wired wireless." Each member of the fire brigade now has a radio receiving set, connected to a network to which the alarm posts at various points throughout the district are attached.

In case of fire, the person who wishes to give the alarm has only to pull down a lever handle on one of such alarm posts, and, on seeing the lamp—which otherwise is perpetually burning over the handle—go out, knows that his call is being passed on and received by the firemen. The signals received by the brigade are in Morse, and cut through all other transmissions. The combination of the letters, of which at present only five are necessary, shows where the fire is occurring, so that the majority of the members of the brigade need not report at the station, but can go direct to where their services are needed.

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ON Wednesday evening I looked forward expectantly to hearing Dr. Guy H. Scholefield's discourse on some international topic—perhaps the dramatic developments in Spain or the intriguing possibilities in Rumania, where once again the eternal feminine seems to be juggling with political matters. The keenness of my expectation, therefore, caused me to be a little disappointed when "Michael" told me that I was to hear, not Dr. Scholefield, but Mr. Howard, with whose effort I was so entertained the preceding week when he dealt with South Africa. Mr. Howard was to pursue his topic in detail upon gold and diamond production. Oh, thought I, this will be a romantic talk, and I looked for some thrilling tales of gold discovery and more thrilling side-lines on the life of the diamond fields, prompted thereto possibly by boyish recollections of "I.D.B.," in which Kaffirs bravely swallowed diamonds, or secreted them in their head-pieces, armlets, etc., and gay adventurers carried on the good work by filling their hollow teeth, heels, wooden legs, corsets, crinolines, and other miscellaneous articles of attire, with the scintillating gems. But no such luck. Mr. Howard adopted the practical and statistical method. Interesting to a point, but not quite thrilling, although he did display a neat touch of humour in indicating the sad fate of the gold after its laborious extraction from the bowels of the earth. Some 800,000,000 sterling of gold has been extracted from the Rand field since its discovery; it employs 18,000 white men, and 160,000 coloured men, and with the illnesses and fatalities from their occupation Mr. Howard dealt faithfully, inspired thereto naturally by his labour sympathies. There are 3000 miles of tunnels—three times the approximate length of New Zealand—some being 1½ miles deep, and reaching below sea level from Jo'burg's height of 6000 feet above the sea. All this activity and scientific effort is devoted first to taking the gold from the ground, and then, said the lecturer, it is taken to America and laboriously placed by other labourers again safely in the bowels of the earth! Quite a good point, which prompts reflections upon the extraordinary mountain of credit and currency built throughout the world upon a relatively mean quantity of crude metal. To diamonds Mr. Howard devoted some attention, and his description of the methods attending upon the extraction of the diamonds from the "biggest man-made hole on God's earth" was quite entertaining.

THE early evening talk on Wednesday dealt with pigs, and on the figures presented by the speaker, it is obvious that the porker is an infinitely more valuable gold mine than the South African field, and contributes vastly more to the wealth, health and happiness of the world. It was the purpose of the speaker, Mr. Elliot Davis, of Auckland, to urge our farmer friends to produce more pigs. To this end he held out the golden bait of an attractive market. Britain, it seems, imports upwards of £50,000,000 worth of pork products annually, mostly from Denmark. Why should not much of this come from New Zealand? Why not indeed? Listening, I was convinced that it should. And I hope my farmer friends felt duly spurred to action, for action certainly is needed. There is definitely an opening here, and

The VOICE of MICHAEL By "CRITIC"

talks such as this must serve a useful function. I notice from the programmes that similar enthusing talks have been given from IYA and elsewhere. Thus far-sighted encouragement is being given through radio to the development of a new industry, which will go far to restore that prosperity which for the moment seems hiding its head. Our present pig exports represent less than a quarter of a million annually. Denmark makes more from her pigs than from her dairy cows. While we have been making from £16,000,000 to £20,000,000 in the past from our dairy cattle, we have almost entirely neglected pigs. The two go together admirably. Hence full endorsement can be given Mr. Davis's urge to rectify the position. He proved himself an enthusiast in his subject, and spoke vitally, a little quickly, but vigorously and clearly. Although not a pig fancier myself, save in the form of pork chops or good bacon, I found myself applauding his vigour and enthusiasm. I hope he wins many converts. Oh, yes, and I applaud his thrust at the Department of Agriculture. This department, having a heaven-sent opportunity to "make" this country from a productive point of view, has allowed itself to become the victim of red tape bureaucracy, meriting condemnation where praise should resound. If a changed spirit should occur in the course of this slump readjustment, it would mean much to the country.

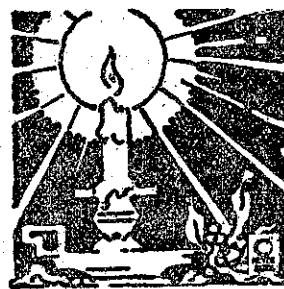
FOR it's Tommy this and Tommy that an
"Chuck 'im out, the brute!"
BUT it's "Saviour of 'is country" when the guns begin to shoot;
AN' it's Tommy this, and Tommy that an' anything you please;
AN' Tommy ain't a bloomin' fool—
You bet that Tommy sees!

So wrote Kipling, the greatest friend of the English Tommy Atkins, and so G. W. Lloyd, past president of the Christchurch R.S.A., reminded us of our own beloved Anzacs in his appeal broadcast from 3YA last Wednesday. "Appeal" did I say? Here was no appeal! Here was something much grander—a stern clarion call to duty. A veritable reveille for those of us more happily placed, financially, than many of our returned soldiers. To our eternal shame let it be recorded that Christchurch alone claims no fewer than 170 unemployed and needy Anzacs. Let us hope that Mr. Lloyd's call for immediate action met with the most sympathetic response on Poppy Day and, for the rest, let us re-

member that we can never, never put "Paid" to the debt of gratitude which we owe our Returned Men.

ARE you one of those fussy folk who consider that port wine out of a china cup tastes all wrong? I am! And listening to the gentleman who super-

From IYA
Tuesday, May 5
"And So to Bed"
by
J. B. FAGAN
presented by
J. William Bailey
A Comedy in Three Acts



sided Mr. Lloyd Ross, M.A., LL.B., unavoidably absent from Dunedin last Tuesday night, I wished that I were not so particular. For the talk was on "Old and New in Vienna" and if ever a subject offered possibilities for an enthralling half-hour surely here it was. The matter was undoubtedly fine; but the delivery was unfortunately very poor. Somehow "the ancient 'Ouse of 'Apsburg" coming doubleforte over the air dispels for me all the imaginative glamour which should be conjured up by reference to the past glories of such a proud lineage.

Similarly the fact that the "municipal authorities are leaving to the inhabitants of Orstria 'appy and contented children" leaves me distinctly cold. Among other verbal pictures of famous Viennese sights were the City Hall; the Palace of Justice, burnt down in 1925, and just recently rebuilt; the vaults of past emperors and empresses wherein are inter-

red no fewer than 137 members of the House of Hapsburg, including Maria Theresa and her beloved consort, Francis of Lorraine, down to Francis Joseph, who died in the Great War. The wide divide between the luxurious living of the rich and the appalling squalor of the poor was ably drawn. Vienna must present a series of extraordinary comparisons and absorbing interests for the fortunate visitor.

I LEARNED quite a lot about forests on Thursday last when I tuned in to 3YA and heard Mr. C. E. Foweraker talking on the subject. Besides quoting many interesting figures which, unfortunately one cannot remember, he stressed the fact that unless very stringent forestry regulations were observed our forests would be cut out in fifty years—an alarming statement when we think how much our native forests mean to us. The prevention of this is the main function of the Forestry Department. Besides being an asset to the beauty of the country, the forests have a large influence upon the rain distribution, upon river erosion, and even upon climate. Afforestation is being taken in hand and many thousands of acres have already been planted with exotic trees. Among these pine bulks largely, and the timber will be available shortly. Among the statistics given the following appealed to me as being interesting; there are in New Zealand 103,000 square miles; fifty per cent. of this is agricultural and twenty per cent. forest land. Of the forest area the State owns 300,000 acres, representing seventy per cent. of our forests. There are nearly 30 private companies engaged in afforestation work. In making observations on the private companies Mr. Foweraker slipped badly in that he spoke of one of these companies by name. A splendid advertisement for these people, but quite against the regulations.

"MANNERS Makyth Man" is a favourite old saw of mine, so that my interest was intrigued when, picking my way through last week's programmes as is my careful wont, I lighted upon a lecturette on the "Teaching of Manners to Children." Here, thought I, is something to my taste, and made mental note of the date. But, alas, when the time came I heard little of the discourse. Either my set was out of tune, or the speaker not possessed of the desirable attribute of a radio voice of audible quality and attractive timbre.

Some advice, of the obvious variety, was given as to the training of youth in this desirable branch of the social cosmos. "Company manners," one had thought, are extinct as the moa, but apparently not, for it was suggested that children be taught to abjure these, as such, and, in the home and out of it, practise the virtues of courtesy and self-control. Parents, remembering that children are inveterate copyists, should cultivate a cheery visage and pleasant ways in domestic circles; father in especial being recommended to put off his face of gloom and surly demeanour at eventide, and not keep all his chippy remarks for chance acquaintance who rings up on the telephone. Quite rightly, the lecturer emphasised value of tact in dealing with youth; they being keenly susceptible, like their elders, to being held up to ridicule. "You were

very far behind the door when manners were served out!" shrieked stern teacher once-upon-a-time before a large and amused class. The phrase stuck and rankled in the mind of sensitive ten-year-old, serving rather as incitement to avoidance of loud voice and disproportionate wrath than cultivation of the niceties of good form.

I admit I looked for more vigour and vim in a disquisition on the far-reaching effect of courtesy of speech and bearing. It was all very true, but somewhat time-honoured and trivial, though doubtless there was more to it than I was able to follow. It may be that it was inculcated that "Manners are not idle, but the fruit of loyal nature and of noble mind," that the foundation is consideration for others; and that clear enunciation, modest bearing, and spiritual grace are invaluable emollients in greasing the wheels, so to speak, of social intercourse. A certain intuitive breadth of vision seemed to be wanting, and I can't help hoping that in the good time that is coming our speakers over the air will approximate to the standard set by the B.B.C., which chooses as exponents of wit and wisdom men and women of high achievement and notable oratorical gifts, who through the miracle of radio can delight their limitless audience.

CONGRATULATIONS to the gentleman who gave us a talk on "Pickles" from 1YA on Thursday night. For pickles don't sound very interesting, do they? But I am sure listeners who tuned in were agreeably surprised. Here was a rare combination; someone who obviously knew his job and had the necessary voice and delivery to put that knowledge successfully through the Voice of Michael! It would seem sheer waste of money and deplorable lack of commonsense to buy foreign-made pickles and sauces when our own are carefully made and sold at such a reasonable figure. The care exercised in the purchase of high quality raw materials, coupled with Government supervision of manufacture combine to give us an article second to none. It will be interesting to see who is the first New Zealander to grow gherkins and olives successfully. Who would have thought that Worcestershire sauce, like Christmas pudding and beer, improves with keeping? Yet we learn that five years in the wood is considered the minimum time deemed most suitable for maturing this appetiser. Again, did you know that over 30,000 gallons of vinegar are brewed in Auckland alone every week? Have you considered where the coloured gentleman who calls for your empty bottles and arouses the warmest passions of your dog finds his market? One Auckland factory alone buys £500 worth a month! One wonders whether they are all returned empty vinegar bottles or . . . ? This talk was valuable—not only in point of technical interest, but as a reminder to ourselves, that the cure for our present "depression" (hateful word which I only employ for lack of a more suitable description of quiet times) rests largely with us. The speaker claims that if every New Zealand housewife would spend one shilling a week more on New Zealand-made goods the unemployment problem would be solved! It may sound too good to be true, but the experiment for a few months would not be very costly, so what about trying it out, everybody?

2YA Musical and Dramatic Radio Hobbies Club Committee

Musical Societies Subsidised

A MEETING of the 2YA Musical and Dramatic Committee was held on Monday, April 13, there being present: Messrs. E. Palliser (chairman), J. Carr (Charley's Aunt Club), W. P. McLachlan (Wellington Competitions Society), R. J. Retallick (Apollo Singers), H. B. Robb (Orpheus Musical Society), R. Lyon (Savage Club), H. Hardcastle ("Evening Post"), I. M. Levy ("Radio Record"), Harrison Cook and E. M. Pankhurst (Commercial Travellers' Male Voice Choir), O. Pritchard and J. Ball (Broadcasting Company), also Dr. I. L. G. Sutherland (W.E.A.), and Mrs. Daisy Basham.

Applications to participate in the company's subsidy were received from the Competitions Society, Apollo Singers, Symphony Orchestra, Commercial Travellers' Male Voice Choir, Harmonic Society and Orpheus Society. These were approved by the committee.

It was decided that in the event of any societies not being able to enter into the scheme by June 30, the committee should then decide what to do about the outstanding dates and deal with other societies.

To Further Amateur Radio

A "Radio Hobbies" Club, with headquarters in Wellington, has recently been formed, with the object of increasing the interest in radio construction and in radio generally.

The following are the officers of the organisation:—

President: Hon. J. B. Donald (Postmaster-General).

Vice-presidents: Messrs. A. R. Harris (General Manager Radio Broadcasting Company), A. J. Heighway (Managing Editor "Radio Record"), F. E. Pitt (manager Philips Lamps N.Z. Ltd.), G. W. Robertson (N.Z. manager Amalgamated Wireless Australasia Ltd.).

Technical advisers: Messrs. W. M. Dawson, A.M.I.R.E., M.I.W.T. (Philips Lamps), and Colin W. Smith, B.A. ("Radio Record").

Hon. auditor: Mr. W. Mason.

Organiser: Mr. A. Cornish.

Secretary: Mr. M. Lofton.

The club intends to issue periodically circuits of various receivers. These will, for the start, be of a comparatively simple nature to enable beginners to grasp the fundamentals of radio construction, and will lead up to more diffi-

cult and interesting circuits for the more advanced. There will be crystal sets and amplifiers, both a.c. and d.c. One and two-valve sets will follow, leading up to all types of sets that will interest constructors.

At present one of the most attractive features of the club is that there is no membership fee, and intending members should join up while these pleasant conditions last. All interested persons should write to the secretary, Box 163, Te Aro, Wellington, and ask to be registered as a member. Circuits will then be posted from time to time as they become available. It is requested that a stamped and addressed envelope be enclosed with all correspondence to the club.

Exploration Broadcasts

RELAYING broadcast descriptions of expeditions directly from the field of exploration, predicted at the time of the Byrd expedition, may be pioneered by Sir Hubert Wilkins, the explorer, who is equipping the submarine with which he proposes to sail under the ice to the North Pole with radio equipment for that purpose. Sir Hubert hopes to broadcast speech directly from the submarine to a key network station in America, which will relay it all over the continent.

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6B2

Identification Wanted

ON the 18th at 1.30 a.m. station heard broadcasting a boxing contest. The decision was given on points. Announcer said time was — minutes to ten, and that they were returning to the studio. From here a record was played, followed by another ("Pat on the Back"). An announcement followed from the studio, but I could not catch it. It came in between 2YA and 2FC. —J.S. (Hamilton).

STATION heard at 1 a.m. on April 20 operating on approximately 1210 k.c. (248 m.). Call sounded like 3BY, Melbourne. —"Newchum" (Wellington).

STATION operating on approximately 333m. (900 k.c.), heard closing down at approx. 7.30 p.m. on April 20. Last item was an organ solo. —J.J.W. (Renanga).

AT approximately 11.15 p.m. on the 23rd a Jap was heard on 449 metres (668 k.c.). A man was talking. Signals R3. Also at 11.20 p.m. another station on approximately 900 k.c. (333m.). Orchestral items, lady announcer. Signals R4. —"Bob." (Wellington).

WHAT American station operates exactly on 2FC's frequency? I cannot find one in the latest American call-book, and yet I can hear him quite distinctly. —J.P.C. (P.N.).

Stations Identified

W.B. (Gisborne): Station on 70 metres is undoubtedly the Russian RV15, which commences transmitting

at 9.30 p.m., N.Z.T. The one on 121 on your dial is probably 3RO, Rome, which has a lady announcer. "Six-Valve" (Christchurch): Obviously WENR, as you heard the announcer mention Husk O'Hare and His Gentlemen of the Air (referring to the jazz band which frequently broadcasts from that station). "Jackmack" (Dunedin): The American station in close proximity to 3YA is KFVD, Culver City, and broadcasts an organ programme from the Hal Roach Studios every Tuesday evening. B.W. (Stratford): Station on approximately 361 metres is probably one of the Indian stations giving the call VUB, Bombay. They sign off at about 4.30 a.m. with the National Anthem, and were heard by me about three weeks ago. —D.T.H. (Timaru).

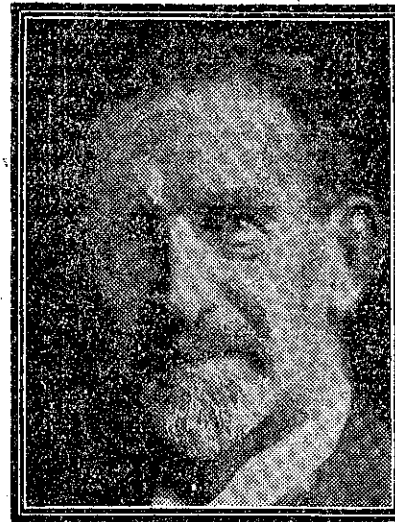
"MOREPORK" (Ohakune Junction) —Station one deg. below 2ZL broadcasting a Japanese programme was KGMB, Honolulu. These programmes are a common feature of that station. —"Dud" (Bay of Plenty).

RE "Radio Oxley" heard testing on 262 m. (1145 kc.), a letter from 4BC, Brisbane, under date April 8, states, inter alia: "Our new transmitter is still in the test stages, and is transmitting a regular test under the call '4ME, Oxley.' Should you pick these up we would appreciate a report." —"Mike" (P.N.).

News and Views of the D.X. CLUB

"QUELQU'UN" (Carterton) and J.V.D. (Cambridge). — Station heard on 1500 kc. (200 m.) was "Glade House Radio." It is located at the head of Lake Te Anau, at one end of Milford Track. Noise like a circular saw is due to the transmitter. This is so loud here that it is very hard to distinguish speech. —"Amuri" (Invercargill).

R.A.S. (Mamaku). —I heard station WOI, Ames, Iowa, on October 26, 1930, at 9.30 p.m., on a frequency of 640 kc. (468 m.). I wrote for a verification, but have not received a reply.



MR. JOHN BALL,
editor-announcer of the R.B.C., who
took an active part in the opening of
the Dunedin Radio Exhibition.

I think Mr. Ellis's idea of a DX cup badge is excellent. —"Red Bird" (Wellington).

"SIX VALVE" (Christchurch): WENR, Chicago, 345m. (870 k.c.). "Seven Kicker" (Okoroire Springs): The station heterodyning 2BL may have been either WABC, or WBOQ, both of New York, on 349m. (860 k.c.). Station behind KGER is WKBH, La Crosse, Wisconsin, 217m. (1380 k.c.). Station near 2YA's harmonic is KFOA, Los Angeles, 209m. (1430 k.c.), or KPXY, Spokane, Washington, on 224m. (1340 k.c.), 1 kw. —R.J.R. (P.N.).

"JACKMACK" (Dunedin): American on 1000 k.c. (300m.) was KFVD, Culver City. —N.J. (Masterton).

"CERSTRIA" (Whangarei): Station you logged on March 29 was 3GL, Geelong Broadcasting Proprietary, Ltd., operating on 1440 k.c. (214.2m.). Aerial output, 50 watts. W.B. (Linwood): In a magazine recently to hand from America I noticed an article on the establishment in Siam of two new broadcasting stations, the first in that country, so "Radio Bangkok" would be O.K. D.N.A. (Timaru): In a letter

recently received from Mr. J. C. Randall, plant manager of station WTIC, Hartford, Conn., he gives their schedule as follows: —Mondays, Wednesdays, Fridays, transmit on 660 k.c. (454m.) from 8 a.m. to 4 p.m. and from 4.15 p.m. to 12.30 midnight on 1080 k.c. (283m.); Tuesdays, Thursdays and Saturdays on 1060 k.c. from 7 a.m. to 4 p.m. and from 4.15 p.m. to 1 a.m. on 660 k.c.; on Sundays 10 a.m. to 7.30 p.m. on 660 k.c., from 7.45 p.m. to midnight on 1060. All time mentioned is Eastern S.T. When in synchronisation with WEAF on 660 k.c. transmission, their programmes will be identical with those of WEAF. I notice that the majority of the New Zealand "B" stations have been re-established, the latest, 2ZK Wanganui, being "on the air" this week. —"Thrace" (P.N.).

"STATIO" (Nelson): Station heard below 2UE, Sydney, would be 2ZF, Palmerston North, relaying 2YA's Wednesday night's programme. 2MV, Mossvale, may be found slightly above 2NC, Newcastle. Apologies to 4ZP, Invercargill. I received two cards by the same mail. G.C.H. (Masterton): A few nights ago I heard 2ME, Sydney, when they stated they were operating on 197m. (1510 k.c.). B.W. (Stratford): "Cromdale" (Otago) was mistaken when he quoted KSTP. It should have been KFTB. —J.P.C. (P.N.).

DX Topics

Frequencies of European Stations.

HERE are the frequencies of some European stations for early morning DX-ers: —Heilsberg (Germany), 75 kw., 1085 kc. (276.5 m.); interval signal: 2 notes (D flat, A flat), repeated for 41 seconds, followed by similar interval. Radio Toulouse (France), 8 kw., 779 kc. (385.1 m.); man announcer; interval signal: gong. Strasbourg, P.T.T. (France), 15 kw., 869 kc. (345.2 m.); interval signal, deep toned gong. Langenberg (Germany), 17 kw., 635 kc. (472.4 m.); Vienna (Austria), 20 kw., 581 kc. (516.4 m.); Katowice (Poland), 16 kw., 761 kc. (394.2 m.). —N. Jenkins (Masterton).

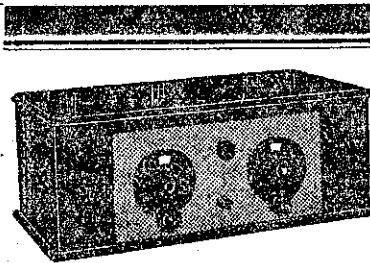
Presentation of DX Cup.

I HAVE just been listening to the presentation of the DX cup to Mr. Ellis from 2YB (I clapped, too, but I'm afraid I wasn't heard). In last week's notes, KOX should read KBX. Since receiving the DX notepaper on 15/4/31 static has been terrible here, and on two evenings it was impossible to hear any of the YA stations' programmes. A very handy booklet for DX-ers, "Radio Log and Lore," may be obtained from the Te Aro Book Co. (2/-). It contains a list of the world's broadcast and short-wave stations, airline distances between the different countries, and much other useful information. I would advise all DX-ers to secure a copy. I think Mr. Ellis's suggestion re a DX club members' badge is excellent. The last overseas mail brought verifications from KTHS, KJR, KTAB, WMBI, and a number of others. —"Seven Kicker" (Okoroire Springs).

DX Club Badge Favoured.

I THINK the suggestion put forward by Mr. Ellis for a club badge an excellent one, for not only will it give all those who wear it the feeling that

Build Your Own Receiver It's Cheaper!



But be sure you build a receiver that will give you something outstanding in performance. Choose a Lissen Screen-Grid Three Kit Set —it's easy to build, and the results will delight you. In a few hours you can transform the box of parts into a remarkably neat, compact, and perfectly balanced receiver, that gives razor-edge tuning, with range, volume and rich, clear tone. Your nearest radio dealer will give you full particulars of the Lissen S.G. 3—See him today.

LISSEN

SCREEN- GRID THREE

If you have any difficulty in obtaining particulars write to
N.Z. Distributors:
ABEL, SMEETON, LTD.,
27-29, Customs St. E., Auckland.

PRICE OF KIT,
with full instructions and diagrams
for construction—**£6**
Or complete with Speaker,
Valves, and Batteries (no
cabinet or aerial)—**£13/12/-**

they are members of the vast brotherhood of "searchers," but it will also help to bring closer together the members who find themselves in various places where they are practically strangers. The sign of the DX Club badge should in itself be sufficient introduction. I am hoping to see others of the club support this suggestion. I find the DX notepaper very useful, and it helps me considerably in sending for verifications.—"Vogeltown" (New Plymouth).

A New Short-waver.

THE recent American mail brought in 10 verifications, as follow: KFOX, KFWB, KTAB, KDYL, KGA, KOIN, WTIC, KFSD, WSUI and KRLD. The wonderful service which KFOX has maintained since going on the air was illustrated in the interesting folder which accompanied their letter. Although of only 1 k.w. power, they have had reports of reception from all over the world. Did any D.X.-er hear the American station on WENR's frequency on the evening of April 12, broadcasting an anniversary programme until 6.30 p.m. and giving the call WLS? I held him until 6.30 p.m., when WENR commenced a programme of dance music. As WLS is listed with a power of only 5 k.w. and yet came in with strength equal to that of WENR with a power of 50 k.w., it may have been a rebroadcast of the former station by WENR. The Europeans which could be received at fair strength a short time ago seem to have petered out, the German regional on 276 metres (1090 k.c.) being the only one worth listening to.

A new short-wave transmitter has been heard during the early morning operating on the 49-metre band, just below the Vatican station. The call was given as "Allo, Allo, hier Radio Moscow." This means that Russia has now three high-power short-wavers on the air, RV15 on 70 metres and two at Moscow on 49 metres and 45 metres. With regard to Mr. Ellis's suggestion concerning a badge for the D.X. Club, I think that it would be quite a good idea, but we would have to leave the design to his own judgment.—D.T.H. (Timaru).

KGW Controversy.

J.P.C. (P.N.): Thanks for your support in the KGW-KZRM controversy. If D. McL. (Wellington) reads my note of 20/3/31 he will see that I am referring to a specific instance quoted by "Switch." Some months ago B.C. (Hamilton) was asking about S.W. stations in Honolulu. I have advice to-day that there is no broadcasting station, but there are eleven S.W. commercial telegraph stations and about 26 amateurs, two of whom have radio phone transmitters. No W.L.'s mentioned, however. Had 13 carriers on the early morning stations, but too much static to do anything with them. Two of them, on 216 and 220 m. (approximately), were, I think, French, and were very strong about 6.20 a.m.—"Cromdale" (Otago).

71A Launceston, at R7.

ON April 14, using a three-valve battery, set with 'phones, I received 71A, Launceston, at R7, static being severe. He called N.Z. and expressed the hope that "all N.Z. listeners were well tuned-in." He also asked for reports. "Ocol" (Hawke's Bay). Re station on 508 m. (590 kc.), using a det two audio, I picked this station up on April 13 and 14. Strength on the latter occasion was very good. A lady and gentleman were conducting a conversa-

tion in Japanese. No call was given.—"Mike" (P.N.)

Americans Coming In.

LATEST loggings are: WOWO, Fort Wayne, 1160 kc. (259m.); 2MO, Gunnedah, 1330 kc. (215m.); and KSTP, 1460 kc. (205m.). The latter was heard testing on April 11, when his location was given as "St. Paul and Minneapolis." Strength R7. Mr. Ellis's suggestion re DX Club badge is excellent.—N.J. (Masterton).

KSTP Test Programme.

"WIRELESS BUG" (Raethi): I also heard the test programme from KSTP, St. Paul, and think you will find that the owners are the National Battery Broadcasting Company. Once the announcer gave it as N.B.C., but quickly corrected himself. Before 8.15 p.m. a frequency test was carried out. B.W. (Stratford): KSTP is announced as "KSTP, St. Paul at Minneapolis." J.P.C. (P.N.): I heard 2BE, Sydney, on 316m. (950 kc.), about two years ago,

DX Competition

DX-ERS, do not forget that the next period for the DX Cup closes on June 30. By this date all logs must be in our hands. Remember that Australian stations received in daylight can be entered in the competition, and that the winner in each district receives a certificate. We have received interesting letters from DX-ers and it appears that the next competition will be keenly contested.

but the station was partially destroyed by fire, and I have not heard them since. Recent verifications have been received from KOIN and KWK. Has any DX-er received a verification from COHB, Harbin, on 445m. (675 kc.)? Has any DX-er heard what I take to be a new Jap. station on 365m. (820 kc.), just above JOIK? It can be heard almost any night at about 9 p.m. at quite good strength. R.A.S. (Mamaku): I have heard WOI, but only once. This was about a year ago, when they were broadcasting a test programme at approximately 10 p.m. Mr. Ellis's suggestion is just the thing.—R.J.R. (P.N.).

Waste Transmission Power

Of American Stations

THOUGH American broadcasting stations use an aggregate of nearly 1500 kilowatts of power, an engineering professor of the Massachusetts Institute of Technology has estimated that the total power received by the average receiving set's aerial amounts to the equivalent of the energy consumed by the common housefly walking a distance of one foot up a window pane.

An engineer of the Federal Radio Commission has also calculated that, with 13,500,000 radio receiving sets in use in the United States, their aggregate "consumption" of broadcasting power amounts to only 13.6 watts. All the rest of the broadcast energy is dissipated in space.

DX Reception Controlling Factors

THE first point to be considered in respect to obtaining D.X. reception is the ratio of signal level to noise level. A station broadcasts by means of other waves, the amplitude or power in the transmitted waves becoming weaker in proportion to the distance it has travelled. This is known as attenuation, and the strength of a signal at a particular point the "signal level." This varies from day to day, and is nearly always higher at night.

There is always a certain amount of static or atmospheric disturbance, due to free electricity present in the earth's atmosphere. The strength of these disturbances varies from place to place, and from day to day, while local disturbances emanate from electrical appliances, and a certain amount of noise is generated in the receiver itself.

Three components therefore make up the noise level: Atmospheric, man-made static, receiver noises.

We thus find that there are two levels to be taken into consideration—signal level and noise level. If on a particular night 2BL's signal level at a particular place in New Zealand is above the noise level, then a good set can pick up, and reproduce, 2BL satisfactorily.

But on another night, or even at a different time on the same night, the signal level of 2BL may drop, the noise level rise, or both. Now, it is obvious that if the signal from 2BL drops below noise level, leaving no signal margin to be amplified, no set can possibly reproduce 2BL satisfactorily.

Another important factor in d.x. reception is the fading and distant effect which frequently occurs and which is often incorrectly ascribed to some fault in the receiver.

A normal broadcast station emits two waves, "ground wave" following the curvature of the earth, and the "space wave," which travels upward until it meets the conducting layer in the upper stratum of the earth's atmosphere, called the Heaviside layer. The wave is reflected from this layer and comes to earth at some point distant from the station.

At certain points both waves may be picked up by the receiving aerial; these

Australian License Numbers

Exceed 300,000

	Number in force at 31/12/30	Ratio to 100 of population
New South Wales	119,659	4.79
Victoria	139,020	7.76
Queensland	24,332	2.57
South Australia ..	28,803	4.95
Western Australia	8,450	2.01
Tasmania	7,901	3.58
Commonwealth	328,165	5.07

Picture Transmission

RECENT experiments in the transmission of pictures by wireless between Japan and Germany, via U.S.A. and Great Britain, were very successful. The reproduced photographs were of a high order, and in some cases were capable of newspaper reproduction.

having travelled along different paths, at the same speed (186,000 miles per second), obviously rarely arrive together ("in phase"). They may be of equal strength, in which case, if exactly 180 deg. out of phase, they will cancel one another and no signal will be heard.

When of different strengths, one will sometimes assist the other, and at other times act in opposition and fading and distortion result.

Finally, for good quality reception, the detector must be supplied with adequate signal voltage, so that even when the signal level: noise level ratio is favourable, and there is no ground and space wave interference, it is still necessary to have sufficient r.f. amplification so that the signal voltage may load the detector adequately.

Where distant reception is desired, at least one, and preferably two stages of r.f. amplification, using the modern screen grid valves, should be employed. Even then there will be occasions on which pleasurable reception is not possible, no matter how good his equipment may be.

(By courtesy Philips Lamps.)

Have YOU Joined The Radio Hobbies Club ? Membership FREE !

It has long been felt that Radio Enthusiasts would much appreciate definite information and instructions on Radio Set Building—and it is with this idea that the "Radio Hobbies Club" has been formed. Membership is absolutely FREE, and "Radio Circuits" will be published regularly containing interesting and instructive information on Radio circuit building.

Write NOW to the "Registrar," P.O. Box 163 Te Aro, Wellington, enclosing stamped and addressed envelope, and join up. You will receive your membership card by return.

Laboratory Jottings

FROM Messrs. Crawford and Finlayson we received a Lyratone Midget a.c. receiver for test. This is the latest product of Gilfillan Brothers, the well-known American radio manufacturers.

The set has a very neat appearance and is well finished; it has three controls, tuning, volume and tone. Weighing under 22lb. it is readily transportable, and as it will receive the local station without an aerial, it is an ideal portable set for those who wish to move it from one room to another as occasion may demand.

The circuit consists of three r.f. screen-grid stages, screen-grid detector, feeding through resistance capacity coupling into a single output stage. The detector employs the power linear system. Self-healing, dry, and electrolytic condensers are employed, and this does away with any possibility of filter condenser trouble. We had an interesting example of this in that when examining the internal portions of the machine we accidentally disconnected the speaker with the power on. Normally the set would probably have broken down one of the condensers, but in this case a crackling across the electrolytic condenser was the only result. When the speaker was connected again the condenser healed. The filament voltages are kept well down, and this is a safeguard against power line surge. The mains are equipped with fuses.

The tone of the set is very good and quite natural. Obviously, using only one stage of 245, the output is limited though it is ample for the average room. The tone control gives a gradual transition from bass to treble. At its minimum setting there is little apparent clipping at either end of the musical scale. In other words, there is neither a boomy bass nor overpronounced treble.

The performance on distance quite surprised us. It brought in the main Australian stations at good strength, and even the smaller ones came in quite well. In the few days we had the set we were able to compile a log of about 30 stations.

By adjustment of the balancing condensers the set may be made to oscillate, and thus will go into a state more sensitive than the balanced receiver.

Selectivity is another strong feature, for we were agreeably surprised to find that we could receive 2FC with no trace

World Radio News

AT the beginning of the year the U.S.A. had 615 transmitting stations, Canada 70, Cuba 60 and Mexico 35. Central America had 800, South America 98, Argentina 43 Uruguay 26, Brazil 23, and Chile 6.

THE United States army is conducting experiments with a view to abolishing the military band. Instead of the band preceding a regiment, a loudspeaker car is being used as a substitute.

THE installation of a shortwave transmitting station is contemplated at Madagascar. The new post will give news bulletins, concerts, etc., and will also serve to facilitate the administration of the affairs of the island from Africa and enable instructions to be issued to the military force garrisoned there.

THE Radio Supplement of the Hungarian Journal, "The Voice of the People," is agitating for a decrease in the cost of radio licenses. Relative to the wages of the workers, the cost of a license is dearer than in any other part of the world. The townspeople are also complaining that the programmes

of 2YA. This is one of the most difficult tests any receiver is called upon to pass.

The volume control is capable of cutting Wellington down without introducing an obvious amount of distortion. It operates upon both aerial coupling and the screen-grid bias.

From a fairly searching examination we could detect no weaknesses or evidences of shoddy construction. Of course some time is necessary before the durability of any set can be ascertained, but, from what we could see of it, the "Lyratone" appears to be well constructed and would stand long service.

are solely drawn up to interest the country people. Although it is realised that these constitute the major part of the population of the country, the inhabitants of such towns as Budapest desire something a little more cultured.

EXPERIMENTS are being conducted in Hamburg in connection with the transmission of piano music without using a microphone. The string vibrations are immediately converted to electrical vibrations and fed to the transmitter. Tests are also being made to ascertain whether the principle can be applied to other musical instruments.

THIRTY-SEVEN State and local police radio stations are now in operation in almost as many American cities, and eighteen others are under construction. The majority of these are used for low power broadcasting on short-wave to patrol cars, although Pennsylvania's State police employ five long-wave stations.

A LONDON radio shop has a device whereby the passer by can light up the window at night by responding to the invitation to switch on the illumination himself merely by placing his hand over a shadowy miniature porthole. A hidden photoelectric bell causes a relay to work which in turn operates the light switch. The illumination ceases as soon as the hand is removed from the porthole.

AN international regulation reserving a block of high frequencies (short waves) for S.O.S. calls is urged by Captain S. C. Hooper, director of U.S. Naval Communications, who points out that the present distress frequency of 500 kilocycles (600 metres) is often inadequate when used over vast expanses of water like the Pacific, Indian, and South Atlantic Oceans. The daylight range of the average ship's transmitter, working on a 500 k.c. frequency, is about 500 miles, with a night range of perhaps 2000 miles. According to Captain Hooper, a ship in distress could easily be farther than this from other ships or land stations, and hence its S.O.S. signals would probably be unheard.

PRESS WIRELESS, INC., co-operative radio subsidiary of a group of important American newspapers, has been authorised by the Federal Radio Commission to proceed with the erection of a network of radio-telegraph stations with which to handle Press messages as a public service for the American Press as a whole. Stations in 19 cities were planned in the original project of Press Wireless. Under a previous grant of 13 trans-oceanic channels, some of which may also be used domestically, Press Wireless has already erected two stations in New York, two in Chicago, and one each in Boston, Los Angeles, and San Francisco. These are now operating with one another, and to some extent in international service. Other stations are under construction in Washington, Boston, and Los Angeles, and another has been projected in Honolulu.

THE American station WEAf frequently broadcasts the singing of canaries, to orchestral accompaniments, and, since the trilling of these little songsters cannot be imitated, cages of good birds are eagerly sought after and well paid for. Apropos of this story, one is told concerning other unusual performers before the microphone. When Byrd was in the regions of the South Pole the American station KDKA endeavoured to broadcast the voices of a number of American dogs for the edification of those with Byrd. Unfortunately one of the prospective artists proved refractory and upset the others, with the result that soon the entire personnel of the studio was pursuing errant dogs around the streets. Only one remained in the studio, but it was too frightened to be prevailed upon to bark, so the announcer had no alternative but to imitate the bark of a dog himself. This was duly broadcast to the world.

EXAMPLES

From my Bargain List

Igramic Short-Wave Chokes 2/6
14-inch Former 10d. per ft.
4-Volt Condor Valves, UX Base, 6/6 each

If you have not a copy of the Cheapest Radio and Radio Parts List write me at once.

BOB HORROBIN

Flashlight Corner, 2 Courtenay Place, Wellington.

Quick Repairs. 'Phone 22-357.

SILVER-MARSHALL SRADIO M EXTRAORDINARY

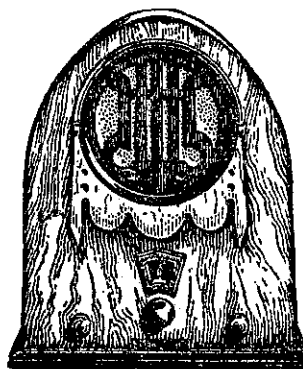
These complete console receivers are now available. The receivers employ the most modern features in radio design, incorporating:—

FOUR SCREEN GRID BAND PASS
SELECTOR, DYNAMIC SPEAKER,
BUILT-IN AERIAL, FREE FROM
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Official S.M. franchised dealers for Wellington City

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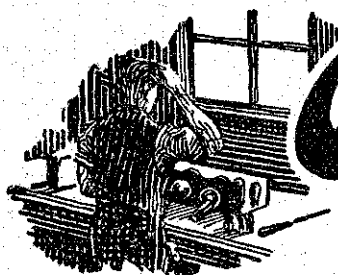


DEALERS! The next shipment of Gilfillan's LYRA-TONE MIDGET

Arrives April 31. Nearly 100 of this month's shipment already booked. Get in early.

CRAWFORD & FINLAYSON LTD.

Box 675, Wellington.



Questions and Answers



R.H.R. (Southbridge): Is resistance-coupled amplification suitable when following a regenerative grid-leak detector?

A.: Yes.

2. Would PM1A or PM1HF be the more suitable as detector?—The latter.

3. Would cocoa tins make suitable shields for the "Outspan Five"?

A.: Yes, but they will not be as efficient as aluminium or copper ones.

"TAINUI" (Dunedin): I have a commercial a.c. super. het. on which it seems difficult to receive Japanese and American stations. Aerial is 60ft. long, 40ft. high at one end, and 30 at the other. Can you offer any suggestion for improvement?

A.: Have you a good earth? for your aerial is quite O.K. Your situation may be against your reception of distant stations.

2. Does locality affect distant reception?—Yes.

"HOPELESS" (Wellington): Is insulation tape satisfactory for insulating my lead-in, which comes down between some electric light wires and the guttering of the roof?

A.: Your lead-in should be at least three or four feet away from the power lines, with no possibility of swinging across them in the wind. Otherwise, you may possibly seriously damage both the mains and your set. Insulation tape in such an event would be of little use. In any case, if your lead-in is close to power lines you will probably be troubled by interference. Use heavily insulated wire.

2. How many insulators should I use on my aerial?

A.: Three at each end.

Note.—Your log is quite a good one.

G.S.N. (Eketahuna): Can the "Sellen short-wave set" be used for reception on the broadcast band? If not, could it be adapted for both?

A.: Yes. Particulars of suitable coils will appear shortly.

C.H.W. (Invercargill): I have two power valves, a Mullard PM4 and a B.T.H. B4 (6 volts). Could I use these valves in push-pull in the manner shown in the diagram?

A.: No. The characteristics of valves used in push-pull should be fairly closely matched, and hence should, in general, be of similar make.

2. Which additional valve would you advise me to buy?

A.: Possibly the PM4, though both are quite suitable.

W.L.L. (Devonport): I have built the "Outspan Five," using a stage of push-pull and A and B eliminators. I have logged 22 stations, without much exploring, at full loudspeaker strength, but am troubled with what I think is a modulation hum on local stations. This comes in only with the carrier wave of the locals such as 1YA and 1ZR and 1ZB, etc. It is not in evidence on distant stations.

A.: You might try one of the following three remedies:—(1) Place a good quality mica fixed condenser of .0001 mfd. in series with the set and earth. (2) Break the connection between the primary and the secondary coil in the first r.f. transformer. (3) Reduce the number of turns on the aerial coil. Also see that the cores of the transformers are grounded.

O.B.S. (Auckland): I have a three-valve commercial battery set. Is it suitable for short-wave reception?

A.: It is satisfactory, but not as efficient on short-wave as it might be. Coils may be obtained from the agents.

"SHORTWAVE" (Marton): Are the windings for the short-wave coils in the "Diff. Two" close or space wound?

A.: Close, for space reasons.

"NEUCHUM" (Marlborough): I have a six-valve commercial a.c. "Midget" which vibrates when in operation. What is the cause of the trouble?

A.: This may be due to a number of faults such as loose speaker diaphragm, loose lamination in the power transformer, a defective valve, etc. See the article published in last issue (dated April 24) on "Locating Noise in Receivers." You must remember that midget sets will not handle a great amount of volume.

2. I am in a good locality and have a good aerial and earth. Should this set bring in all the Australians and Dunedin at good loudspeaker strength?

A.: Yes.

3. Are my valves of a good make? If not, would it be possible to improve on them?

A.: We have not tested this make of valve, and so cannot advise you. Better use one of the recognized makes of first-grade valves.

"COAL" (Greymouth): I am using two 45-volt "B" batteries with a 7-valve commercial set. Will it improve reception to add another block?

A.: Yes, you will secure much greater volume, and your set will be more sensitive on distant stations. Do not, however, add a new battery to two already partially run down, for it will ruin the former.

2. What type of loudspeaker would give the best reception on my set?

A.: A good moving-coil speaker would

probably be the best, though a cone capable of handling a large output, such as the Bluespot 66R, would be quite suitable.

C.J.S. (Auckland): I substituted a .0005 condenser for a .00035 in my set and altered the coils accordingly. The volume and tone are better, but distant stations which were previously quite good are barely audible. I appear to get the carrier waves but cannot bring them in. Signals seem louder when I use a wave-trap. I tried a few more turns on the primary coil, which is three-eighths of an inch from the secondary, without any apparent effect.

A.: This is just a little difficult to explain, particularly, when you say volume and tone are better but distance stations are weak. You see, we don't quite un-

DX COMPETITION.

Entries for second period close June 30. Certificates for winners in each district. Verifications are required for every station logged.

Understand what you mean. The distance between the primary coil and the secondary should be less than three-eighths—say one-eighth or one-quarter of an inch. Try increasing the number of turns on the reaction coil and just make quite sure that the connections on the new coil are quite right.

BAT. (Wellington): The three cells in my accumulator show a different reading when I test them. Does this make any difference?

A.: This should not be so to any marked degree, though sometimes small variations are apparent and permissible. The best way to overcome this is to give the battery a long, steady charge and leave it on until all cells are fully charged. Another plan would be to put the charger on to the cell that is lowest, of course adjusting the voltage to 2.

2. I have had my "A" battery three years and wish to change the electrolyte. How do I go about it?

A.: Drain off the old electrolyte after the battery has been fully charged. The cells should then be washed out with distilled or rain water that has been collected in an earthenware vessel. Now obtain from the chemist a small quantity of pure sulphuric acid, or, better still, ask him to mix up for you a solution of sulphuric acid having a specific gravity of 1.240. You can find out the quantity you will require by measuring the amount you drain off.

3. I was told the gravity test should be 1.240, but my hydrometer reads 1.250.

A.: This is of little concern. It only indicates that your accumulator has slightly more sulphuric acid than normal, but it is so little that it does not matter.

QUALITY (Auckland): I am operating an a.c. set with a heavy cone speaker, but I wish to use a pick-up and find that the speaker jars on a heavy recording. Would there be any noticeable falling off of volume if I used a dynamic speaker? A friend of mine made the change and his results were very much inferior as regards sensitivity.

A.: A good dynamic speaker should be equally as sensitive as yours. The one you mention is an excellent one.

CHANGEABLE (Te Kauwhata): My commercial set was designed for 6 valve and I have always used Continental valves, but I have done everything I can to get beyond Australia. Would the use of American valves improve sensitivity?

A.: It is most unlikely. Probably your locality is to blame.

2. Is my set noted for distance work?

A.: It is a good one, though, of course, more recent ones using s.g. valves have a tremendous advantage over sets of your type.

BELMONT (Lower Hutt): Would it be possible to convert a trickle charger into an eliminator? If so, how?

A.: Yes, providing the current required by your set is not greater than the charger will deliver. You must use a smoothing choke and an electrolytic condenser.

JACK (Invercargill): I have a battery-operated all-wave set. Will you supply particulars to enable me to cover the band from 500 to 850 metres?

A.: To get a coil that will be anything like efficient you must use a three-inch former and it will require about 200 turns. The reaction requires about the same number. You should use fairly fine wire, say, 30 gauge d.s.c.

FACE (Dunedin): I wish to use a loading coil with my crystal set. Is my circuit correct and where must a loading coil be used?

A.: You must use it in series with the secondary coil. In other words, it

CORRESPONDENTS must attach this coupon to all queries sent to the Technical Editor (Box 1082, Wellington). Limit three questions, unless letter is accompanied by 1/- fee.

Name of set

Number of valves

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries.

Date

Please Note:—

- (1) Be specific and brief, tabulating, if possible.
- (2) Write legibly, and on one side of the paper.
- (3) We do not design circuits, but accept suggestions for feature articles.

Solving trouble, as different from advice, is difficult by correspondence and while letters are given every consideration, answers are not necessarily correct—they are only our opinion based on the matter supplied, which may be quite inadequate. Intricate and involved specifications cannot be supplied without a specialist's fee.

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should occupy the position "A" in your sketch.

K.I.W.I. (Dunedin): Do you know who are the agents for the "Supertone" receiving set?

A.: Sorry we do not. Perhaps some reader seeing this may be able to advise our correspondent of the address of the agents.

G.T.H. (Christchurch): I wish to use the Philips equivalent of the 245 in the L.W. What alterations must be made?

A.: You need not make any alterations; the valves are so much alike that efficiency will not be impaired if it is just substituted.

JUMBO (Otago): What fixed condensers must I place in series with my .00015 tuning condenser to bring it to the following capacity: .0001, .00035, and .0005?

A.: By using a series capacity you will reduce the total capacity. Therefore the only capacity you can get by seriesing is the .0001 and for this you require a .001 condenser. If you want to bring your condenser up to the other

A.: It is not practicable to use .0005 condensers in short-wave sets. Use those specified if you want worth-while results.

MILLYCYCLE (Pokeno): Will zinc do for shielding an ordinary set?

No; it must be copper or aluminium.
2. Would 30 gauge d.s.c. wire be too heavy for the primary. If not, what alterations must I make in the number of turns?

A.: You can use 32 without any departure from the specification.

3. Will the incorporation of a 30 henry output choke improve distance-getting ability?

A.: No; it will only save your speaker.

A.W.E. (Christchurch): What voltages do you suggest on the "B" side of the "Radiogram" power supply?

A.: "B+ maximum" at least 135. "B+ audio," either the same as "B+ maximum," or 45 volts less. "B+ detector," 22½ to 45. "B+ screen" half the voltage on the plate.

2. Concerning the 1½ former the list of components specify 7 inches and the directions for making up the coils call for a one-inch piece. Which is correct?

A.: Only one short piece is required, say 1 in.

3. Will 3 bypass condensers do instead of .25?—Yes.

P.A. (Wellington): What are the capacities of two condensers, one with 11 plates and another of 24?

A.: Probably .00025 and .0005.

2. How many plates in a .00015 and .00025 condensers?

A.: Seven and eleven respectively.

3. Where could I obtain some information about condensers?

A.: The 1931 "Radio Guide."

TRICKLE CHARGER (Khandallah): I have an Osram DE5 valve. What type is it?

A.: A general purpose 6v. valve.

2. When are you bringing out an all-electric version of the Outspan Five?

A.: In the 1931 "Guide" we gave an electric version of a somewhat similar set using one less stage. Before long, however, we will add another stage for the "Radio Record." This will equal the Outspan Five only it will use push-pull.

3. I have a Ferranti OP1 and a Pilot 394 output transformer. Which is the most suitable for the L.W.?

A.: As both are of the same ratio both are equally suitable.

PUKEKO (Hineara): My house is situated on a knob, and I am forced to run the aerial parallel and very close to a power line. I can lengthen it without sacrificing much height only by having the lead-in off the centre of the aerial. Would this improve matters?

A.: If the distance from the centre of the proposed aerial to one end is greater than the distance from the existing lead-in to the mast, then it will be an improvement, otherwise not. If you are near a power line there is little to be gained by increasing the length. Where possible increase the height and shorten.

2. Could you recommend a handy textbook to assist in the location of trouble that might develop in a set such as mine?

A.: Yes, the 1931 "Guide" will help you, but you would find "The Service Manual" (Radio News) gives more detail as far as a.c. sets are concerned.

PARALLE (Nelson): Would a 50 ohm potentiometer be suitable for centre tapping the filament wires of two Osram P625 valves in push-pull?—Yes.

2. Which would be the correct resistance for biasing two P625's?

A.: 500 ohms seeing they are in push-pull, and double the current will be passing.

3. What value potentiometer do I require for shunting across the filament leads of the detector stage?—200 or 400 ohms.

MEGOSTAT (Wellington): Can an eliminator designed for 200-220 volt mains be worked safely on 230 volts mains?

A.: Providing your lines are not subject to great fluctuation, yes.

2. How do amateurs find out their percentage of modulation?

A.: By the use of meters.

3. Would a 100 ohms potentiometer use any current across a 6-volt accumulator?—60 mills.

(Note.—We restrict the number of questions that any one person may ask without payment of a fee to three.)

H.J.P. (Blenheim): I am using two midget condensers in conjunction with my tuning condensers to spread the amateur Morse, but I cannot get near the main tuning control for hand capacity. Would adjusting them by bakelite rods and shifting them to the back of the panel help me?

A.: Yes. Receive the station on the main dial, and vary the midget condenser from minimum to maximum. If the station disappears move the main dial one point and tune in again with the midget, and so on, as the midget tunes the wave between the two points on the main dial only. When not in use the midget condensers are left at minimum capacity.

2. In your recent data for short-wave coils you give three coils. Are these for the detector and are they put on in this order from the top?

A.: Yes, primary on the bottom and tickler on the top. The s.g. coils are of the same dimensions.

3. My set will not oscillate with the r.f. choke between the detector coil and the first transformer. Do I need more reaction turns on the coil?

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"Radio Amateur Handbook" (Handy's) latest edition, 5/3.

"Radio Amateur Call Book," latest quarterly, 5/3 (March, 1931).

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"How Radio Receivers Work," by Roberts, 8/-.

"Radio Design," 1/- per copy.

"Radio Engineering" (a monthly issue), 21/- per annum.

"Projection Engineering" (monthly) 21/- per annum.

"Radio Citizen's Call Book," latest quarterly, March, 1931, 2/9.

"N.Z. Radio Guide and Call Book, 1931," 2/40.

"1931 N.Z. Radio Handbook," 2/10 posted.

6-Valve Neurodyne Blue Prints and instructions with one transformer and 2 resistance coupled audio stages, 1/8.

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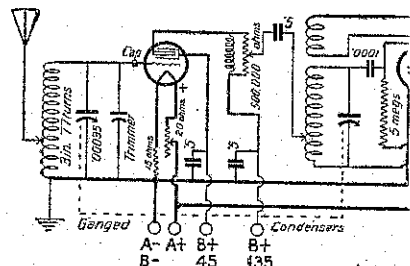
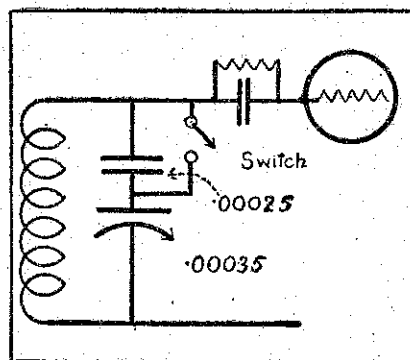
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By connecting condensers in series, as in the upper illustration, the total capacity is less than that of the smallest. By paralleling them as in the lower diagram the total capacities equal the sum.

two you must use in parallel a .0002 or a .00035 as the case may be, but by using a condenser in parallel you are reducing the minimum capacity and lessening the tuning range of your set.

2. I have two shortwave coils which work well on the top wavelength, but which give me Morse only on the lower end.

A.: Probably your set is oscillating continuously when on the lower wave lengths and you must reduce the tickler turns until it will just oscillate on the upper wavelength. If this is not the case you will need a little more practice in tuning in broadcast stations, though on the lower wavelengths there is more Morse than telephony.

SEARCHER (Kaikohe): I have had a difficulty with the s.g. stage of the Diff. Four. Oscillation is difficult to control.

A.: Use a .001 coupling condenser instead of a .0001 as specified, when the set was first described. This will probably overcome your trouble. The condenser, by the way, is the one between the s.g. stage and the detector.

L.D. (Christchurch): I am building the s.g. short-wave set in the 1931 "Guide," but I intend to use .0005 variable condensers. What size coils should I make to match them?

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PHONE 41-446

A.: This may be due to a poor choke. Try increasing the number of reaction turns or a different choke.

SUPREMA (Wellington): I have a four-valve set and am using an A425 in the first audio. I find that there is a very objectionable whistle.

A.: This whistle is due to your using an unsuitable valve in the first audio. A425 is designed for a different class of work from what you are using it for. Use a different class of valve in its place and your trouble will disappear.

PURUKI (Picton): Owing to an accidental short-circuit I burned out a condenser in my eliminator, but after a short time the choke burned out. Can a suitable one be obtained ready-made that I might instal myself, or could I make one? It is very small.

A.: Your best plan would be to make a choke such as described in the 1931 "Radio Guide." You would need to pick out one of the standard chokes from the table given in the chapter on chokes that would fit into the space you have available. This, when built, would serve the purpose as well as the one originally in the set.

OUTSPAN (S. Dunedin): I have built the "Outspan" circuit and am getting good results, but I believe a certain amount of damping is taking place in the coils. Could you give me particulars for valve base coils?

A.: Valve base coils will really be quite inefficient owing to their shape. However, if you want to try them they will be as follows for .00035 condensers: 32 d.s.c. wire; secondaries, 90 turns; primaries, 40 turns; aerial coil, 30 turns.

2. Could you arrange to publish an article on the design of primary coils?

A.: Yes, we shall see what we can do in the matter.

3. Would a stage of push-pull such as described in the "Guide," using ordinary transformer, be suitable for the "Outspan"?

A.: Yes; it would be better, however to use a push-pull transformer next to the speaker. If you already have the ordinary transformers, you can use them.

N.R.B. (Kerikeri).—I have a factory built wireless set. Could you send me the circuit of an aerial tuner?

A.: An ordinary wavetrap would suit your purpose, though the commercial "Reesonator" would be better.

2. Will you inform me when your 1931 "Guide" will be published?

A.: It was published just five weeks ago, and a full-page advertisement has been regularly appearing in our magazine announcing that fact. Just for the time being we are short of copies, having sold out our first edition, and are waiting the second, which will be ready in a day or two.

H.W. (Waipukurau).—I have a receiver of my own layout, consisting of Schnell detector and two audio. I was recently fiddling around with the set full on, and the coil right out. I disconnected the earth from the variable condenser, and then to my amazement heard Morse on the telephone. Reaction control had no effect on the signal strength or note, and neither had the tuning condenser. Half an hour later the signal was still going strong. Hand capacity had quite an effect, though the grid filament potentiometer had a very slight de-tuning effect.

A.: Had you broken the lead to the grid potentiometer you would have had no signals, as with this closed the circuit becomes a vacuum-tube volt meter, and some part of the choke is resonating at a harmonic of the incoming signal. Further, by varying the potentiometer which in-

creases or decreases the bias oscillation is caused to stop and start. By placing a coil in the circuit and disconnecting or insulating the grid pin or contact, local broadcast can be heard. Try it.

HOOK-UP (Matamata).—If I increase the number of turns on the primary for the "Outspan," what should I expect as regards amplification and selectivity?

A.: Generally the effect of increasing the number of primary turns is to increase sensitivity and decrease selectivity. There is a point, however, at which further turns on the primary only cause the set to become unstable.

2. What value of resistances and condenser should be used in an r.c.c. outfit using s.g. detector?

A.: The exact value will have to be found by experiment, but the following will give you a basis. Use a 100,000 ohms resistance in the plate circuit, a .5 coupling condenser and a .5 megohm grid resistance.

3. Would H 610, followed by S 610, and hooked up to L 610, make a satisfactory set?—Yes.

(Note.—I find the "Outspan" very sensitive, and quite selective. I have had several Americans at speaker strength.)

Learning by Experience

Aerial Resistance

TWO experiences I have had lately; one a rather expensive item, might be of interest. I was adding a stage of audio to my short-wave set, the transformer had its four terminals in a row on top, B + G bias, G. and P. I was experimenting with the grid bias and disconnected the wire from the bias terminal, and a slight movement caused

this wire to make contact with the B + 90 volts. There was a flash, and three good valves went west. Moral, always disconnect H.T. when tinkering with your set.

My second experience goes to show how necessary it is for a good insulated aerial. I built up a kit set for a friend, and it worked well at my house. When I connected it to my friend's aerial reception was poor. I took it home again, tried it again. All O.K. Back again to my friend's house, no better result than before. I suggested his aerial may be leaking to ground, so I tested my aerial with a megger. The reading was infinity. When I tested that of my friend all I could get was 6 megohms, so that he was losing about 70 per cent. of his signal strength. We unhooked the aerial at the lead-in and got the infinity test. The whole trouble was at the lead-in, which was a piece of wood nailed to keep the aerial from touching the spouting. After this all was satisfactory. In discussing the subject with a friend I suggested making a test of his aerial, when we found a resistance of only 4 megohms. When the aerial was disconnected it read infinity. His lead-in through a brick wall was the source of much energy being lost. No one was more surprised than he. In my opinion, one of the main causes of bad reception is an inefficient aerial. A megger test is the most conclusive one that can be applied to any installation. —T. P. Sewell (Christchurch.)

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A Wavetraps for Long and Short Waves

By "MEGOHM"



THE following is the result of experiments made with the object of producing a wave-trap for use with all-wave or other receivers, enabling them to receive distant stations when the local station is on the air, and also enabling them after the local has closed down to be used for DX without interference from nearby 80-metre phone transmission.

This combination trap has been designed specially to increase the utility of the "Advance" a.c. short-wave receiver (described in the 1931 "Radio Guide"), when used to receive broadcast, but may equally well be applied to any other receiver for the purposes mentioned. When listening on the 80-metre band the trap may be used to reduce local phone or c.w. interference, and thus one may receive stations that otherwise could not be received.

A wave-trap of this type will function best when the resistance is kept low, and as the coil offers more r.f. resistance than the condenser a condenser of large capacity is employed. Thus the coil may have few turns, and with heavy gauge wire, low r.f. resistance will be secured.

Shielding is not always necessary, but where the interfering station is close at hand it is advisable. The construction of a copper shield is described for the benefit of advanced constructors and those wishing maximum efficiency, but for economy a tin box of similar dimensions, and having a close-fitting lid at the top, may be used. With a coat of duco enamel this looks very neat.

The Shielding.

COPPER sheet of 26 gauge is used, the dimensions being shown on the diagrams. The bottom and two sides are bent from one piece, as being more

economical of copper. The two ends are then soldered in, leaving 1-16in. of the bottom and sides projecting. Most of the soldering can be done inside unless the constructor is a practised hand, in which case it may be done outside. The secret of a neat joint is to use killed acid and ordinary solder, with a clean, hot iron. Use only as much solder as can be picked up by the iron, and then spread in both directions along the joint. Clean off any roughness with coarse carborundum paper on a small block of wood.

Before soldering the front panel in place, it should be drilled and the switch and condenser mounted in place. After soldering in, the coils are placed and connected up, and then the back is soldered in. The top may be permanently soldered or not, as desired.

The top is cut the exact length of body from back to front, and sideways, the width of the inside plus one inch, which forms a half-inch flange down at each side. A is the front edge, projecting 1-16in.

The body is a sheet 20 $\frac{1}{2}$ by 7 $\frac{1}{2}$, bent as shown, which leaves about $\frac{1}{4}$ in. extra at B; to be finally cut off to make both sides of equal height.

An earth wire is soldered to the back of the shield, and run round the back of the receiver to the earth terminal.

The Tuning Condenser.

THE most suitable capacity is .0005, though .001 or .00035 may be used,

altering coil turns to suit. Note that no part of the circuit is connected to the shielding. Therefore, the condenser must be insulated by mounting on a strip of 3-16 ebonite $\frac{1}{4}$ by 2 inches, or to suit the condenser, and providing a

are placed so that they will not touch the condenser frame. Drill the ebonite first, then mark positions of holes on the copper, using the ebonite as a template. Arrange the height of the condenser so that the moving plates are never less than $\frac{1}{4}$ in. from the top of shield. A vernier dial is best, but a plain dial is quite practicable.

The Switch.

UNLESS the trap is to be used on two bands the switch is not required. Any two-way switch, if insulated, is suitable, and requires that only the spindle is to project outside the shield, a hole being made to give 1-8in. clearance all round.

If it is desired to construct a suitable switch, the diagrams give necessary particulars. The minimum size of the ebonite is 2 1-8in. by 1 $\frac{1}{4}$ in. The spindle is a piece of $\frac{1}{4}$ in. brass rod not less than 1 $\frac{1}{4}$ in. long. The top portion of the switch consists of three layers of $\frac{1}{4}$ in. ebonite drilled to take the spindle and form a bearing. Two bolts at each end hold the switch to the panel. At the contact end, a narrow slip of ebonite holds the main portion clear of the panel.

The arm of 18 brass should be short, drilled $\frac{1}{4}$ in. and slipped over the end of the spindle and soldered on. Between it and the ebonite is a 24 brass washer cut like a solder tag. At the other side of the ebonite a narrow washer or turn of 24 wire is soldered to the spindle to prevent end play.

Bending of the arm to fit well down to contacts is left to the constructor's discretion. A stop each side is a 1-8in. screw and nut projecting outwards. A pigtail of 26 wire may be placed across the arm and its washer.

The arm connects to fixed plates of condenser and aerial input.

Output Connection.

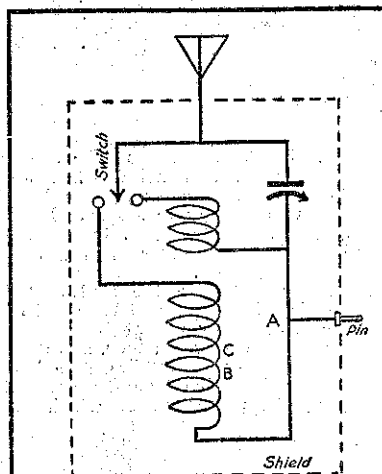
FOR the "Advance" short-waver the trap shield is intended to push close against the left-hand end of receiver with the output pin engaged in the aerial socket, the height being accurately adjusted. The output pin is fixed in a piece of ebonite about 2in. square, bolted to the shield in correct position with a $\frac{1}{4}$ in. hole for clearance.

For other receivers a terminal may replace the pin, but it must be remembered that pick-up of the unwanted transmission must be avoided at this point, or the usefulness of the trap will be nullified. A one-inch metal collar soldered round the output, would allow of connection being made with a short rubber-covered wire and the trap then pushed up close to the shielded receiver with the spare wire inside the circular collar.

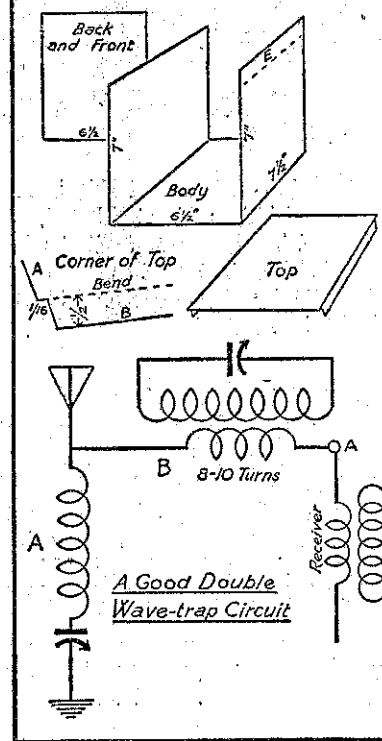
The Coils.

THE 80-metre coil consists of ten turns of 18 enamelled or d.c.c. wire on a 3in. former, held together by four strips of celluloid, each projecting one inch on one side to act as feet. The turns are spaced to occupy exactly 5-8in.

The broadcast coil should have sufficient turns to tune a little above the wavelength of the local station. The



Theoretical Diagram



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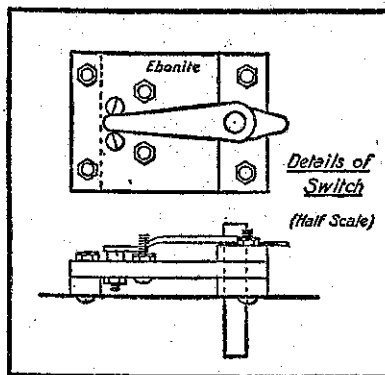
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space for the aerial connection which may be either a socket or a terminal.

A large hole will be required in the front panel to clear the nut of the one-hole fixing condenser, and another to clear the aerial connection. See that nuts and screws to hold the ebonite



more low-loss this coil is made, within reasonable limits, the better will it perform. In the original 60 turns of 24 tinned wire spaced 22 to the inch (with 36 enamel) on a 3in. former made a coil to cover any required wavelength. To cut out 1YA and 3YA 45 turns would be sufficient, spacing 22 to inch or using 20 d.c.c. close wound, on 3in. former. Cement to three double strips of celluloid and mount as shown or as most convenient. Many experimenters will have a suitable coil on hand.

Wooden Base.

THE wooden base is of 3/4in. rimu, with a 3-8 strip screwed under back and front edges. The shield is attached by four screws through the copper, allowing it to hang over at the right to clear the projecting base of receiver. A pin projecting 1/4in. may be put in base of receiver at A so that, using this as a gauge for position, the output pin will engage with the aerial socket without trouble.

Using the Trap.

THE trap may be always kept in position if used on an unselective broadcast receiver, because when not required as a broadcast trap, the short-wave coil may be switched in, when there will be no effect upon broadcast signal strength, whether tuned against 80 metres or not. If unwanted, 80-metre phone transmission is heard, adjust the condenser until it is cut out. This will not affect the receiver tuning, but when the broadcast coil is in use, tuning of the receiver aerial circuit will be altered.

Performance of the trap depends to some extent upon the receiver. Using the "Advance" all-electric short-wave receiver at a distance of two miles from 2YA, whilst the latter is transmitting, 2FC, can be received without interference. Stations further removed from 2YA's frequency are, of course, more easily tuned out.

In some locations or with certain receivers, if the trap does not appear to be cutting out sufficiently, it would be advisable to try disconnecting the output pin from A, and, instead, connecting to C, the centre of the coil, or B, a quarter of the total turns (see theoretical diagram). This refers to broadcast, and when switching over to short-wave it would be necessary to then connect output pin to the bottom of large coil. Experiment before shielding.

Theory of the Trap.

THE theory of the trap is that it accepts the unwanted signal instead of rejecting it, and is therefore called an "acceptor" wave-trap. A circuit of low r.f. resistance is provided by the coil and condenser, tuned to the unwanted frequency, around which it may circulate unhindered in-

stead of entering the receiver circuit, which is tuned against it.

In practice no such circuit can have zero resistance, so that a small amount of the interfering signal may enter the receiver. Where this residual signal is not a negligible quantity, another trap circuit is required to absorb it. As a rule, one stage will be found sufficient, but when a keener trap is desired, the double circuit shown in the diagram may be utilised.

It should be understood that when receiving short-wave the "Advance" receiver experiences no interference whatever from 2YA at two miles distance.

A Double Trap.

THIS trap provides at A a circuit tuned to the unwanted frequency, by-passing it to earth. The wanted signals pass through a coil of few turns to the receiver primary coil, which must be separate from and not a tapped portion of the secondary or aerial coil. The few turns at B are coupled to a circuit tuned to the unwanted signals, providing a low-resistance path through which the rem-

nant may circulate. With suitable coils this trap may be used for either broadcast or short-wave.

Even when unshielded and fitted with 80 metre coils, it will cut out a nearby transmitter completely, and when shielded and carefully constructed will cut out transmission at the station, enabling signals on other frequencies to be received.

Note that the receiver must have a loose-coupled r.f. stage.

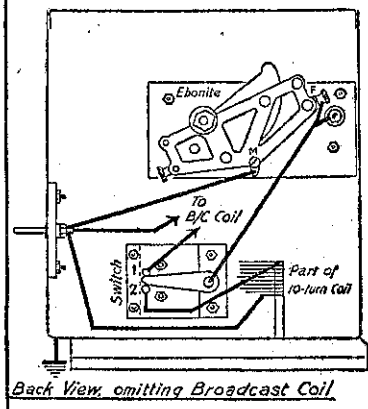
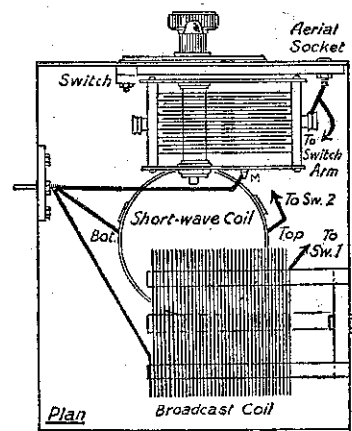
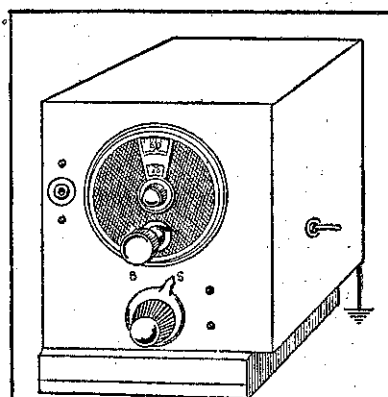
The best arrangement for this trap is to have one condenser above the other on a panel about 8 1/2 by 6in. minimum, B circuit at the top. Condensers may be of different values with appropriate coil turns for each. For 80 metres ten turns for .0005 condenser and 12 for .00015. The best coils are made of 18 d.c.c. on four strips of celluloid, the wire spaced about half its diameter on a 3in. former.

The coupling coil in circuit B requires only six turns of No. 18 d.c.c., which are wound outside the trap circuit coil, separating the two with celluloid strips. While winding, strips of cardboard are placed in between these to preserve a space between the two coils. One end of this winding connects to the pin or terminal engaging with aerial connection of receiver. The coils are not heavy and may be hung behind each condenser, but the fields must be opposed, so the bottom coil may be on edge, slightly diagonally, with its central axis from side-to-side of the trap. The upper coil would then be placed horizontally with its axis vertical.

For broadcast, suitable coils and condensers are used, and the coupling coil for circuit B may then be ten turns of 18 wound outside one end of the larger coil.

DX COMPETITION.

Entries for second period close June 30. Certificates for winners in each district. Verifications are required for every station logged.



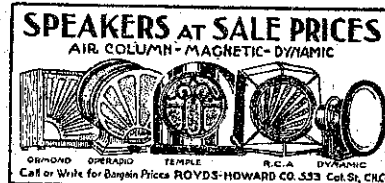
Progress of Television

Serious Difficulty Overcome

ONE of the major difficulties encountered by engineers in attempting to design an efficient television receiver has been the lack of a sufficiently brilliant light. A solution of the problem appears to have been discovered, however, by J. L. Baird, British television pioneer, during his experiments with the "singing" arc light.

Its great brilliancy, combined with the fact that it varies instantly with the current supplied to it, adapt it to the special requirements of television. When a high-frequency current is superimposed upon the current supplying the carbons in the light, the arc varies in step with the frequencies, causing air waves to radiate from the light. If the high-frequency current is modulated by a microphone, the arc acts as a loudspeaker, reproducing the voice or music.

The intensity of the light varies also, and it is this property which makes the arc suitable for television. Neon tubes have been widely used for receivers, but they do not furnish sufficient light to enable projection of the image through a lens and upon a screen.



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FEATURE PEEPS

... at ...

FUTURE PROGRAMMES

SUNDAY

Auckland Notes

AT 3 p.m. 1YA will carry out a relay from the Town Hall, where an International Youth Rally is to take place. His Excellency the Governor-General will be the principal speaker.

In the evening the service to be held in St. Matthew's Church will be broadcast, the preacher being the Rev. C. H. Grant Cowan. This will be followed by a studio programme on which will appear Miss Gwladys Edwardes, the Australian soprano, and Mr. Morris T. Schroder, a young artist who made such a favourable impression on his last appearance at this station.

Instrumental music will be provided by Miss Margot St. L. Toner (piano), Miss Jean Allen (violin), and Miss Marjorie Tiaks (cello).

From Wellington

THE evening service in St. Gerard's Redemptorist Church will be broadcast. Afterward a relay of a recital to be given in the De Luxe Theatre by the Royal Naval Volunteer Reserve Band will be carried out.

Christchurch Features

THE Rev. Percy Knight will be the preacher at Durham Street Methodist Church, when the service will be broadcast. Afterward 3YA will relay 4YA's studio concert.

From 4YA

THE service to be conducted in the First Presbyterian Church by the Rev. W. Allan Stevely will be relayed.

Dr. V. E. Galway will be the choir-master. The after-church concert will be contributed by the Kaikorai Band under Mr. T. J. Kirk-Burnand.

MONDAY

From Wellington

A MUSICAL treat is in store for 2YA listeners this evening. Mrs. Amy Woodward (soprano) and



MARGOT ST. L. TONER, an accomplished pianist, to be heard from Auckland on May 3. —S. P. Andrew, photo.

Mrs. Wilfred Andrews (contralto); two of the leading vocalists of Wellington, will give a recital.

Mrs. Amy Woodward will be heard in the fine recitative and aria "Softly Sighing" from "Der Freischütz," and, with Mrs. Andrews, will also sing the duet "Rogue, Hold Firm," from the same opera. Another duet to be sung by these ladies is "Love's Dream," arranged from the ever-popular "Liebestraum" of Liszt. This duet will have orchestral accompaniment. Mrs. Woodward will sing the song cycle "Flowering Trees," by Montague Phillips. Mrs. Andrews's operatic number will be "Dearest Fernando" (from "La Favorita," by Donizetti), and she will also sing "Echoes—Three Songs of Parting," an exquisite cycle by Elizabeth Allen, and quite new to New Zealand.

The Orchestrina will play Gounod's "Prison Scene" and some "Gipsy Songs" by Brahms, as well as the overture to "Norma" and the selection "Marriage of Figaro." A duet for two pianos will be played by Misses Molly Withers and Molly Cook, with orchestral accompaniment. A programme of dance music will follow the concert.

Christchurch Notes

"WHAT is this Sunlight League?" is the subject of a dialogue at 3YA. The speakers will be a Christchurch man and his family doctor. This talk will be the first of a series concerning the benefits of fresh air and sunshine.

The Woolston Band (under Conductor R. J. Estall) and assisting 3YA artists will provide the evening's programme. The band items will be varied and will be up to this splendid combination's usual high standard. Mr. R. H. Ohlson, cornetist, will play the "Rainstorm Polka," to band accompaniment.

Dunedin Features

MR. ARTHUR MACDONALD, one of New Zealand's leading baritones, will give a recital this evening. His numbers will be "The Garden of To-morrow," "The Town Brass Band" and "Blow, Blow, Thou Winter Wind."

Also contributing to the vocal programme will be The Majors. A group of quartets will include Ame's "English Airs," "Nursery Rhymes" (by Davies), "The Village Blacksmith," and as a final number "O Hush Thee, My Baby." Two contralto solos will be sung by Miss G. Burt. There will be humorous items by Mr. Lester F. Moller and cello and piano solos by Mr. P. J. Palmer and Mr. Max Scherek respectively. Instrumental numbers will also be provided by a trio.

Featurettes

Youth Rally

1YA, Sunday.

"And So To Bed"

1YA, Tuesday.

Savoy Male Quartet

1YA, Thursday.

"Shakespeare Night"

3YA, Thursday.

Eight O'Clock Revue

2YA, Saturday.

TUESDAY

Auckland Notes

MRS. LESLIE CRANE will continue her afternoon talks on "The Beauty of Mind and Body in Relation to Diet," and at 7.40 p.m. Mr. N. M. Richmond, B.A., will give a talk, under the auspices of the W.E.A., on "Civilisation in America."

The evening programme will be devoted to a special presentation of the three-act comedy, "And So To Bed," by J. B. Fagan. This will be presented by Mr. J. W. Bailey and company.

From Wellington

AT 3.15 Mrs. T. W. Lewis will give another of her talks on "Fabrics and Fashions." The weekly lecturette for the man on the land will be given at 7.40 p.m.

The evening's concert will be of a popular type. The Salon Orchestra, under Mr. M. T. Dixon, will play the overture "Merry Wives of Windsor," a selection, "Chanson de Matin," a novelty, "Fireflies," "Miniature Suite" (by Coates), "Two Lyric Waltzes" (by Poldina), and the latest dance novelties. The vocal portion will be provided by the popular Melodie Four, and Miss Muriel Johns, in songs at the piano. Miss Gwladys Edwardes will be heard in solos with orchestral accompaniment—"Comin' Thro' the Rye," "My Ships," "Robin Adair" and "Hoorie is Calling." Selected electrical recordings will be introduced into the programme.

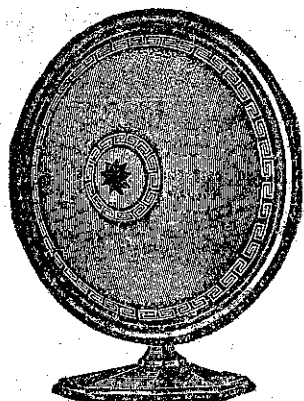
Christchurch Notes

3YA will be on the air this morning to broadcast the Capping Day festivities.

From Dunedin

"THE DREAM OF STOCKHOLM," another of the "Metropolis" series, will be the subject of a talk at 4YA by Mr. Lloyd Ross, M.A., LL.B., under the auspices of the W.E.A.

The evening programme will be given by the St. Kilda Band (under Mr. James Dixon) and 4YA artists. The band's programme will be a very attractive one. It will include a euphonium solo, "Up from Somerset." Concerted numbers by a mixed quartet, The Serenaders, will feature on the vocal side of the programme.



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WEDNESDAY

ALL stations will be broadcasting the results of the municipal elections to-night. The results will intersperse the concert programmes.

Auckland Notes

FROM 1YA Mr. Norman Kerr will give one of his regular talks on "Physical Culture."

Last May, the Auckland Anglican City Mission gave from 1YA an excellent programme full of variety and humour, and for this evening another very fine programme under the capable direction of the Rev. Jasper Calder has been arranged. Listeners are assured of an excellent entertainment, as some of New Zealand's foremost singers are included on the programme. There will be sketches, choruses and vocal music.

Wellington Features

THE first of the new series of International programmes will be broadcast. A further talk on South Africa will be given by Mr. E. J. Howard, M.P.

From Christchurch

MISS MILLICENT O'GRADY, lyric soprano, will be heard this evening in four ballads: "Cupid," "The Curtain Falls," "Annie Laurie," and "By the Waters of Minnetonka." There will be contralto solos from Mrs. D. W. Stallard. Mr. T. D. Williams will sing three popular songs: "The Trumpeter," "Drake Goes West," and "Land of Hope and Glory." Mr. Jock Lockhart, the Scottish entertainer, will dispense humour in song and story.

On the instrumental side of the programme will be Mr. Norman Goffin (cornetist), and the Studio Octet. The recordings introduced will include orchestral and brass band selections, the Ural Cossacks, a mouth organ band, a novelty item by melodeon players and selections by the Berlin Late and Mandolin Band.

Dunedin Features

THE afternoon talk by the Home Science Extension Department of Otago University will be on "Toothsome Stories." In the evening at 7.15 Mr. L. W. McCaskill will review the April issue of the "Journal of Agriculture." Both talks will be under the auspices of the 4YA Primary Productions Committee.

The Caversham Methodist Church choir, conducted by Mr. John Davidson, assisted by the Studio Instrumental Trio, will provide the evening's programme. This is a specially good combination. The part songs and choruses include such numbers as "The Fishermen's Return," "The Sea Hath its Pearls," "Killarney," "Peter, Go Ring Dem Bells," "Moonlight," "O, Peaceful Night," "Sleep, Gentle Lady," and "The Fisherman's Good Night."

THURSDAY

FROM 1YA, 2YA, and 3YA the afternoon home science talk will be on "The Dining Table and Table Service."

From Auckland

UNDER the auspices of the New Zealand Manufacturers' Association, a further talk entitled "The Tale of a Shirt and Pyjamas" will be broadcast from 1YA.

The Savoy Male Quartet, consisting of Messrs. Bert Skeels, Frank Campbell, Arthur Gally, and Sid Poffley, is quickly making a name for itself for their beautiful concerted singing. They have included some very fine numbers for this evening's programme, among them being "Spin, Spin," and "Love's Old Sweet Song." The Orchestral Octet, under Mr. Harold Baxter, will be heard in several numbers, including "Three Jevington Sketches," "The Maid of the Mountains" selection, and "My Lady Dragonfly Suite." The programme will conclude with a gramophone lec-



DOUGLAS SUCKLING,

whose delightful tenor voice is well known to listeners at 3YA.

—Steffano Webb, photo.

ture-recital to be given by Miss Molly Atkinson, entitled "Immortal Mozart."

Wellington Notes

THE speaker for the home science talk this afternoon will be Miss I. F. Meadows. At 7.40 Mr. W. E. Priestly will give another talk on "Modern Ballroom Dancing."

The evening session will be the broadcast of a special studio concert to be given by the Salvation Army Band and assisting artists. A very interesting programme has been arranged. The vocal portion is well varied, and includes choral numbers by a girls' choir and a male voice choir, with duets and solos. Features of the programme will be the piano solos by Mr. Hayden Redway, and concertina solos by Brigadier Imrie, a violin solo by Miss O. Burton, a concert solo by Bandsman Dutton, and trios by Misses Gray and Burton and Mrs. Peterson (piano, organ, and violin).

From Christchurch

3YA'S farming talk this evening will be a review of the April issue of the "Journal of Agriculture."

A "Shakespeare Night" is scheduled for this evening. The programme has been arranged and will be presented by the Canterbury Repertory Theatre Society. Numerous excerpts, humorous as well as dramatic, from the works of the great dramatist will be acted, and musical numbers, vocal and instrumental, will be given. Mrs. R. J. McLaren will be the soloist, singing "Where the Bee Sucks," "It was a Lover and his Lass," and "Under the Greenwood Tree."

4YA Notes

4YA will be on the air during the afternoon to broadcast the results of the Forbury Park Trotting Club's meeting.

FRIDAY

Auckland Topics

THIS evening's programme will be well and truly varied, the outstanding feature being another appearance of Simon Philippoff, who will play several balalaika solos. A very fine baritone, new to 1YA, J. W. Nicholls, will sing several well-known ballads. Mister Ree will entertain with Radio Magic, and the Salon Trio will be heard in instrumental trios, soprano solos, with violin obbligato, violin solos, piano solos, and cello solos, while Eric Waters and Ray Jury will once again be heard in piano and xylophone novelties. Other instrumental numbers will be provided by that popular combination Bert Kingsland's Saxophone Quartet.

2YA Features

FEATURED on the programme will be two humorous sketches by Mr. and Mrs. J. W. Bailey, the well-known Auckland entertainers. The orchestra will present bright musical numbers. R. J. C. Madigan (basso) will be heard in two songs with orchestral accompaniment, "Cloze Props" and "Harlequin." Mildred Kenny's Guitar Orchestra will again delight listeners with popular numbers, including the Maori item "Haere Ra e Rere taku Poi."



MRS. D. W. STALLARD,

whose beautiful contralto voice is a great attraction to Christchurch listeners.

—Steffano Webb, photo.

From Christchurch

A MISCELLANEOUS programme will be heard from 3YA. Frances Hamerton, well known as a soprano soloist, will give a pianoforte recital. Further instrumental numbers will be provided by Harold Beck (cellist), and the Christchurch Broadcasting Trio, while Les. Croft will demonstrate what can be accomplished on mouth organs. One of his numbers will be played without the aid of hands on the smallest mouth organ in the world. By means of recordings, orchestral, military band, violin, balalaika and accordion selections will be introduced. The vocalists for

the evening will be the Salon Quartet, presenting a popular programme of solo and concerted numbers, the latter including some plantation songs.

At 4YA

SOME familiar melodies, including "Old Mother Hubbard," "The Bells of St. Michael's Tower," and "A Perfect Day," will be heard from the Select Four. The Bluebird Hawaiian Trio will present novelty numbers.

SATURDAY

1YA Items

THERE will be a relay from the Town Hall of the concert to be given by the Municipal Choir, under the conductorship of Maughan Barnett.

Wellington Topics

AT 7.40 p.m., Mr. W. M. Jackson will give another of his talks on "Gladoli and Gardening Hints."

The presentation of the "Eight o'clock Revue," under the direction of Will Bishop, will occupy the first half of 2YA's programme.

The second half will be provided by the Salon Orchestra, under Mat Dixon, and a bright and interesting programme of instrumental music has been chosen, including the overture "Vive la Danse," the selection "The Girl from Brazil," and the latest dance novelties. Will Hancock (tenor) will be heard in three numbers, "Gypsy Song," "When Song is Sweet," and "I Heard You Go By."

Items From Christchurch

LYNDON Christie and his Rhythmic Symphonists have been engaged for this evening.

At the first broadcast performance this exceptional combination became exceedingly popular. A wide variety of items, including "The Desert Song," "Dixie Ditties" (a medley), "Flapperette," a march, "Tiger's Tail," and two fox trots, "It's a Great Life" and "Over the Garden Wall," will be included. One of McDowell's delightful "Woodland Sketches," "To a Wild Rose," will be played as a saxophone solo by Mr. Christie, to accompaniment by the orchestra. The orchestra will also accompany Herb Fox in his cornet solo "Macushla." The evening's programme will be relayed to 4YA.

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Full Programmes for Next

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Sunday, May 3

1YA, AUCKLAND (900 KILOCYCLES)—SUNDAY, MAY 3.

- 8.0 : Relay of Interdenominational Youth Rally from the Auckland Town Hall. Speaker: His Excellency the Governor-General, Lord Bledisloe.
- 6.0 : Children's Song Service, conducted by "Uncle Bert."
- 6.55 : Relay of Divine Service from St. Matthew's Church. Preacher, Canon C. H. Grant Cowan. Organist and Choirmaster, Mr. J. H. Philpott.
- 8.30 (approx.): Berlin State Opera Orchestra, "Christmas Concerto No. 8" (Arcangelo-Corelli): (1) Vivace, Grave, Allegro; (2) Adagio, Allegro, Adagio; (3) Vivace, Allegro; (4) Pastorale, Largo.
- Baritone—Mr. Morris T. Schroder, (a) "The Unknown Land" (Craske); (b) "The Perfect Prayer" (Day).
- Instrumental—Misses Margot St. L. Toner, Jean Allen and Marjorie Tlarks, "Trio Op. 11" (Beethoven).
- Evening weather forecast and announcements.
- State Opera Orchestra, Berlin, "Lohengrin Introduction Act 3."
- Soprano—Miss Gwladys Edwardes, (a) "You Lay so Still in the Sunshine" (Coleridge-Taylor); (b) "Thou Hast Bewitched Me, Beloved" (Coleridge-Taylor).
- 'Cello—Miss Marjorie Tlarks, "Romance" (Matys).
- Instrumental—Misses Margot St. L. Toner, Jean Allen and Marjorie Tlarks, "Andante" (Hurlstone).
- Baritone—Mr. Morris T. Schroder, (a) "Arise, O Sun" (Day); (b) "Vale" (Kennedy Russell).
- Piano—Ignace Hilsberg, (a) "Cravonienne Fantastique" (Paderewski); (b) "Aufschwung" (Schumann).
- Instrumental—Misses Margot St. L. Toner, Jean Allen and Marjorie Tlarks, "Trio" (Schumann).
- Soprano—Miss Gwladys Edwardes, (a) "The Rainbow Child" (Coleridge-Taylor); (b) "Thou Art Risen, My Beloved."
- Madrid Symphony Orchestra, "Noche de Arabia" (Arbos).
- 10.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, MAY 3.

- 3.0 to 4.30: Afternoon session of selected gramophone recordings.
- 6.0 : Children's Song Service, conducted by "Uncle George," assisted by the Children's Choir from Upper Hutt Methodist Church.
- 7.0 : Relay of Evening Service from St. Gerard's Redemptorist Church, Hawker Street, Wellington.
- 8.15 (approx.): Relay of Band Recital by the Royal Naval Volunteer Reserve Band from De Luxe Theatre (Conductor, Mr. Harry Baker). God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, MAY 3.

- 3.0 : Gramophone recital.
- 5.30 : Children's song service.
- 6.15 : Chimes from studio.
- 6.30 : Relay of Evening Service from Durham Street Methodist Church. Preacher, Rev. Percy Knight. Organist, Mrs. McEachern.
- 7.45 : Musical recordings from studio.
- 8.15 (approx.): Relay of 4YA, Dunedin, programme. God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, MAY 3.

- 3.0 : Selected recordings.
- 5.30 : Children's Song Service, conducted by "Big Brother Bill."
- 6.15 : Instrumental recordings.
- 6.30 : Relay of Evening Service from First Presbyterian Church, Moray Place, Dunedin. Preacher, Rev. W. Allan Stevely. Choirmaster, Dr. V. B. Galway.
- 7.45 : Selected recordings.
- 8.15 : Studio presentation by the Kaikorai Band, under the conductorship of Mr. Thos. J. Kirk-Burnnand, assisted by 4YA artists.
- Contest—The Band, "Our Gallant Guards" (Holloway); Serenade, "In this Hour of Softened Splendour" (Pinsuti).
- 8.22 : Duet—Messrs. Wm. Ruffell and John Leech, "Song of the Sword."
- 8.25 : Grand selection—Band, "Anna Bolena" (Donizetti).
- 8.38 : Contralto—Miss Irene Horniblow, L.R.A.M., (a) "Fairy Waters" (Wood); (b) "Who Knows?" (Ball).
- 8.44 : Violin—Miss Ethel Wallace, "Allegro Brillante" (Have).
- 8.49 : Baritone—Mr. Wm. Ruffell, "Thy Sentinel Am I" (Watson).
- 8.52 : Waltz—Band, "Die Hydropaten" (Gungl).
- 9.0 : Weather report and station notices.

- 9.2 : 'Cello—Gaspar Cassado, "Mazurka" (Popper).
- 9.6 : Tenor—Mr. John Leech, "Lend Me Your Aid" (from "Reine de Saba").
- 9.11 : Popular selection—Band, "H.M.S. Pinafore" (Sullivan).
- 9.18 : Contralto—Miss Irene Horniblow, L.R.A.M., "De Old Clay Road."
- 9.21 : March—Band, "Gladiator's Farewell" (Blankenburg).
- 9.26 : Duet—Messrs. John Leech and Wm. Ruffell, "So Thou Lifest."
- 9.29 : Violin—Miss Ethel Wallace, "Guitarre" (Moszkowski).
- 9.35 : Selected recordings.
- 10.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, MAY 3.

- 6.0 : Children's service.
- 8.15 : Studio concert.

Monday, May 4

1YA, AUCKLAND (900 KILOCYCLES)—MONDAY, MAY 4.

SILENT DAY.

2YA, WELLINGTON (720 KILOCYCLES)—MONDAY, MAY 4.

- 3.0 : Chimes. Selected gramophone recordings.
- 3.30 and 4.30: Sporting results to hand.
- 5.0 : Children's session, conducted by "Uncle Jeff."
- 6.0 : Dinner music session.
- Edith Lorand's Orchestra, "Johann Strauss" Fantasia (Strauss).
- Grand Symphony Orchestra, "Tales of Hoffman—Barcarolle."
- Edith Lorand Orchestra, "The Flowers' Dream" (Translatour); "Faust" Fantasia (Gounod); "Wedding of the Winds" (Hall).
- Blackstone Trio, "Silver Threads Among the Gold" (Danks).
- Berlin State Opera Orchestra, "Italiana in Algeria" (Rossini).
- 'Cello—Orabio de Castro, "Nocturne in E Flat" (Chopin).
- Grand Symphony Orchestra, "Fra Diavolo" (Auber).
- Blackstone Trio, "Love's Old Sweet Song" (Molloy).
- Grand Symphony Orchestra, "Tales of Hoffman—Entr'acte and Minuet" (Offenbach).
- Edith Lorand Orchestra, "Song of Autumn" (Waldteufel).
- 7.0 : News session, market reports and sports results.
- 8.0 : Chimes. Overture—Symphony Orchestra, "Die Fledermaus" (Strauss).
- 8.9 : Soprano—Mrs. Amy Woodward, Recit. and Aria, "Softly Sighing."
- 8.14 : Selection—2YA Orchestra (Conductor, Signor A. P. Truda), "Norma" Overture (Bellini).
- 8.21 : Piano—Mr. Gordon Short, "First Movement Sonata in B Flat Minor."
- 8.29 : Duet, soprano and contralto—Mrs. Amy Woodward and Mrs. Wilfred Andrews, "Rogue, Hold Firm" (from "Der Freischutz") (Weber).
- 8.34 : Violin—Lullen Wladigeroff, "Im Volkston" (Wladigeroff).
- 8.42 : Contralto—Mrs. Wilfred Andrews, "Dearest Fernando" (Donizetti).
- 8.47 : Organ—Leo Stin, "Peer Gynt Suite" (Grieg): (a) "Morning," (b) "Death of Ase."
- 8.53 : Selection—Orchestra, "Marriage of Figaro" (Mozart).
- 9.2 : Weather report and announcements.
- 9.4 : Organ—Leo Stin, "Peer Gynt Suite No. 1" (Grieg), "Anitra's Dance"; "Peer Gynt Suite No. 2," "Solveig's Song."
- 9.10 : Duet, soprano and contralto—Mrs. Amy Woodward and Mrs. Wilfred Andrews, "Love's Dream" (arrgd. from Liszt's "Liebestraume").
- 9.15 : Two pianos—Miss Molly Withers and Molly Cook, with orchestra, "Concerto," First Movement (Mozart).
- 9.27 : Contralto—Mrs. Wilfred Andrews, "Echoes" (Three Songs of Parting).
- 9.33 : Selections—2YA Orchestra, "Zgennelieder" (Gipsy Songs).
- 9.38 : Male quartet with band—Polydor Wind Orchestra with Male Quartet, (a) "Stille Der Nacht" (Willich-Kunze); (b) "Lieb' Ist's."
- 9.43 : Soprano—Mrs. Amy Woodward, Cycle, "Flowering Trees" (Montagne Phillips): (a) "Lilac," (b) "Laburnum," (c) "Hawthorn."
- 9.50 : Scene—2YA Orchestra, "Prison Scene" (from "Faust") (Gounod).
- 10.0 : Dance programme.
- Foxtrots—George Posnack and Orchestra, "Punch and Judy."
- Zenith Knights, "Eyes of Blue" (Albin).
- Carl Fenton and His Orchestra, "What Is This Thing Called Love?" (Cole-Porter).
- Waltz—Cova Cavaliers, "Louisiana Moon" (Walter Donaldson).
- 10.12 : Foxtrots—New Yorkers, "If I Were King" (Robin).
- Zenith Knights, "Get Yourself a Sweetie" (Meskill).
- Carl Fenton and His Orchestra, "The Stein Song."
- Jack Montrose and Orchestra, "Valparaiso" (Allen).
- 10.24 : Vocal—Tommy Weir, "That's When I Learned to Love You."

Week-all Stations-to May 10

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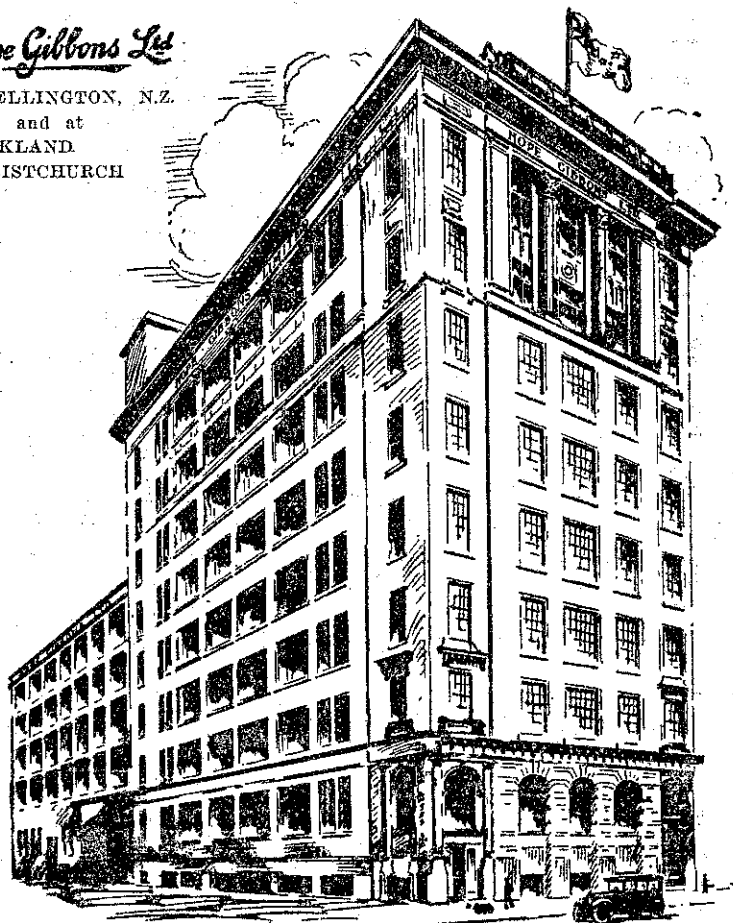
- 10.27: Foxtrots—New Yorkers, "Happy Days are Here Again" (Ager);
"Kicking a Hole in the Sky" (Rose); "Fireworks."
10.36: Waltz—Cova Cavaliers, "Sweet Kentucky Nights" (Herscher).
Foxtrots—Carl Fenton and His Orchestra, "Won't Cha" (Razaf);
"That's When I Learned to Love You" (Costello).
10.45: Vocal—Tommy Weir, "There's Danger in Your Eyes, Cherie."
10.48: Foxtrots—New Yorkers, "Let Me Sing and I'm Happy" (Irving Berlin)
Carl Fenton and His Orchestra, "Night Time is Love Time."
Zenith Knights, "Hanging on a Garden Gate" (Florito).
Carl Fenton and His Orchestra, "If He Cared" (Grey).
11.0: God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—MONDAY, MAY 4.

- 3.0: Gramophone recital.
4.25: Sports results.
5.0: Children's hour.
6.0: Dinner music session.
London Symphony Orchestra, "Czar Sultan" Suite.
International Concert Orchestra, "Waltz Dream" (Strauss).
De Groot and His Orchestra, "Louise" Selection (Charpentier).
New Light Symphony Orchestra, "Peer Gynt Suite" (Grieg). (1) In-
grid's Lament; (2) Arabian Dance; "Prelude in G Minor" (Rach-
maninoff). "Peer Gynt Suite" (Grieg). (1) Return of Peer
Gynt; (2) Solveig's Song; "Prelude in C Sharp Minor."
De Groot and His Orchestra, "Samson and Delilah" (Saint-Saens).
Philadelphia Symphony Orchestra, "Danse Orientale" (Glazounov).

Hope Gibbons Ltd

WELLINGTON, N.Z.
and at
AUCKLAND
CHRISTCHURCH



The New Zealand Home of STEWART-WARNER RADIO, where every receiver is tested and examined for perfection before it leaves for its final destination, which may be anywhere from the Far North to the Bluff.

STEWART-WARNER RADIOS

Bring Joy into thousands of New Zealand homes

- International Concert Orchestra, "Sari" (Kalman).
Philadelphia Symphony Orchestra, "March of the Caucasian Chief."
7.0: News session.
7.30: Dialogue arranged by the Sunlight League between a Christchurch
man and his family doctor, "What is this Sunlight League?"
8.0: Chimes. Programme by the Woolston Brass Band (Conductor, R. J.
Bstall), and assisting artists. March—Band, "Washington Greys."
8.5: Vocal—Valencia Quartet, "Will o' the Wisp" (Cherry).
Bass—Mr. E. J. Johnson, "The Windmill" (Herbert Nelson).
8.12: Selection—Band, "Gems of Italian Opera" (arr. Rimmer).
8.22: Mezzo-soprano—Miss Lucy Fullwood, "Time's Roses" (Barry).
8.26: Accordeon—Michel Haling, (a) "La Mitrailleuse" (Haling); (b)
"Myra Valse" (Haling).
8.32: Tenor—Mr. T. G. Rogers, "For You Alone" (Geehl).
8.35: Piano—Leslie Hutchinson, "Maurice Chevalier" Medley.
8.43: Contralto—Miss Jean Johnson, (a) "Travellers' All" (Loughborough);
(b) "The Star" (Rogers).
8.48: Foxtrots—Band, (a) "Stein, Stein, Stein, Stein" (Hume); (b) "Tip-
toe Thro' the Tulips With Me" (arr. Hume).
8.57: Bass—Mr. E. J. Johnson, "Laugh and Sing" (Drummond).
Vocal—Valencia Quartet, "Sing a Song of Sixpence" (Cornwall).
9.2: Weather forecast and station notices.
9.4: Paul Whiteman's Orchestra, "Liebestraum" (Liszt, arr. Bargey).
9.8: Vocal—Valencia Quartet, "The Village Blacksmith" (Weiss).
Soprano—Miss Lucy Fullwood, "My Prayer" (Squire).
9.15: Cornet solo—Mr. R. Ohlson, with band accompaniment, "Hailstorm
Polka" (Rimmer).
9.20: Tenor—Mr. T. G. Rogers, "The Dove" (Trad'l).
9.24: Waltz—Band, "Lady Divine" (Kountz).
9.29: Humour—Florrie Ford and Chorus, "Florrie Ford Old-time Medley."
9.33: Contralto—Miss Jean Johnson, (a) "You'll Get Heaps of Lickin's"
(Clarke); (b) "O Night of Life" (Sanderson).
9.37: Selection—Band, "The Meistersingers" (Wagner).
9.45: Tenor and bass—Valetta Duo, "Flow Gently Deva" (Parry).
9.49: Novelty—Grinzing Schrammel Trio, (a) "Gay and Jolly"; (b) "Jolly
Alpine Larks" (Dietrich).
9.57: Vocal—Valencia Quartet, "Evening's Pastorale" (Shaw).
0.1: March—Band, "Cavalry of the Clouds" (Alford).
10.6: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—MONDAY, MAY 4.

- 3.0: Selected recordings.
5.0: Children's hour, conducted by "Big Brother Bill."
6.0: Dinner music session.
Frank Westfield's Orchestra, "The Belle of New York" Selection.
Dajos Bela Orchestra, "Strauss, the Waltz King at Home" (Weber);
"Ideale" (Tosti).
Edith Lorand Orchestra, "Rustle of Spring" (Sinding).
Berlin State Opera House Orchestra, "Wine, Women and Song" Waltz.
Dajos Bela Orchestra, "Viennese Life" Waltz (Translatour).
Victor Olof Salon Orchestra, "Grieg" Selection (arr. Urbach).
Dajos Bela Orchestra, "Traumideale" (Fueck).
Edith Lorand Orchestra, "Ich Liebe Dich" (Grieg).
Frank Westfield's Orchestra, "Our Miss Gibbs" Selection (Monckton).
7.0: News session.
8.0: Chimes.
Overture—B.B.C. Wireless Symphony Orchestra, "H.M.S. Pinafore"
Selection (Sullivan).
8.9: Mixed quartets—The Majors, "English Airs" (arr. Fainig). (1) There
was a Jolly Miller; (2) The Lass of Richmond Hill; (3) Begone
Dull Care; (4) The Girl I Left Behind Me.
8.21: Instrumental trios—(a) "The Mill"; (b) "Cavatina" (Raff).
8.28: Baritone—Mr. Arthur Macdonald, (a) "The Garden of Tomorrow"
(Tierney); (b) "The Town Brass Band" (Longstaffe); (c) "Blow,
Blow, Thou Winter Wind" (Sargeant).
8.37: Piano—Mr. Max Scherek, "Rhapsody in B Minor" (Brahms).
8.45: Humour—Mr. Lester F. Moller, "Hints on Cycling" (McGill).
8.51: Mixed quartet—The Majors, "Village Blacksmith" (Weiss).
8.54: Cello—Mr. P. J. Palmer, "Sonatina" (Eccles).
9.0: Weather report and station notices.
9.2: Balalaika Orchestra, Gorskaja, (a) "Stand Ein Birkenbaum"; (b)
"An Der Wolga" (Trad'l).
9.18: Mixed quartet—The Majors, "Nursery Rhymes" (Davies). (1) "Lulla-
by and Willie Winkie"; (2) "Valentine"; (3) "Hunting for the
Snail"; (4) "T'other Little Tune"; (5) "Thomas and Annis"; (6)
"If All the Seas were One Sea"; (7) "White Paternoster."
9.23: Instrumental Trio, "Waltz in B Flat" (Godard).
9.28: Humour—Mr. Lester F. Moller, "Knocking Down Ginger" (Thomas).

- 9.33: Two pianos—Sisters Rialto, (a) "Cookery" (Killman); (b) "Supper is Here" (Seifert).
 9.39: Contralto—Miss G. Burt, (a) "The Winds are Calling" (Ronald); (b) "Nature Has Gone to Her Rest" (Whishaw).
 9.45: 'Cello—Mr. P. J. Palmer, "Minuet" (Beethoven).
 9.50: Mixed quartet—The Majors, "O Hush Thee, My Baby" (Sullivan).
 9.58: March—Band of H.M. Grenadier Guards, "Regimental March Medley."
 10.3: God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—MONDAY, MAY 4.

- 4.30: Children's session.
 7.30: News, markets, and information.
 8.0: Studio concert.

Tuesday, May 5

1YA, AUCKLAND (900 KILOCYCLES)—TUESDAY, MAY 5.

- 3.0: Selected recordings.
 3.15: Talk—Mrs. Leslie Crane, "Beauty of Mind and Body in Relation to Diet."
 5.0: Children's session, conducted by "Uncle Dave."
 6.0: Dinner music session.
 Bohemian Orchestra, "Love and Life in Vienna" (Komzak).
 Organ—G. T. Pattman, "Alice, Where Art Thou?" (Traditional).
 Bruno Walter and Berlin Philharmonic Orchestra, "Roses of the South"
 Band of H.M. Grenadier Guards, "Ivanhoe" Selection (Sullivan).
 Edith Lorand Orchestra, "Venetian Barcarolle" (Leoncavallo).
 Bohemian Orchestra, "Destiny Waltz" (Baynes).
 Edith Lorand Orchestra, "La Serenade" (Metra).
 Plaza Theatre Orchestra, "A La Gavotte" (Finck).
 Dajos Bela Orchestra, "Schatz Waltz" ("The Gypsy Baron"; Strauss).
 J. H. Squire's Celeste Octet, "La Serenata" (Braga).
 Venetian Players String Quintet, "Romanza" (Mozart, arr. Sear).
 Dajos Bela Orchestra, "Moonlight on the Alster" (Petras).
 Plaza Theatre Orchestra, "Minuet" (Finck).
 Organ—G. T. Pattman, "Cinderella Waltz" (Pattman).
 J. H. Squire's Celeste Octet, "Serenade" (Titi).
 7.0: News and market reports.
 7.40: Talk—Mr. N. M. Richmond (under the auspices of the W.E.A.), "Civilisation in America."
 8.0: Chimes. Special presentation of the three-act comedy, "And so to Bed," by J. B. Fagan. Presented by Mr. J. William Bailey and Company.
 Overture—New Light Symphony Orchestra, "Malaguena" (Moszkowski).
 Act 1, Scene 1.—An alley in Pepys' house in Seething Lane. Scene 2.—A room in Pepys' house.
 Entr'acte—Symphony Orchestra, "Coppelia" Variations (Delibes).
 Act 2, Scene: Mrs. Knight's Lodging in Gray's Inn Fields.
 Entr'acte—Symphony Orchestra, "Coppelia Waltz of the Hours."
 Act 3 Scene: A room in Pepys' house. Period: A few days after the close of the Diary, June, 1669. The Action: Covers eight hours.
 Place: London. Characters: Charles II, Samuel Pepys, Creed, Pelling (The Potticary), Pelham Humfrey, Progers (Groom of the Chamber), W. Caesar (a Lutanist), Boy to Pepys, Boy to Creed, Pelling's Prentice, A Pick-Purse, First Watchman, Mrs. Pepys, Mrs. Knight, Mrs. Pierce, Mrs. Knepp, Doll (a Blackamoore), "Lettice" Sue, Julia.
 9.30: Programme of dance music.
 Foxtrots—Anglo-Persians, "Dancing Butterfly" (Pascal).
 Abe Lyman and His California Orchestra, "Worryin' Over You" (Tobias).
 Al Goodman and His "Flying High" Orchestra, "Thank Your Father" (de Sylva).
 Waltz—Regent Club Orchestra, "I Love You So" (Kahn).
 9.42: Foxtrots—Tom Olines and His Music, "Until Love Comes Along."
 Lloyd Huntley and His Isle o' Blues Orchestra, "Promises."
 Ben Bernie and His Orchestra, "Telling it to the Daisies."
 Lloyd Huntley and His Isle o' Blues Orchestra, "On a Blue and Moonless Night" (O'Flynn).
 9.54: Vocal trio—Earl Burnett's Biltmore Trio, "If I'm Dreaming" (Dubin).
 Foxtrots—Ben Bernie and His Orchestra, "Keepin' Myself for You."
 Colonial Club Orchestra, "Caribbean Love Song" (Berton).
 Ben Bernie and His Orchestra, "You Brought a New Kind of Love to Me" (Fain).
 Tom Olines and His Music, "Any Time's the Time to Fall in Love" (Janis).
 10.9: Waltz—Ben Bernie and His Hotel Roosevelt Orchestra, "Coquette."
 Foxtrots—Dan Russo and His Oriole Orchestra, "Sweetheart" (Lewis).
 Roger Wolfe Kahn and His Orchestra, "Exactly Like You."
 Ben Bernie and His Orchestra, "Reminiscing" (Leslie).
 10.21: Vocal—Vaughn de Leath, "Sometimes I'm Happy" (Caesar).
 Foxtrots—Abe Lyman and His California Orchestra, "You Will Come Back to Me" (Fields).
 Ben Bernie and His Orchestra, "Livin' in the Sunlight, Lovin' in the Moonlight" (Sherman).
 Colonial Club Orchestra, "Watching My Dreams Go By."
 10.33: Waltz—Regent Club Orchestra, "Lazy Louisiana Moon" (Donaldson).

- Foxtrots—Colonial Club Orchestra, "Wherever You Are" (Kalmar);
 "Sweepin' the Clouds Away" (Coslow).
 10.42: Vocal trio—Earl Burnett's Biltmore Trio, "A Year from To-day."
 Foxtrots—Roger Wolfe Kahn and His Orchestra, "On the Sunny Side of the Street" (Fields).
 The Jungle Band, "Sweet Mama" (Ellington).
 Waltz—Regent Club Orchestra, "My Dear" (Kahn).
 Foxtrots—Anglo-Persians, "The Toy Town Admiral" (Godfrey).
 Colonial Club Orchestra, "All Alone Monday" (Kalmar).
 11.0: God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—TUESDAY, MAY 5.

- 3.0: Chimes. Selected gramophone recordings.
 3.15: Lecturette—Mrs. T. W. Lewis, "Fabrics and Fashions."
 3.30 and 4.30: Sporting results to hand.
 5.0: Children's session, conducted by "Uncle Jeff."
 6.0: Dinner music session:
 Military Band (of specially selected musicians), "Ever or Never."
 Sir Hamilton Harty, conducting the Halle Orchestra, "An Irish Symphony Scherzo" (Sir Hamilton Harty).
 New Concert Orchestra, "Life in Vienna" (Karl Komzak).
 Military Band (of specially selected musicians), "The Guards' Patrol."
 Dinicu and His Orchestra, "Crepuscule" Tango (Bianco).
 Salon Orchestra, "Mem'ries" (Neely-Sanford).
 J. H. Squire's Celeste Octet, "Traume" (Wagner, arr. Willoughby).
 Gustav Holst conducting the London Symphony Orchestra, "Marching Song" (Gustav Holst).
 J. H. Squire's Celeste Octet, "Albumblatt" (Wagner, arr. Willoughby).
 The Elite Dance Orchestra, "In Einer Konditorei" Tango (Raymond).
 Regimental Band of H.M. Grenadier Guards, "Sylvia Ballet, Parts 1 and 2" (Delibes, arr. Kappey): (a) "Valse Lente," (b) "Pizzicato," (c) "Barcarolle," (d) "March."
 Halle Orchestra, "Londonderry Air" (Hamilton Harty).
 7.0: News session, market reports and sports results.
 7.40: Lecturette by a Representative of Department of Agriculture, "For the Man on the Land."
 8.0: Chimes. Overture—Salon Orchestra (Conductor, Mr. M. T. Dixon), "Merry Wives of Windsor" (Nicolai).
 8.9: Quartet—Melodie Four, "Comrades in Arms" (Abt).
 Tenor—Mr. S. Duncan with violin obligato, "Sweet are the Banks When Spring Perfumes" (Cherubini).
 8.16: Songs at the piano—Miss Muriel Johns, (a) "I Miss a Little Miss" (Coots), (b) "It Must Be Love" (Archer).
 8.22: Accordeon—Rene Leroux and Bal Musette Orchestra, (a) "During the Dance" (Olivier-Lenoir), (b) "They Don't Have It" (Clayssac).
 8.28: Bass—Mr. W. W. Marshall, "A Thousand Leagues Under the Sea."
 8.32: Saxophone—Feith and Kleinhart, (a) "Souvenir" (Zakrgevsy); Rene Dumont, (a) "Saxophonia" (Wiedoeft).
 8.38: Morceau—Salon Orchestra, (a) "Chanson de Matin" (Elgar), (b) "Fireflies" (Savino).
 8.46: Soprano with orchestral accompaniment, Miss Gwladys Edwardes, (a) "Comin' Thru' the Rye" (Anon.), (b) "My Ships" (Barrett).
 8.52: Suite—Salon Orchestra, "Miniature Suite" (Coates).
 9.4: Weather report and station notices.
 9.6: March—Polydor Military Band, "Castaldo" (Novacek).
 9.9: Quartet—Melodie Four, "The Old Quartet" (O'Hara).
 Baritone—Mr. R. S. Allwright, with orchestral accompaniment, "The Village Blacksmith" (Weiss).
 9.17: Songs at the piano—Miss Muriel Johns, (a) "The Wedding of the Birds" (Tobias), (b) "I'll Be Blue Just Thinking of You."
 9.23: Waltzes—Salon Orchestra, "Two Lyric Waltzes" (Poldini).
 9.31: Soprano—Miss Gwladys Edwardes, with orchestral accompaniment, (a) "Robin Adair" (Burns), (b) "Home Is Calling" (Hill).
 9.37: Banjo and guitar—Brothers Bertini, (a) "Medley of Stephen Foster Songs" (Foster), (b) "Wedding Chimes."
 9.43: Tenor—Mr. Frank Bryant, with violin obligato, "I Love You More."
 Quartet—Melodie Four, "All Through the Night" (traditional).
 9.51: Salon Orchestra, "Latest Dance Novelties."
 10.0: God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—TUESDAY, MAY 5.

- 10.15 (approx.): Relay of Capping Day Festivities by Canterbury University students from Christchurch "Press" Company's balcony, Cathedral Square.
 Description of the procession of students through the main streets of the city, terminating behind the Cathedral.
 10.30 (approx.): Speeches by the dignitaries of the Capping Festival from Christchurch "Press" Company's balcony.
 10.45 (approx.): God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—TUESDAY, MAY 5.

- 3.0: Selected recordings.
 5.0: Children's hour, conducted by "Wendy" and "Big Brother Bill."
 6.0: Dinner music session:
 Linck's Orchestra, "Gaiety Echoes" (Caryll-Monckton).
 Sandler's Orchestra, "Las Lagarteranas" (Guerrero and Foulkes).
 Regal Salon Orchestra, "Memories of Beethoven."
 J. H. Squire's Celeste Octet, "Everybody's Melodies" (arr. Squire).

Organ—John Hassel, "By the Waters of Minnetonka" (Lienance).
 Sandler's Orchestra, "Raphaellito" (Guerrero and Foulkes).
 Dinicu and His Orchestra, "Adoration" Tango (Bianco).
 Regal Cinema Orchestra, "Broadway" Selection (Gottler).
 Romani and Italian Orchestra, "Old Comrades" March (Telke).
 Berlin State Orchestra, "Die Fledermaus" (Strauss).
 Nullo Romani's Orchestra, "Canto al Inverno."
 Russian Novelty Orchestra, "Tesoro Mio" (Becucci).

7.0 : News session.

7.40 : Talk—Mr. Lloyd Ross, M.A., LL.B., under auspices of W.E.A. Metropolitan Series, "The Dream of Stockholm."

8.0 : Studio presentation by the St. Kilda Band, under the conductorship of Mr. Jas. Dixon, assisted by 4YA artists. March—Band, "Constellation" (Clarke); Dance Burlesque, "Laughing Marionette."

8.10 : Mixed quartets—"The Serenaders," (a) "Come Back to Erin" (Claribel), (b) "Dear Harp of My Country" (arr. Northcote).

8.16 : Mandolin and lute—Professor and Maria Calace, (a) "Hero's March," (b) "Spanish Dance" (Calace).

8.22 : Scots humour—Mr. James A. Paterson, "Bella McGraw" (Lauder).

8.26 : Selections—Band, "Gems of Italian Opera" (arr. Rimmer).

8.37 : Mixed quartet—"The Serenaders," "Sweet and Low" (Barnby).

9.40 : Piano—Mrs. C. Drake, (a) "Polonaise in A Major" (Chopin), (b) "Hexentanz" (McDowell).

8.46 : Morceau—Band, "Turkish Patrol" (Hume).

8.52 : Soprano—Miss F. Sumner, "Serenade" (Gounod).

8.55 : Male quartet—Felix Schmidt Quartet, (a) "Spinn, Spinn" (Jungst), (b) "Guten Abend, Gute Nacht" (Brahms).

9.1 : Weather report and station notices.

9.2 : Selections—Band, "The Talisman" (Balfe).

9.11 : Mixed quartets—"The Serenaders," (a) "Tell Me, Where is Fancy Bred?" (Bartholomew), (b) "A Stitch in Time Saves Nine."

9.17 : Piano, violin, and saxophone—Carroll Gibbons, (a) "Body and Soul" (Green), (b) "Moonbeam Dance" (Gibbons).

9.25 : Contralto—Miss D. Allan, (a) "The Restless Sea" (Hamblen), (b) "A Mood" (Travers).

9.31 : Euphonium with band, "Up From Somerset" (Sanderson).

9.36 : Scots humour—Mr. James A. Paterson, (a) "Sergeant Jock McPhee" (McFarlane), (b) "We Can Oot Together" (Fyffe).

9.43 : Accordion—Bastien, (a) "Forever" (Delhaisi), (b) "Oh, Donna Clara"

9.49 : Mixed quartets—"The Serenaders," (a) "Sing a Song of Sixpence" (Cornwall), (b) "Sleep" (Besly).

9.55 : March—Band, "Vanished Army" (Alford).

10.1 : God save the King.

Wednesday, May 6

1YA, AUCKLAND (900 KILOCYCLES)—WEDNESDAY, MAY 6.

12.30 to 1.30: Relay of Community Singing from Auckland Town Hall.

3.0 : Selected recordings.

3.15 : Literary selection.

5.0 : Children's session, conducted by "Uncle Reg."

6.0 : Dinner music session.

Paul Godwin's Orchestra, "Musical Panorama Medley" (Lincke); "Birthday Serenade" (Lincke); "The Spider" Intermezzo (Klose); "Tonerna" (Sjoberg); "Wedding Serenade" (Klose); "Butterfly" Intermezzo (Schkenk).

Violin with orchestra—Paul Godwin's Orchestra, "Serenade" (Tosti). Paul Godwin's Orchestra, "Geisha" Medley (Jones); "La Poupee de Nuremberg" Overture (Adam).

Vienna Schrammel Quartet, "Firefly's Appointment" (Siede).

Paul Godwin's Orchestra, "Medley Memorial of Strauss' Waltzes."

Vienna Schrammel Quartet, "Serenade" (Heykens).

7.0 : News and market reports.

7.40 : Talk—Mr. Norman Kerr, "Physical Culture."

8.0 : Chimes. Presentation of Special Programme by the Anglican City Mission, under the direction of the Rev. Jasper Calder. This programme is subject to considerable alteration to allow for the broadcasting of results of Municipal Elections.

March—Black Diamonds Band, "Entry of the Gladiators" (Fucik).

Opening chorus—The Company, "Opening Chorus" (arr. Jasper Calder)

Tenor—Mr. Robert Nixon, "My Pretty Jane" (Balfe).

Sketch—Members of the Company, "Sob Stuff."

Lute and Mandolin—Professor and Maria Calace, "Tarantella."

Vocal—The Company, "British Airs."

Contralto—Madame Irene Ainsley, (a) "Irish Lullaby" (Needham); (b) "Happy Song" (del Riego).

Sketch—Members of Company, "When the Ladder Fell."

Marimba—Green Bros.' Marimba Orchestra, "Wedding of the Winds" (Darewski); "Humour" (Miss Edna Herrick).

Bass-baritone and chorus—Mr. F. Sutherland and Company, (a) "Song of the Vagabonds" (Friml); (b) "Only a Rose" (Friml); (c) "Toreador Song" (Bizet).

Vocal—Mission Quartet, "Whimsical Melodies" (arr. J. Calder).

Novelty—International Novelty Quartet, "The Clock is Playing."

Vocal duet—Misses Laura and Ida Walker.

Musical scene—The Company, "Southern Memories" (arr. J. Calder).

March—Black Diamond Band, "Distant Greetings" (Doring).

God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—WEDNESDAY, MAY 6.

3.0 : Chimes. Selected gramophone recordings.

3.30 and 4.30 : Sporting results to hand.

5.0 : Children's session, conducted by "Aunt Daisy."

6.0 : Dinner music session.

Philharmonic Orchestra, Berlin, "Les Huguenots" Overture.

Paul Godwin Quartet, "Beautiful Garden of Roses" (Schmid).

State Opera Orchestra, Berlin, "German Dances" (Schubert).

Polydor Symphonic Orchestra, "Hear You Again" Medley (Weninger).

Association des Concerts Lamoureux, Paris, "Petite Suite" (Debussy).

(1) En Bateau; (2) Cortège; (3) Menuet; (4) Ballet.

Paul Godwin Quartet, "Le Reve" (D'Ambrosio).

Philharmonic Orchestra, Berlin, "Emperor Waltz" (Strauss).

7.0 : News session, market reports and sports results.

8.0 : Chimes. At intervals during the presentation of this programme results of Municipal Elections will be announced

Specialty Recorded Overseas Programme

Golden Hour of Music.

Adam and Eve.

Ohman and Arden (two pianos).

International talk—Mr. E. J. Howard, M.P., "South Africa as a Unit of the Empire—Her Mysterious Ruins."

High Spots.

Nat Brusiloff and His Lido Venice Orchestra.

God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—WEDNESDAY, MAY 6.

3.0 : Afternoon session.

4.25 : Sports results.

5.0 : Children's hour, "Uncle John."

6.0 : Dinner music session.

Dajos Bela Orchestra, "Pique Dame" Fantasia (Tschaiakowsky).

Grand Symphony Orchestra, "Polonaise No. 1 in A" (Chopin).

Dajos Bela Orchestra, "Dynamiden Waltz" (Josef Strauss).

Grand Symphony Orchestra, "Hungarian Dances" (Brahms).

Edith Lorand Orchestra, "Myosotis Waltz" (Waldteufel).

Parlophone Dance Orchestra, "The Skaters" (Waldteufel).

Brunswick Concert Orchestra, "La Danseuse" (Von Blon).

Orchestra of the Opera Comique, Paris, "Ballet Egyptien" (Luigini).

Cello—Gregor Piatigorsky, "The Swan" (Saint-Saens).

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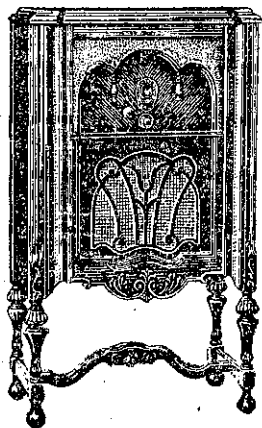
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WAKEFIELD STREET, WELLINGTON.

Edith Lorand Orchestra, "The Merry Widow" Selection (Lehar).
Grand Symphony Orchestra, "Scherzo from Midsummer Night's Dream" (Mendelssohn).

7.0 : News session.

7.30 : Addington stock market reports.

8.0 : Chimes. This programme will be interrupted for the purpose of announcing the results of the Municipal Elections.

Menorah Symphony Orchestra, "Shulamith" Selection (Goldfaden).

Soprano—Miss Millicent O'Grady, (a) "Cupid" (Sanderson); (b) "The Curtain Falls" (D'Hardelot).

Instrumental—Studio Octet (Harold Beck, conductor), (a) "The Majestic" (Allan); (b) "Lustspiel" Overture (Kela Bela).

Male choir—Ural Cossacks, (a) "Hej Hej" (Trad'l); (b) "Signal March" (Kolatinin).

Cornet—Mr. Norman Goffin, "Melody in F" (Rubinstein).

Humour in song and story—Mr. Jock Lockhart, introducing "Thuthie."

Instrumental—Studio Octet, jazz numbers, "Ragamuffin Romeo"; "It Happened in Monterey" (Wayne).

Baritone—Mr. T. D. Williams, with Studio Octet, (a) "The Trumpeter" (Dix); (b) "Drake Goes West" (Sanderson); (c) "Land of Hope and Glory" (Elgar).

Mouth organ—Stern Mouth Organ Band, (a) "Brownies' Parade" (Noack); (b) "The Night" (Abt).

Weather forecast and station notices.

Selection—Studio Octet, "Sally" (Kern).

Contralto—Mrs. D. W. Stallard, "The Sanctuary of the Heart."

Cornet—Mr. Norman Goffin, "When the Swallows Homeward Fly."

Soprano—Miss Millicent O'Grady, (a) "Annie Laurie" (arr. Lehmann); (b) "By the Waters of Minnetonka" (Lieurance).

Novelty—The Melodeon Players, (a) "Evelina Mazurka" (D'Alba); (b) "The Belle of Bodensee" (Trad'l).

Selection—Studio Instrumental Octet, Humorous Interlude for Piano and Orchestra, "Cat and Mouse" (Englemann).

Humour in song and story—Mr. Jock Lockhart, introducing (a) "Heather Dew"; (b) "Bits and Pieces" (arr. Lockhart).

String band—Berlin Lute and Mandolin Band, (a) "Santiago" (Corbin); (b) "Blue Danube" (Strauss).

Contralto—Mrs. D. W. Stallard, (a) "Love, Love To-day" (Laura Lemon); (b) "There's a Bonny House in Ayr" (Monica West).

March—Polydor Brass Band, "Telefunken March" (Zandonai).

God save the King.

9.30 : Dance session.

Foxtrots—Ben Selvin and His Orchestra, "Around the Corner."

Gil Dech and His Syncopators, "You Can't be Unhappy if You Sing" (Barry).

Paul Specht and His Orchestra, "Santiago" (Stothart).

Stellar Dance Band, "Minnie's Yoo-hoo!" (W. Stalling).

9.42 : Waltz—The Four Bright Sparks, "Eleanor" (McCarthy).

Foxtrots—Van Phillips and His Band, "Just Like in a Story Book."

Gil Dech and His Syncopators, "Bridge of Our Dreams Come True" (Monk).

9.51 : Vocal duet—Sweet and Low Duettists, "By the Waters of Killarney."

9.54 : Foxtrots—Ipana Troubadours, "Cooking Breakfast for the One I Love."

Columbia Photo Players, "Leave it that Way" (Fisher).

Ipana Troubadours, "Kickin' a Hole in the Sky" (Greer).

Columbia Photo Players, "The Whole Darned Thing's For You" (Ahlert).

10.6 : Waltz—Frank Ferera's Hawaiian Trio, "Lazy Lou'siana Moon."

Foxtrots—Paul Specht and His Orchestra, "Into My Heart" (Ahlert).

The Four Bright Sparks, "High Society Blues" (McCarthy).

10.15 : Vocal—Cavan O'Connor, "The Sunshine of Marseilles" (Gilbert).

10.18 : Foxtrots—The Columbia Photo Players, "The 'Free and Easy'."

Frank Ferera's Hawaiian Trio, "Pale Blue Waters."

Stellar Dance Band, "The Toy Farmyard" (Weston).

Paul Whiteman and His Orchestra, "Livin' in the Sunlight."

10.30 : Waltz—Stellar Dance Band, "I Feel You Near Me" (McCarthy).

Foxtrots—The Columbia Photo Players, "It Must Be You" (Turk).

Ben Selvin and His Orchestra, "With My Guitar and You."

Paul Whiteman and His Orchestra, "You Brought a New Kind of Love to Me" (Fain).

Stellar Dance Band, "A Pair of Blue Eyes" (Kernell).

10.45 : Vocal duet—Sweet and Low Duettists, "Just an Old Refrain" (Wynn).

10.48 : Foxtrots—Van Phillips and His Band, "I'm in the Market for You."

Gil Dech and His Syncopators, "Johnnie, Our Aeroplane Girl!"

Debroy Somers Band, "Tigaro" (Mitchell).

Gil Dech and His Syncopators, "A Lone Girl Flyer."

11.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—WEDNESDAY, MAY 6.

6.30 : Children's session.

7.30 : News, markets, and information.

8.9 : Studio concert.

4YA, DUNEDIN (650 KILOCYCLES)—WEDNESDAY, MAY 6.

5.0 : Selected recordings.

3.15 : Talk—"Toothsome Stories, Part 1." Arranged by the Home Science Extension Service of Otago University.

5.0 : Children's hour, conducted by "Big Brother Bill."

6.0 : Dinner music session.

Berlin State Opera Orchestra, "Polonaise" (Liszt).

The London Palladium Orchestra, "Dawn" (Matt).

Band of H.M. Coldstream Guards, "La Fille de Madame Angot."

John Barbirolli's Chamber Orchestra, "A Little Night Music—1st to 4th Movements" (Mozart).

Symphony Orchestra, "Coppella" Variations; "Coppella—Waltz of the Hours" (Delibes).

Virtuoso String Quartet, "Londonderry Air" (arr. Bridge); "The Emperor" (Haydn).

The London Palladium Orchestra, "Sunset" (Matt).

7.0 : News session.

7.15 : Talk—Mr. L. W. McCaskill, "Review of Journal of Agriculture for April."

8.0 : Chimes. This programme will be interrupted to announce the results of Municipal Elections. Studio presentation by Caversham Methodist Choir, conducted by Mr. John Davidson, assisted by the Studio Instrumental Trio. Accompanist, Mrs. E. Smyth.

Overture—Bournemouth Municipal Orchestra, "Crown Diamonds."

Part song—The Choir, (a) "The Fisher Crew's Return" (Vearzie); (b) "The Sea Hath Its Pearls" (Pinsuti).

Mezzo-soprano—Mrs. John Davidson, "Tired Hands" (Sanderson).

Instrumental Trio, "Finale in B Flat" (Mozart).

Duet, tenor and bass—Messrs. H. Stubbs and J. Davidson, "Excelsior."

Part song and chorus—The Choir, (a) "Killarney" (Baife); (b) "Peter, Go Ring Dem Bells" (Traditional).

Bass—Mr. H. Daniel, "Hybrias, the Cretan" (Elliot).

Violin—Mr. J. A. Wallace, "1st and 2nd Movements from Sonata in F"

Part song—The Choir, (a) "Moonlight" (Faning); (b) "O Thou Whose Beams" (Goss).

Mezzo-soprano—Miss T. Paine, "Thou Art Risen, My Beloved."

Trio (ladies' voices)—Ladies of the Choir, "Spring Flowers."

Weather report and station notices.

New Symphony Orchestra, "Nell Gwynn Dance No. 1" (German).

Vocal duet—Mrs. L. Mercier and Miss T. Paine, "Come, Silver Moon."

Part song—The Choir, (a) "O Peaceful Night" (German); (b) "Sleep, Gentle Lady" (Bishop).

Instrumental Trio, "Scherzo in B Flat" (Beethoven).

Soprano—Mrs. L. Mercier, "Mignonne, Here is April" (Rieto).

New Symphony Orchestra, "Nell Gwynn Dance No. 2" (German).

Part songs—Choir, "The Fisherman's Goodnight" (Bishop).

Thursday, May 7

1YA, AUCKLAND (900 KILOCYCLES)—THURSDAY, MAY 7.

3.0 : Selected recordings.

3.15 : Talk—"The Dining Table and Table Service." Arranged by the Home Science Extension Department.

5.0 : Children's session, conducted by "Peter Pan."

6.0 : Dinner music session.

Band of H.M. Grenadier Guards, "Sir Harry Lauder" Medley.

J. H. Squire's Celeste Octet, "Second Movement from Symphonie Pathétique" (Tchaikowsky, arr. Robertson).

Modern Dance Players, "Amoretten Tanze" (Gung'l).

Court Symphony Orchestra, "The Windmill Man."

Organ—Stanley Macdonald, "The Rosary" (Nevin).

Symphony Orchestra, "When the Lemons Bloom" (Strauss).

Plaza Theatre Orchestra, "The Three Bears" (Coates).

Symphony Orchestra, "Doctrinen" (Strauss).

Continental Novelty Orchestra, "Las Lagarteranas."

New York Symphony Orchestra, "Entrance of the Little Fauns."

B.B.C. Wireless Military Band, "La Reve Passe" (Krier and Helmer).

J. H. Squire's Celeste Octet, "Scene de Ballet" (de Berliot, arr. Sear).

Organ—Stanley Macdonald, "La Rosita" (Dupont).

Continental Novelty Orchestra, "Los Claveles de Sevilla" (Guerrero).

7.0 : News and market reports.

7.40 : Talk under the auspices of the New Zealand Manufacturers' Association, "The Tale of a Shirt and Pyjamas."

8.0 : Chimes. March—Orchestral Octet, under the conductorship of Mr. Harold Baxter, "Entry of Boyards" (Halvorsen); "Three Jevington Sketches" (Loughborough); (a) "In the Fields"; (b) "On the Downs"; (c) "The Jig."

8.12 : Vocal—The Savoy Male Quartet, "Simple Simon" (Macy).

Alto—Mr. Bert Skeels, "It Is Only a Tiny Garden" (Wood).

Baritone—Mr. Arthur Gally, "Kashmiri Song" (Woodforde-Finden).

8.21 : Characteristic piece—Orchestral Octet, "The Steppes" (Borodine); Waltz, "Dreaming" (Joyce).

8.28 : Tenor—Mr. Frank Campbell, "In Sweet September" (Temple).

Duet—Messrs. Campbell and S. Hislop, "Battle Eve" (Behrend).

Bass—Mr. S. Hislop, "Messmates" (Lohr).

8.39 : Suite—Orchestral Octet, "My Lady Dragon Fly" (Finck), (a) "Call of the Sun"; (b) "The Bull Frog"; (c) "Dance of the Silver Pool"; (d) "Golden Days"; (e) "Love Spell"; (f) "The Dance."

8.53 : Vocal—The Savoy Male Quartet, "Spin, Spin" (Jungst).

Alto—Mr. Bert Skeels, "Roadways" (Lohr).

Vocal—The Savoy Male Quartet, "Obituaries" (Parks).

- 9.3 : Evening weather forecast and announcements.
 9.5 : Selection—Orchestral Octet, "Maid of the Mountains" (Fraser Simson).
 9.19: Baritone—Mr. Arthur Gally, "Friend" (Novello-Davies).
 The Savoy Male Quartet, "Love's Old Sweet Song" (Molloy).
 9.26: Gramophone Lecture-recital—Miss Molly Atkinson, "Immortal Mozart."
 God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—THURSDAY, MAY 7.

- 3.0 : Chimes. Selected gramophone recordings.
 3.15: Lecturette—Miss I. F. Meadows, "The Dining Table and Table Service."
 Arranged by the Home Science Extension Department of Otago University.
 3.30 and 4.30: Sporting results to hand.
 5.0 : Children's session, conducted by "Uncle George" and "Big Brother Jack."
 6.0 : Dinner music session.
 The Paul Godwin Orchestra, "From Heidelberg to Barcelona."
 Paul Godwin Quintet, "Minuetto" (Bolzoni).
 Paul Godwin Orchestra, "Hearts and Flowers" (Tobani).
 Marek Weber and His Hotel Adlon Orchestra, "Under the Old Lime Tree" (Hugo Felix).
 Paul Godwin and Kunstler Ensemble, "Potpourri of German Folk Songs" (arr. Hannemann).
 Paul Godwin Quintet, "Dolls' Minuet" (Blon).
 Paul Godwin Orchestra, "The Merry Peasant" (Fall-Leon).
 Marek Weber and His Hotel Adlon Orchestra, "Extase" (Ganne).
 Paul Godwin Orchestra, "Sleeping Beauty's Bridal Trip" (Max Rhode);
 "The Count of Luxembourg" (Lehar).
 7.0 : News session, market reports and sports results.
 7.40: Lecturette—Mr. W. E. Priestly, "Modern Ballroom Dancing."
 8.0 : Chimes. Studio Concert by the Wellington City Salvation Army Band
 (Conductor, Bandmaster H. Scotney), and Artists. March—Band,
 "Earlscourt Citadel" (Audioré); Selection, "Gems from Haydn."
 8.13: Male choir—Singing Teachers' Society Neukolln, "Brother Your Hands."
 8.17: Pianoforte—Mr. Haydn Rodway, "Scherzo in C Sharp Minor" (Chopin).
 8.26: Contralto—Mrs. Rossiter, "Salaam" (Lang).
 8.30: Cornet—Bandsman Dutton, "Alpine Echoes" (Hock).
 8.36: Choral—Girls' Choir, "Come Unto Me" (Von Flotow).
 8.40: Balalaika Orchestra, Gorskaja, (a) "Kasbek"; (b) "Das Bachlein."
 8.44: Piano, organ and violin—Misses Gray and Burton, Mrs. Peterson, "Intermezzo" (from "Cavalleria Rusticana") (Mascagni).
 8.48: Vocal duet—Bandsmen K. Macaulay and Alan Pike, "The Battle Eve."
 8.53: Concertina solo—Brigadier Imrie, (a) "Eufonia" (Gore); (b) "Hymn of Praise" (Beethoven); (c) "Deep Harmony" (Owen).
 9.0 : Weather report and station notices.
 9.2 : Novelty—London Novelty Orchestra, (a) "Happy Darkies' Barn Dance" (Godfrey); (b) "The Brooklyn Cake Walk" (Thurban).
 9.8 : Baritone—Bandsman R. Armstrong, "There is a Green Hill" (Gounod).
 9.13: Selection—Band, "King of Kings" (arr. Ball).
 9.21: Vocal medley—The Jolly Old Fellows, "Drinking Songs" (Trad'l).
 9.27: Pianoforte duet—Misses Gray, "Grand Vitesse" (Mullen).
 9.33: Choral—Male Choir, "Lily of the Valley" (arr. Hawkes).
 9.38: Violin—Miss O. Burton, "Tempo di Minuetto" (Pugnani, arr. Kreisler).
 9.42: Contralto—Mrs. Rossiter, "June" (Quilter).
 9.46: Pianoforte—Mr. Haydn Rodway, "Nalla" Waltz (Delibes-Dohnanyi).
 9.51: Choral—Girls' Choir, "Gallilee" (adapted from sextet from "Lucia").
 9.56: Selection—Band, "Jubilation" (arr. Coles).
 10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—THURSDAY, MAY 7.

- 3.0 : Gramophone recital.
 3.15: Lecturette—"The Dining Table and Table Service," arranged by the
 Home Science Extension Service, Otago University.
 3.30 (approx.): Gramophone Recital Continued.
 4.25: Sports results.
 5.0 : Children's Hour, conducted by "Uncle Frank and Cousin Beatrice."
 6.0 : Dinner Music Session.
 Charles Ancliffe and His Orchestra, "Ancliffe Waltzes" (Ancliffe).
 J. H. Squire's Celeste Octet, "Twilight on the Waters" (Squire).
 Gil Dech Ensemble, "Italian Nights" (Roberts).
 Regal Cinema Orchestra, "Sally" Selection (Burke).
 Organ—Quentin Maclean, "Lily of Laguna" (Stuart).
 J. H. Squire's Celeste Octet, "Minuet Sicilienne" (Squire and Hart).
 Band of H.M. Grenadier Guards, "Country Dance" (German).
 Debroy Somers Band, "Mister Cinders" Selection (Ellis and Myers).
 J. H. Squire's Celeste Octet, "The Picanninies' Picnic" (Squire).
 Organ—Quentin Maclean, "Little Dolly Daydream" (Stuart).
 Albert W. Ketelbey's Concert Orchestra, "The Clock and the Dresden Figures" (Ketelbey).
 J. H. Squire's Celeste Octet, "Minuet in D" (Mozart, arr. Willoughby).
 Albert W. Ketelbey's Concert Orchestra, "Wedgwood Blue" (Ketelbey).
 Gil Dech Ensemble, "Valse Parisienne" (Roberts, arr. Barry).
 7.0 : News Session.
 7.30 : Talk—Review of "Journal of Agriculture."
 8.0 : Chimes. Overture—New York Philharmonic Orchestra, "Midsummer Night's Dream" Scherzo (Mendelssohn). Shakespearean Programme by the Canterbury Repertory Theatre Society.

- 8.4 : Introduction Extract from Prologue to "The Life of King Henry the Fifth" (Shakespeare).
 8.6 : Extract from Part II Henry IV. Characters: King Henry IV, the Prince of Wales and Earl of Warwick.
 8.21: Soprano—Mrs. R. J. McLaren, Shakespearean Song: "Where the Bee Sucks" (Dr. Arne).
 8.24: Victor Concert Orchestra, "Amaryllis" (Ghys).
 8.27: Canterbury Repertory Theatre Society, "Love Scenes Between Rosalind, Orlando and Celia" (from "As You Like It") (Shakespeare).
 8.47: Soprano—Mrs. R. J. McLaren, Shakespearean Song, "It was a Lover and His Lass" (Thomas Morley).
 8.50: Royal Opera Orchestra, "Sylvia Ballet—Pizzicato and Procession of Bacchus" (Delibes).
 8.53: Canterbury Repertory Theatre Society, Drinking Scene—"Othello"—Act II, Scene II (Shakespeare). Characters: Cassio, Iago, Othello, Roderigo, Montano and Crowd.
 9.8 : Weather forecast and station notices.
 9.10: New Symphony Orchestra, "Henry VIII Dances"—Morris Dance and Torch Dance (German).
 9.18: Canterbury Repertory Theatre Society, "Willow Cabin Scene" (from Act I. of "Twelfth Night" (Shakespeare). Characters: Malvolio, Maria, Viola and Olivia.
 9.23: Soprano—Mrs. R. J. McLaren, Shakespearean Song, "Under the Greenwood Tree" (Arne).
 9.29: Canterbury Repertory Theatre Society: (a) "Act II, Scene V" (from "Romeo and Juliet") (Shakespeare). Characters: Nurse and Juliet; (b) "Puck's Closing Speech" (from "Midsummer Night's Dream").
 9.34: Dance Music Session:
 Foxtrots—Ben Bernie and His Orchestra, "I'm Yours" (Harburg).
 Jacques Renard and His Orchestra, "Loving You the Way I Do" (Scholl).
 Ben Bernie and His Orchestra, "Confessin'" (Neiburg).
 Earl Burtneft and His Los Angeles Biltmore Hotel Orchestra, "Just A Little Dance Mam'selle" (O'Flynn).
 9.46: Waltz—Abe Lyman and His California Orchestra, "This is Love."
 Foxtrots—Isham Jones' Orchestra, "Sweet Jennie Lee" (Donaldson).
 Jacques Renard and His Orchestra, "Lucky Seven" (Dietz).
 9.55: Vocal—Wendell Hall, "Underneath the Mellow Moon" (Hall).
 9.58: Foxtrots—Ozzie Nelson and His Orchestra, "I Don't Mind Walkin' in the Rain" (Rich).
 Isham Jones' Orchestra, "In My Heart It's You" (O'Flynn).
 Earl Burtneft and His Los Angeles Biltmore Hotel Orchestra, "I Wonder How it Feels" (Sherman).
 10.7 : Jacques Renard and His Orchestra, "Sing Something Simple" (Hupfeld); "Can This Be Love?" (James).
 10.13: Vocal—Jessica Dragonette, "When You're Away" (Blossom).
 10.16: Foxtrots—Isham Jones' Orchestra, "I'll Be Blue, Just Thinking of You."
 Meyer Davis' Hotel Astor Orchestra, "Looking for the Lovelight in the Dark" (Dubin).
 Earl Burtneft and His Los Angeles Biltmore Hotel Orchestra, "Little White Lies" (Donaldson).
 10.25: Waltz—Castlewood Marimba Band, "When the Organ Played at Twilight" (Wallace).
 10.28: Foxtrots—Ozzie Nelson and His Orchestra, "I Still Get a Thrill".
 Meyer Davis' Hotel Astor Orchestra, "As Long As I Have You" (Dubin).
 Tom Gerun and His Orchestra, "A Big Bouquet For You."
 Vocal—Wendell Hall, "Land of My Sunset Dreams" (Hall).
 10.40: Foxtrots—Tom Gerun and His Orchestra, "Sing" (Johnston) "If I Could Be With You" (Creamer); "Wasting My Love on You" (Leslie).
 Earl Burtneft and His Los Angeles Biltmore Hotel Orchestra, "Sweetheart of My Student Days" (Kahn).
 10.52: Waltz—Castlewood Marimba Band, "Moonlight on the Colorado" (Moll).
 10.55: Foxtrots—Isham Jones' Orchestra, "Don't Tell Her" (De Sylva); "Good Evenin'" (Seymour); "My Baby Just Cares for Me" (Kahn).
 11.4 : God Save the King.

4YA, DUNEDIN (650 KILOCYCLES)—THURSDAY, MAY 7.

- 11.30: Results of Forbury Park Trotting Club's meeting.
 5.0 : God save the King.

Friday, May 8

1YA, AUCKLAND (900 KILOCYCLES)—FRIDAY, MAY 8.

- 3.0 : Selected recordings.
 3.15: Literary selection.
 5.0 : Children's session, conducted by "Nod" and "Aunt Jean."
 6.0 : Dinner music session:
 Grand Symphony Orchestra, "Raymond Overture" (Thomas).
 Edith Lorand Orchestra, "Wine, Woman, and Song" (Strauss).
 Orchestra Mascotte with Edith Lorand, "Siren Magic" (Waldteufel).
 Orchestra of the Opera Comique, Paris, "Scenes Pittoresques": (a) "Marche," (b) "Fete Boheme" (Massenet).
 Dr. Ormandy's Instrumental Trio, "Barcarolle" (Offenbach).

- Edith Lorand Orchestra, "Minuet" (Boccherini).
 Edith Lorand Trio, "Trio" (Goldmark).
 Edith Lorand Orchestra, "Tales from the Vienna Woods" (Strauss).
 The Royal Music-Makers, "Ah! Sweet Mystery of Life."
 Orchestra Mascotte with Edith Lorand, "I'd Like to Kiss the Ladies."
 Edith Lorand Orchestra, "Toreador and Andalous" (Rubinstein);
 "Roses of the South" (Strauss).
 Dr. Ormandy's Instrumental Trio, "From the Land of the Sky-Blue Water" (Cadman).
 The Royal Music-Makers, "Kiss Me Again" (Herbert).
 7.0 : News and market reports.
 8.0 : Chimes. Overture—Debroy Somers Band, "The Desert Song" Selection (Romberg).
 8.9 : Baritone—Mr. J. W. Nicholls, "The Curfew" (Gould).
 8.13 : Instrumental—Bert Kingsland's Saxophone Quartet, (a) "Local Pride" (Ford), (b) "Allegro de Concert" (Singelee).
 8.25 : Novelty entertainment—Mister Ree, "Radio Magic."
 8.38 : Instrumental and vocal—The Salon Trio: Instrumental trio, "La Cinquantaine" (Arnold); soprano (with violin obbligato), "Serenade" (Gounod); piano solo, "Impromptu in A Flat" (Schubert); violin solo, "Andante" from Mendelssohn's Concerto (revised by Hans Sitt).
 8.52 : Piano and xylophone—Messrs. Eric F. B. Waters and Ray Jury, (a) "Log Cabin Blues," (b) "Flapperette" (Green).
 9.1 : Evening weather forecast and announcements.
 9.3 : Balalaika—Mr. Simon Philipoff, (a) "Schon Rosmarin" (Kreisler), (b) "Czardas" (Monti), (c) "Fantasia of a Russian Droll Song."
 9.15 : Baritone—Mr. J. W. Nicholls, (a) "Brian of Glenaar" (Graham), (b) "Love, Could I Only Tell Thee" (Capel).
 9.22 : Instrumental—Bert Kingsland's Saxophone Quartet, (a) "Love in Idleness" (Macbeth), (b) "At the End of a Weary Day" (Beresford), (c) "Down Home" (Williams and Jones).
 9.33 : Male trio—The Three Harmonisers, (a) "There's a Good Time Coming" (Butler), (b) "Rollin' Down the River" (Adams).
 9.39 : Vocal and instrumental—The Salon Trio: Cello solo, "Arlequin" (Popper); soprano with violin obbligato, "Coming Home" (Willeby); violin, "Roumanian Air and Gipsy Dance" (Sammons).
 9.49 : Piano and xylophone—Messrs. Eric F. B. Waters and Ray Jury, (a) "Polka Hyacinthe" (Cook), (b) "Ragtime Robin" (Green).
 9.58 : March—Cavalry Band, "Revue March" (Faust).
 10.1 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—FRIDAY, MAY 8.

- 3.0 : Chimes. Selected gramophone recordings.
 2.30 and 4.30 : Sporting results to hand.
 5.0 : Children's session, conducted by "Uncle Jim" and "The Story-Book Lady."
 6.0 : Dinner music session:
 Berlin Philharmonic Orchestra, "Titus" Overture (Mozart).
 Paul Godwin Orchestra, "The Roses' Bridal Procession" (Leon Jessel); "Oh, This Beautiful Springtime" (Lincke).
 Great Symphony Orchestra, "Fortissimo" (Kalman).
 Paul Godwin Orchestra, "The Marionettes Mounting Guard" (Kuhn).
 State Opera Orchestra, Berlin, "Orpheus and Eurydice Ballet Music."
 Paul Godwin Orchestra, "Murmure de Bal" (Meyer Helmund).
 Berlin Philharmonic Orchestra, "Le Nozze di Figaro" Overture.
 Paul Godwin Orchestra, "Poppies" (Moret); "Dreaming Flowers."
 7.0 : News session, market reports and sports results.
 8.0 : Chimes. Overture—2YA Orchestra (Conductor, Signor A. P. Truda), "Morning, Noon, and Night" (Suppe).
 8.15 : Bass—Mr. R. J. G. Madigan, with orchestral accompaniment, "Cloze Props" (Barnes).
 8.19 : Mrs. Mildred Kenny's Guitar Orchestra, (a) "Moonlight on the Colorado" (Moll and King), (b) "Mele Hula" (Clark).
 8.27 : Humorous sketch—Mr. and Mrs. J. W. Bailey, "Light and Shade" (Anon.).
 8.40 : Bass, with orchestral accompaniment—Mr. R. J. G. Madigan, "Harlequin" (Sanderson).
 8.45 : Selection—2YA Orchestra, "Primrose" (Gershwin); concert waltz, "A' Toi" (To Thee) (Waldteufel).
 9.0 : Weather report and station notices.
 9.2 : Mrs. Mildred Kenny's Guitar Orchestra, (a) "Underneath the Mellow Moon" (Ager), (b) Haere Ra-e-rere Taku Poi" (arr. Piripata).
 9.10 : Humorous sketch—Mr. and Mrs. J. W. Bailey, "Implacable Aphrodite."
 9.22 : Foxtrots—2YA Orchestra, (a) "If I Could Be With You One Hour To-night" (Creamer), (b) "Looking for the Lovelight in the Dark."
 9.30 : Dance music programme:
 Foxtrots—Cova Cavaliers, "Right or Wrong, I'm Still in Love With You" (Gillespie).
 New Yorkers, "Go, Get 'Em, Caroline" (Cremare).
 Cova Cavaliers, "Have a Little Faith in Me" (Lewis).
 New Yorkers, "Love" (Goulding).
 9.42 : Waltz—Al Hopkins's Buckle-Busters, "Marosovia Waltz" (Belcher).
 Foxtrots—New Yorkers, "Ev'rything's Rosey Now" (Herscher).
 Jack Montrose's Orchestra, "Egypt" (Costello).
 New Yorkers, "Harmonica Harry" (Phil Baxter).
 9.54 : Vocal—Mildred Grizelle, "Under the Spell of the Moon" (Unger).
 9.57 : Foxtrots—Zenith Knights, "Should I?" (Freed).
 Cova Cavaliers, "Those Old Sweethearts of Mine" (Menzl).
 Zenith Knights, "My Blue Ridge Mountain Home."
 Cova Cavaliers, "Like a Dream" (Rose).

- 10.9 : Polka—Al Hopkins and His Buckle-Busters, "Polka Medley."
 Foxtrots—Carl Fenton and His Orchestra, "Sing, You Sinners."
 Zenith Knights, "We'll Be Married in June" (Marchini).
 George Posnack and Orchestra, "Black Horse" (Tarto).
 10.21 : Vocal—Tommy Weir, "Waiting Through the Night" (Smolev).
 10.24 : Foxtrots—Broadway Players, "Watching My Dreams Go By" (Dubin).
 Carl Fenton and His Orchestra, "Keep on the Sunny Side."
 Zenith Knights, "Where the Golden Daffodils Grow" (Kahn).
 George Posnack and Orchestra, "Whip-poor-will" (De Voll).
 10.36 : Waltz—Eight Radio Stars, "Always in My Heart" (Drew Perry).
 Foxtrots—Carl Fenton and His Orchestra, "Apart From You."
 The New Yorkers Orchestra, "Because I'm Lonesome" (Kahn).
 10.45 : Vocal—Mildred Grizelle, "So Sympathetic" (Kahn).
 10.48 : Foxtrots—Cova Cavaliers, "Telling It to the Daisies" (Young).
 Carl Fenton and His Orchestra, "Exactly Like You."
 George Dobkins and Orchestra, "Love Me in My Dreams."
 The New Yorkers Orchestra, "Ro-ro-rolling Along" (Moll).
 11.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—FRIDAY, MAY 8.

- 3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour, "Chuckie."
 6.0 : Dinner music session.
 San Francisco Symphony Orchestra, "Caprice Viennois" (Kreisler).
 Cello—Pablo Casals, "Spanish Dance" (Granados, arr. Casals).
 Novelty Orchestra, "Ginger Snaps" (Bourdon).
 Victoria Orchestra, "La Serenata" (Metra).
 Kiriloff's Balalaika Orchestra, "Medley of Old-time Songs."
 Organ—Jesse Crawford, "How Am I to Know?" (Parker).
 Vienna Philharmonic Orchestra, "Die Fledermaus" (Strauss).
 Organ—Jesse Crawford, "I'll Close My Eyes to the Rest of the World."
 Novelty Orchestra, "Midnight Bells" (Heuberger).
 San Francisco Symphony Orchestra, "Coppelia Ballet" (Delibes).
 Novelty Orchestra, "Passion Rose" (Lehar).
 Victoria Orchestra, "Espanita" (Rosey).
 Cello—Pablo Casals, "Vito" (Spanish Dance) (Popper).
 Novelty Orchestra, "Danse Bagatelle" (Bourdon).
 7.0 : News session.
 8.0 : Chimes. Overture—Jack Hylton and His Orchestra, "Melodious Memories" (Finck).
 8.8 : Vocal—Salon Quartet, "Negro Plantation Song," "Far, Far Away."
 Baritone—Mr. Clive Hindle, "Blow, Blow, Thou Winter Wind."
 8.13 : Piano—Miss Frances Hamerton, "Barcarolle" (from "Second Suite").
 8.21 : Soprano—Miss Corrie Aslin, with violin obbligato by Miss I. Morris, "La Serenata" (Braga).
 Tenor and baritone—Salon Male Duo, "Les Gendarmes" (from "Genevieve de Brabant") (Offenbach).
 8.27 : Instrumental—Christchurch Broadcasting Trio, (a) "Rondo" (Hummel); (b) "At the Brook" (Bolsdesse); (c) "Humoresque."
 8.37 : Tenor—Mr. H. J. Francis, "Who is Sylvia?" (Schubert).
 8.40 : Cello—Mr. Harold Beck, (a) "Chant D'Amour" (Casella); (b) "La Danza" (Rossini).
 8.46 : Contralto—Miss Dulcie Mitchell, (a) "Garden of Happiness" (Daniel Wood); (b) "Memory's Home" (George Buchanan).
 8.50 : Mouth organ with piano—Mr. Les. Croft, (a) "Funiculi Funicula"; (b) "Miserere" (from "Il Trovatore"); (c) "A Selection Played on the Smallest Mouth Organ in the World, without the Aid of Hands"; (d) "Poet and Peasant"; (e) "William Tell" (arr. Croft).
 8.56 : Balalaika Orchestra, Gorskaja, (a) "Russian Potpourri"; (b) "Der Mond Leuchtet" (Trad'l).
 9.2 : Weather forecast and station notices.
 9.4 : Accordeon duo—Gellin and Borgstrom, (a) "Firefly" (Leslie); (b) "Snow Waltz" (Nicholls).
 9.10 : Vocal—Salon Quartet, from "Plantation Songs"—"Keep Down de Middle" (Scott Gatty).
 Baritone—Mr. Clive Hindle, "I'm a Cornish Man" (Henty).
 9.16 : Piano—Miss Frances Hamerton, (a) "Finnish Lullaby" (Palmgren); (b) "Hearts Base" (Bridge); (c) "Miniature Pastoral No. 3."
 9.22 : Soprano and contralto—Salonelle Duo, "Tell Me Where Do the Fairies Dwell" (Stephen Glover).
 9.25 : Violin—H. Solloway, (a) "The Violin Maker of Cremona" (Hubay); (b) "Romanza Andalus" (Sarasate).
 9.28 : Soprano—Miss Corrie Aslin, "Cigarette" (from "Catch of the Season").
 9.31 : Mouth organ and piano—Mr. Les. Croft, "Boy Scout's Band Approaching and Disappearing" (MS.); Trombone, (a) "Girl of My Dreams" (Sunny Clapp); (b) "Laughing Jack" (arr. Croft and Bidgood).
 9.37 : Tenor—Mr. H. J. Francis, "Come Love Be Mine" (Leoncavallo).
 9.40 : Instrumental—Christchurch Broadcasting Trio, (a) "Polacca" (Thomas); (b) "Valse" (Rebikov); (c) "La Coquette" (Translateur).
 9.50 : Contralto—Miss Dulcie Mitchell, "Beyond the Dawn" (Sanderson).
 9.54 : March—National Military Band, "Three Musketeers" (Banatzky).
 10.0 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—FRIDAY, MAY 8.

- 3.0 : Selected recordings.
 5.0 : Children's hour, conducted by "Aunt Sheila."

6.0 : Dinner music session.

The Philharmonic Orchestra, Berlin, "The Gipsy Baron" (Strauss).
 Heerman Trio, "Pierette" (Chaminade).
 Brunswick Hour Orchestra, "Only a Rose" (Hooker, Friml).
 Symphony Orchestra, "Eva" Medley (Lehar).
 New Light Symphony Orchestra, "Spanish Dance No. 1" (Moszkowski).
 Brunswick Concert Orchestra, "The Perfect Song" (Brell).
 Symphony Orchestra, "Frederick" Medley (Lehar).
 New Light Symphony Orchestra, "Spanish Serenade" (Bizet).
 Brunswick Concert Orchestra, "Sylvia" (Speaks).
 Heerman Trio, "Dalvisa" (Sandby).
 Paul Godwin's String Orchestra, "Lehariana" (arr. Geiger).

7.0 : News session.

8.0 : Chimes. Overture—Finck's Orchestra, "Gaiety Echoes."
 8.9 : Tenor—Mr. J. E. Davies, (a) "Bailiff's Daughter of Islington" (Anon); (b) "The Silent Harp" (Gwyn-Williams).
 8.15 : Trio—Misses Ethel Wallace, S. Baker and Mrs. Moffatt, (a) "Marche Militaire" (Schubert); (b) "Le Reve" (Thome); (c) "Celebre Menuet" (Valensin).
 8.27 : Mixed quartets—The Select Four, (a) "Minute Gun at Sea" (King); (b) "Old Mother Hubbard" (Wheeler).
 8.32 : Novelty instrumental—Bluebird Hawaiian Trio, (a) "Here Comes the Sun" (Wood); (b) "I'll Always Be in Love With You" (Stept).
 8.38 : Soprano—Miss L. de Clifford, (a) "Here's April" (Sanderson); (b) "The Ash Grove" (Welsh Air).
 8.44 : Choir—Tomanerchor Leipzig, (a) "Silent Night, Holy Night" (Gruber); (b) "Es Ist Ein Reis Entsprungen" (Pratorius).
 8.50 : Violin—Miss Ethel Wallace, "Czardas" (Monti).
 8.56 : Mixed quartet—The Select Four, "The Bells of St. Michael's Tower."
 9.0 : Weather report and station notices.
 9.2 : Xylophone—Frunz Kruger, (a) "American Patrol" (Meacham); (b) "Hungarian Airs" (Kruger).
 9.8 : Mezzo-contralto—Miss B. Hamilton, (a) "Bonnie Sweet Bessie" (Anon); (b) "Hills of Donegal" (Sanderson).
 9.14 : Novelty instrumental—Bluebird Hawaiian Trio, (a) "I Don't Sing Aloha When I Go" (Black); (b) "Ro, Ro, Rolling Along."
 9.20 : Mixed quartet—The Select Four, "Hark, 'Tis the Indian Drum."
 9.23 : Accordeon duo—Gellin and Borgstrom, (a) "Blaze Away" (Holzmann); (b) "Gladiator's Farewell" (Blankenburg).
 9.29 : Bass—Mr. Edward Bond, (a) "The Farmer's Pride" (Russell); (b) "The Pirate" (Malay).
 9.35 : Trio—Misses Wallace, Baker and Moffatt, (a) "Scherzo" (Napraynik); (b) "Serenata" (Toselli); (c) "Au Bord D'un Ruisseau."
 9.47 : Mixed quartet—The Select Four, "Perfect Day" (Jacobs-Bond).
 9.50 : Piano—Miss Sybil Baker, "Ballade" (Chopin).
 9.56 : Band—H.M. Coldstream Guards, "Pirates of Penzance" (Sullivan).
 10.2 : God save the King.

Saturday, May 9

1YA, AUCKLAND (980 KILOCYCLES)—SATURDAY, MAY 9.

3.0 : Selected recordings.
 3.15 : Literary selection.
 5.0 : Children's session, conducted by "Cinderella."
 6.0 : Dinner music session.
 March—American Legion Band, "The Conqueror" (Teike).
 Selection—Savoy Orpheans, "Lido Lady" (Rodgers).
 New Light Symphony Orchestra, "Rustic Wedding Symphony."
 Victor Olof Sextet, "To a Water Lily" (Macdowell).
 Berlin State Opera Orchestra, "The Caliph of Bagdad" (Boildieu).
 Berlin State Opera Orchestra, "Spanish Dance" (Moszkowski).
 Organ—Reginald Foort, "Just Like a Darby and Joan" (Gilbert).
 Jack Hylton's Orchestra, "The Selfish Giant" (Coates).
 Victor Olof Sextet, (a) "To a Wild Rose"; (b) "In Autumn."
 Violin and organ—De Groot and Terence Casey, "Parted" (Tosti).
 Victor Symphony Orchestra, "Dance of the Hours" (Ponchielli).
 Organ—Reginald Foort, "Love Lies" (Kellard).
 March—American Legion Band, "Iowa Corn Song" (arr. Beeston).
 7.0 : News and market reports.
 8.0 : Chimes. Relay of Municipal Choir Concert, from the Auckland Town Hall, under the conductorship of Mr. Maughan Barnett.
 10.0 : Programme of Dance Music from the Studio.
 Foxtrots—Marimba Original Excelsior de Guatemala, "Vanos al Mercedon" (Jorga, Vasquez, Lanazabal).
 Ben Berlin Dance Orchestra, "First the Right Leg" (Kollo-Wolff); "A Very Good Chum" (Heymann-Gilbert).
 10.9 : Waltz—Illa Livschakoff Dance Orchestra, "You've Been My Lucky Star" (Stolz).
 Foxtrots—Ben Berlin Dance Orchestra, "Just You" (Nelson).
 Paul Godwin Dance Orchestra, "Both You and Myself."
 10.18 : Vocal—Jack O'Hagan, "Rambling Down the Roadway" (O'Hagan).
 10.21 : Tangos—Jose M. Lucchesi and His South American Orchestra, "Alla Va El Caldo" (Pippo Rache); "La Voz Del Viento" (Lucchesi); "Amargura" (Lucchesi).
 Waltz—Paul Godwin Dance Orchestra, "Goodbye" (Spoliarsky).
 10.30 : Foxtrots—Ben Berlin Dance Orchestra, "To Begin With a Big Question Mark" (Heymann); "Hallo, Sweet Lady" (Heymann); "My Heart is Longing for You" (Heymann).

10.39 : Vocal—Jack O'Hagan, "With My Guitar and You" (Harris).
 10.42 : Tangos—Marimba Original Excelsior de Guatemala, "Nubes de Humo." Illa Livschakoff Dance Orchestra, "The Tale of Good Fortune" (Stolz).
 Jose M. Lucchesi and His South American Orchestra, "Soleadad" (Coppola).
 10.51 : Foxtrots—Marimba Original Excelsior de Guatemala, "Bomberos"; "Mi Perrito" (Pearly Chagnon).
 11.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SATURDAY, MAY 9.

3.0 : Chimes. Selected gramophone recordings.
 3.30 and 4.30 : Sporting results to hand.
 5.0 : Children's session, conducted by "Aunt Molly."
 6.0 : Dinner music session.
 Herman Finck and His Orchestra, "Waldfenel Memories" (arr. Finck).
 Circolo Mandolinistico, "Torna a Surriento" (de Curtis).
 Symphony Orchestra, "Morgen Blatter" (Strauss).
 B.B.C. Wireless Military Band, "Dance of the Tumblers" (Korsakov).
 J. H. Squire's Celeste Octet, "Funeral March of a Marionette."
 Plaza Theatre Orchestra, "Pearl o' Mine" (Fletcher).
 J. H. Squire's Celeste Octet, "Peter Pan" Selection (Crook).
 New Concert Orchestra, "Nights of Fragrance" (Ziehrer).
 Squire's Celeste Octet, "Air on G String" (Bach).
 Plaza Theatre Orchestra, "Bal Masque" (Fletcher).
 Circolo Mandolinistico, "Stephanie Gavotte" (Czibulka).
 B.B.C. Wireless Military Band, "Golliwog's Cake Walk" (Debussy).
 New Concert Orchestra, "Vienna Maidens" (Ziehrer).
 Bournemouth Municipal Orchestra, "Crown Diamonds" Overture.
 7.0 : News session, market reports and sports results.
 7.40 : Lecturette—Mr. W. M. Jackson, "Gladioli and Gardening Hints."
 8.0 : Chimes, followed by "The Eight O'Clock Revue." A second series of Grown-up Children's Hours, specially written and arranged by Mr. Will Bishop. Featuring The Etude Quartet (Miss Gretta Stark, Ray and Rita Kemp and Mr. Will Hancock), Miss Elsie Croft and Mr. Will Bishop.
 9.0 : Weather report and station notices.
 9.2 : Overture—Salon Orchestra (Conductor, Mr. M. T. Dixon), "Vive La Danse" (Finck).
 'Cello—Mr. Stanley Chapman with Salon Orchestra, "Cantilene."
 9.16 : Tenor—Mr. Will Hancock, "Gipsy Song" (Lehar).
 9.20 : Accordeon—Medard Ferrera, (a) "Czardas" (Monti); (b) "Hungarian Dance No. 5" (Brahms).
 9.24 : Selection—Salon Orchestra, "The Girl from Brazil" (Romberg); dances, "Two Irish Dances" (Finucane).
 9.39 : Tenor—Mr. Will Hancock, (a) "When Song is Sweet" (Sans Souci); (b) "I Heard You Go By" (Brahe).
 9.45 : Novelty—Salon Orchestra, "Swing Along" (Cook); instrumental, "Latest Dance Novelties."
 10.0 : Dance programme.
 Foxtrots—Arcadians Dance Orchestra, "Always" (Ruby).
 George Olsen and His Music, "Sweet Nothings of Love."
 Arcadians Dance Orchestra, "At the End of the Lonesome Trail" (Ruby).
 Ted Weems and His Orchestra, "Slappin' the Bass."
 10.12 : Waltz—Regent Club Orchestra, "Underneath the Russian Moon."
 Foxtrots—Johnny Hamp's Kentucky Serenaders, "Lady Luck."
 Victor Arden, Phil Ohman and Their Orchestra, "Why?"
 10.21 : Vocal—Frank Luther, "The Moon is Low" (Freed).
 10.24 : Foxtrots—New Mayfair Dance Orchestra, "She's My Slip of a Girl."
 Leo Reisman and His Orchestra, "Mia Cara" (Kahal).
 Victor Arden, Phil Ohman and Their Orchestra, "It's You I Love" (Davis).
 10.33 : Waltzes—Regent Club Orchestra, "Dear, When I Met You" (Brown).
 Rudy Vallee and His Connecticut Yankees, "Sweet Susanne."
 Foxtrots—New Mayfair Dance Orchestra, "Spread a Little Happiness."
 Nat Shilkret and His Orchestra, "May I Say 'I Love You'?"
 10.45 : Vocal—Johnny Marvin, "Lucky Me, Lovable You" (Yellen).
 10.48 : Foxtrots—The High Hatters, "Singin' in the Bathtub" (Magidson).
 New Mayfair Dance Orchestra, "In an Old World Garden."
 Nat Shilkret and His Orchestra, "Cross Your Fingers."
 The High Hatters, "Duke of Ka-ki-ki" (Leslie).
 11.0 : Sporting summary.
 11.10 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SATURDAY, MAY 9.

3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour.
 6.0 : Dinner music session:
 New Mayfair Orchestra, "Sally" Selection (Kern).
 Organ—Sandy Macpherson, "L'Heure Bleu" (Spoliarski).
 New Mayfair Dance Orchestra, "Hungarian Medley" (arr. Somers).
 Paul Whiteman and His Concert Orchestra, "Midnight Reflections."
 Zonophone Salon Orchestra, "Sweet Adeline" (Armstrong).
 Paul Whiteman and His Concert Orchestra, "Soliloquy" (Bloom).
 Band of H.M. Coldstream Guards, "Florodora" Selection (Stuart).
 Organ—Sandy Macpherson, "In An Old-World Garden" (Pepper).
 Zonophone Salon Orchestra, "In the Shadows" (Finck).

- Jack Hylton and His Orchestra, "Memories of Paris" (Padilla).
 New Mayfair Dance Orchestra, "Waltz Medley."
 The London Palladium Orchestra, "Nautical Moments" (arr. Winter).
- 7.0 : News session.
 7.30 : Sports results.
 8.0 : Chimes. Overture—Regal Cinema Orchestra, "Broadway" Selection.
 8.9 : Tenor—Mr. J. Haydn Williams, (a) "The Brooklet" (Cadman), (b) "Mignonette" (Harris), (c) "My Heart Sings to You" (Ashly).
 8.15 : Instrumental—Lyndon Christie and His Rhythmic Symphonists, selection, "The Desert Song" (Romberg).
 8.25 : Contralto—Miss Nellie Lowe, (a) "When the Stars Were Young" (Rubens), (b) "The Dream Canoe" (Squire).
 8.31 : Accordion—René Leroux, (a) "Girl from Paris" (Sylviano), (b) "The Bagpipe's Song" (Vaissade).
 8.37 : Humour—Mr. L. T. J. Ryan, "Matrimony, Before and After."
 8.42 : Instrumental—Lyndon Christie and His Rhythmic Symphonists: Medley, "Dixie Ditties" (arr. Black); piano solo by Miss Olive Winston, "Flapperette" (Greer).
 8.49 : Cabaret songs at the piano—Mr. Jack Blair, (a) "They All Fall In Love" (Porter), (b) "Let Me Have My Dreams" (Akst).
 8.55 : Instrumental—Lyndon Christie and His Rhythmic Symphonists, selection, "Good News" (Henderson).
 9.5 : Weather forecast and station notices.
 9.7 : Balalaika Orchestra, Gorskaja, (a) "Der Letzte Sechser," (b) "Die Sehnsucht" (traditional).
 9.13 : Tenor—Mr. J. Haydn Williams, (a) "Mountain Lovers" (Squire), (b) "You'd Better Ask Me" (Lohr).
 9.17 : Foxtrots—Lyndon Christie and His Rhythmic Symphonists, (a) "It's a Great Life" (Whiting Chase), (b) "Over the Garden Wall."
 9.23 : Contralto—Miss Nellie Lowe, (a) "A Japanese Love Story" (Brahe), (b) "The Little Cotton Gown" (Hill).
 9.28 : Organ—Reg. Foort, (a) "In the Heart of the Sunset" (Nicholls), (b) "Forever" (Ager).
 9.34 : Humour—Mr. L. T. J. Ryan, "Random Ramblings."
 9.40 : Instrumental—Lyndon Christie and His Rhythmic Symphonists, (a) "To a Wild Rose" (saxophone solo by Lyndon Christie with orchestral accompaniment) (McDowell), (b) "Lilting Lucia" (arr. Black).
 9.48 : Cabaret song at the piano—Mr. Jack Blair, "I'll Always Be Dreaming of Mary" (Beresford).
 9.52 : Instrumental—Lyndon Christie and His Rhythmic Symphonists, (a) "Macushla" (McMurrough) (cornet solo by Mr. Herb. Fox, with orchestral accompaniment), (b) march, "Tiger's Tail" (Thurban).
- 10.0 : Dance music session:
 Foxtrots—Jack Payne and His B.B.C. Dance Orchestra, "Beware of Love" (Kernell).
 Van Phillips and His Band, "Always, In All Ways" (Robin);
 "Why Am I So Romantic" (Kalmar); "Beyond the Blue Horizon" (Robin).
 10.12 : Waltz—Will Osborne and His Orchestra, "Down the River of Golden Dreams" (Klenner).
 Foxtrots—Jan Garber and His Orchestra, "When a Woman Loves a Man" (Rainger).
 Fred Rich and His Orchestra, "If I'd Only Listened to You."
 10.21 : Vocal duet—Layton and Johnstone, "Dancing with Tears in My Eyes."
 10.24 : Foxtrots—Rhythmic Troubadours, "You're the Sweetest Girl."
 Guy Lombardo and His Royal Canadians, "Where the Golden Daffodils Grow" (Archer).
 Waltz—The Cavaliers, "The Kiss Waltz" (Burke).
 10.33 : Foxtrots—Johnny Walker and His Rollickers, "Betty Co-ed" (Fogarty).
 Ben Selvin and His Orchestra, "Around the Corner."
 10.39 : Vocal duet—Layton and Johnstone, "Watching My Dreams Go By."
 10.42 : Foxtrots—Will Osborne and His Orchestra, "The Song Without a Name" (Russell).
 Guy Lombardo and His Royal Canadians, "Under a Texas Moon" (Perkins), "Good Evening" (Seymour).
 10.51 : Waltz—The Cavaliers, "All Through the Night" (Yorke).
 Foxtrots—Guy Lombardo and His Royal Canadians, "Be Careful With Those Eyes" (Woods).
 Ben Selvin and His Orchestra, "With My Guitar and You."
- 11.0 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SATURDAY, MAY 9.

- 11.30 : Results of Forbury Park Trotting Club's Meeting.
 5.0 : Children's hour, conducted by "Aunt Anita."
 6.0 : Dinner music session.
 Great Symphony Orchestra, "Vienna Operetta Revue" (Robrecht).
 Jacques Jacobs Ensemble, "Wiener Blut" (Strauss).
 Band of H.M. Grenadier Guards, "La Benediction des Poignards."
 Jacques Jacobs Ensemble, "España Waltz" (Waldteufel).
 Plaza Theatre Orchestra, "My Lady Dainty" (Hesse).
 Jacques Jacobs Ensemble, "Sobre Las Olas" (Rosas).
 Symphony Orchestra, "Countess Mariza" Medley (Kalman).
 J. H. Squire's Celeste Octet, "Valse Bleu" (Margis).
 B.B.C. Wireless Symphony Orchestra, "Il Trovatore" Selection.
 J. H. Squire's Celeste Octet, "Amoureuse Valse" (Berger).
 Band of H.M. Grenadier Guards, "Lo! Here the Gentle Lark."
 Plaza Theatre Orchestra, "The Busy Bee" (Bendix).
- 7.0 : News session.
 8.0 : Relay of vaudeville programme from 3YA, Christchurch.
 10.0 : Dance session.

- Foxtrots—Jack Hylton and His Orchestra, "The King's Horses."
 Ted Weems and His Orchestra, "My Baby Just Cares for Me" (Kahn).
 Nat Shilkret and His Orchestra, "Dixiana" (Caldwell).
 Ted Weems and His Orchestra, "A Girl Friend of a Boy Friend of Mine" (Kahn).
 10.12 : Waltz—Nat Shilkret and His Orchestra, "Dancing with Tears in My Eyes" (Dubin).
 Foxtrots—The High Hatters, "Anchors Aweigh" (Zimmermann).
 Jack Hylton and His Orchestra, "Adeline" (Nicholls).
 The High Hatters, "The Mug Song" (Gaskill).
 10.24 : Vocal—Aileen Stanley, "Swingin' in a Hammock" (Seymour).
 10.27 : Foxtrots—Nat Shilkret and His Orchestra, "How are You To-night in Hawaii?" (Leslie).
 Nat Shilkret and His Orchestra, "Mr. and Mrs. Sippi."
 Green Brothers' Marimba Orchestra, "Lo Lo" (Feist).
 Nat Shilkret and His Orchestra, "Why Have You Forgotten Waikiki?" (Kahn).
 10.39 : Waltz—International Novelty Quartet, "Jolly Fellows" (Vollstedt).
 Foxtrots—Marimba Centro Americana, "Forget You? Never."
 International Novelty Quartet, "Knocked 'Em in the Old Kent Road" (Ingie).
 10.48 : Vocal—Aileen Stanley, "I Love You So Much" (Kalmar).
 10.51 : Foxtrots—Ben Bernie and His Orchestra, "It's a Lonesome Old Town."
 Waring's Pennsylvanians, "Little White Lies" (Donaldson).
 Ben Bernie and His Orchestra, "Au Revoir—Pleasant Dreams" (Meskill).
 11.0 : God save the King.

Sunday, May 10

1YA, AUCKLAND (900 KILOCYCLES)—SUNDAY, MAY 10.

- 3.0 : Selected recordings, and relay of portion of Organ Recital from the Auckland Town Hall, by Mr. Maughan Barnett, City Organist.
 6.0 : Children's Song Service, conducted by "Uncle Bert."
 6.55 : Relay of Divine Service from the St. David's Church.
 8.30 (approx.) : Suite—Association des Concerts Lamoureux, Paris, "Petite Suite" (Debussy). (1) En Bateau; (2) Cortège; (3) Menuet; (4) Ballet.
 Boy-soprano—Master Desmond Casey, (a) "The Birds Go North Again" (Willeby); (b) "The Swallows" (from "La Golondrina").
 Ballet—Orchestral Octet, under the direction of Mr. Harold Baxter, "The Enchanted Lake" (Tchaikowsky); (a) "Scena"; (b) "Dance of the Swans"; (c) "Hungarian Dance."
 Waltz—"L'Estudiantina" (Waldteufel).
 Dramatic story—Mr. J. F. Montague, "After Twenty Years" (O. Henry).
 Evening weather forecast and announcements.
 Suite—Orchestral Octet, "In Arcady" (Niven).
 Manchester Children's Choir, "Nymphs and Shepherds" (Purcell).
 Morceaux—Orchestral Octet, (a) "Serenade" (Drigo); (b) "London-derry Air" (Morris); (c) "Dream Castles" (Hope).
 Boy-soprano—Master Desmond Casey, "Hear My Prayer."
 Cello—Edmund Kurtz, "Mazurka" (Werkmeister).
 Tone picture—Orchestral Octet, "Hawaiian Waters" (Ketelbey).
 Elocution—Mr. J. F. Montague, "Irish Sketch"—"Shanaghan's Ould Shebeen" (Anon); Negro sketch, "Wot's de Good o' Grousin'?"
 Cello—Edmund Kurtz, "Minuet" (Werkmeister).
 Suite—Orchestral Octet, "Jeux D'Enfants" (Bizet); March, "Gipsy Caravan" (Oscheit).
 10.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, MAY 10.

- 3.0 : Afternoon session of selected gramophone recordings.
 6.0 : Children's Song Service, conducted by "Uncle George," and assisted by the Children's Choir from St. Aiden's Anglican Church, Kilbirnie.
 7.0 : Relay of Evening Service from Taranaki Street Methodist Church.
 Preacher: Rev. T. R. Richards. Organist and choirmaster: Mr. H. Temple White.
 8.15 (approx.) : Relay of Band Recital by the Wellington Municipal Tramways Band from St. James's Theatre (Conductor, Mr. E. Franklin).
 God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, MAY 10.

- 3.0 : Gramophone recital.
 5.30 : Children's song service by children of Church of Christ Sunday Schools.
 6.15 : Chimes from studio.
 6.30 : Relay of evening service from St. Andrew's Presbyterian Church.
 Preacher, Rev. Lawson Robinson. Organist, Mr. Robert Lake.
 Choir Conductor, Mr. J. McLean.
 7.45 (approx.) : Musical recordings from studio.
 8.15 : Alexandre Glazounov and Orchestra, "The Seasons Ballet, Autumn": (1) "Bacchanal," (2) "Petit Adagio" (Glazounov).
 8.28 : Mezzo-contralto—Mrs. Sidney Bryant, (a) Negro Spirituals, "Bye and Bye" (Burleigh); (b) "Steal Away" (Burleigh).

- 8.28: 'Cello—Mr. Harold Beck, (a) "Nocturne" (Tschalkowski); (b) "March On" (Benjamin).
 8.32: Bass—Mr. Malcolm Miller, (a) "I Would I Were a King" (Sullivan); (b) "Lie There, My Lute" (MacCunn).
 8.37: Flute—Mr. A. E. Hutton, "Adagio" (Tulou).
 8.42: Soprano—Miss Lottie Colville, (a) "The Enchanted Forest" (Phillips); (b) "The Rain Fairy" (Arundale).
 8.47: Tenor—Mr. Douglas Suckling, "Dost Thou Not Breathe the Fragrant Scent" (Wagner).
 8.50: Instrumental—Studio Trio, "Allegro Vivace" (from "D Major Trio").
 9.2: Weather forecast and station announcements.
 9.4: Alexandre Glazounov and Orchestra, "The Seasons Ballet, Autumn": "Finale—Les Bacchantes" (Glazounov).
 9.10: Mezzo-contralto—Mrs. Sidney Bryant, (a) "I Sometimes Think" (Liza-Lehmann); (b) "The Wordly Hope" (from "In a Persian Garden").
 9.15: Tenor—Mr. Douglas Suckling, (a) "Echo" (Somerset); (b) "The Last Song" (Rogers).
 9.21: Violin—Paul Godwin, "Concerto No. 2 in D Minor" (Wieniawski).
 Trio—Paul Godwin Trio, "Legende d'Amour" (Bece).
 9.27: Bass—Mr. Malcolm Miller, (a) "Son of Mine" ("Freebooters' Song"; Wallace); (b) "Oh That it Were So" (Bridge).
 9.32: Septet—Septetto Iwan Wassiljeff, "Grandfather Pachom" (Traditional).
 9.35: Flute—Mr. A. E. Hutton, "Concerto" (MacFarren).
 9.41: Soprano—Miss Lottie Colville, (a) "Magdalen at Michael's Gate" (Lehmann); (b) Negro Spiritual, "Were You There?" (Burleigh).
 9.46: Instrumental—Studio Trio, (a) "Serenade" (Mozart); (b) "Tempo di Minuetto" (Godard).
 9.58: Lucerne Kursoraal Orchestra, "Dance of the Flowers" (Debussy).
 10.2: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, MAY 10.

- 3.0: Selected recordings.
 5.30: Children's Song Service, conducted by "Big Brother Bill."
 6.15: Instrumental recordings.
 6.30: Relay of Evening Service from St. Andrew's Street Church of Christ. Preacher: Pastor W. D. More. Choirmaster: Mr. H. W. Mackenzie.
 7.45: Selected recordings.
 8.15: Relay of Concert Programme from Station 3YA, Christchurch.
 10.0: God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, MAY 10.

- 6.0: Children's service.
 8.15: Studio concert.

Schedule of W3XAL

Description of Plant

THE short-wave experimental broadcasting station of the Radio Corporation of America, W3XAL, managed and operated by the National Broadcasting Co., is located in the transmitting building of WJZ at Bound Brook, New Jersey, and has to date transmitted the programmes of this station. The working frequency of W3XAL is 6700 kc., or 49.18 metres, and power input to the antenna ranges from 12 to 15 k.w. Regular hours of operation are from 5.00 p.m. to 6.00 p.m. (Sunday from 5.0 p.m. to 6.45 p.m.), and 11.00 p.m. to 1.00 a.m. E.S.T. (about 10½ hours behind N.Z.T.) daily, although the transmitter is also frequently operated during other hours on programmes of special interest.

The short-wave equipment consists of intermediate and power radio frequency amplifiers, modulator, speech amplifiers, and radiating system, a brief description of which follows:—

One of the four 3050 k.c. quartz crystals with constant temperature regulation controls the frequency of 5, 75, 250 and 500 watt intermediate radio frequency amplifiers, the 75 watt being a shield grid stage and acting

as buffer and frequency doubler. These stages in turn excite the grids of four 10 k.w. UV-854's in a push-pull output stage, which is capable of delivering 20 k.w. to the antenna. Regeneration in the 250, 500 and 20 k.w. stages is prevented by proper neutralisation.

Constant current, or Heising, modulation of the plate power to the power amplifier is provided by ten 10 k.w. UV-854's in parallel, voice frequencies being supplied to the grids of these valves from 500 watt speech amplifiers, preceded by a 5 watt line amplifier. All audio valves are operated at values which will cause no distortion on peak modulation.

Plate power to the modulator and power amplifier is supplied by twelve 10 k.w. UV-855's in a three phase, full wave circuit, two valves in parallel on each half phase, and to the intermediate radio frequency amplifiers and speech amplifiers by two 1 k.w. single phase, full wave rectifiers, employing UV-856's. A similar rectifier supplies grid bias to all radio frequency valves. Filament current for all valves is obtained from a 23 k.w. 23 volt generator, with the exception of the speech amplifiers, which are supplied from storage batteries.

A half-wave vertical Hertz radiator is mounted on a 105 foot wooden mast, the lower end being one-quarter wavelength, or 38 feet, above ground. This is conductively connected to the output stage of the transmitter through a 700 foot double feed line. Provision is made for antenna tuning and coupling adjustment.

Dunedin Radio Exhibition

(Continued from page 3.)

ready a host of new things which people will want, and which will put more people to work. Not the least of these are in the field of radio.

"This year, therefore, we anticipate witnessing a steady advance in radio in New Zealand. The service which the Broadcasting Company gives has been steadily keeping abreast of the public's response.

"Every year has seen a great extension in hours and in the standard of the entertainment and information broadcast. Last year, for instance, that is, the year ending March 31, the four YA stations were transmitting for ap-

DX COMPETITION.

Entries for second period close June 30. Certificates for winners in each district. Verifications are required for every station logged.

proximately 9400 hours. In that period of time there were 6250 different sessions—afternoon sessions, news sessions, children's sessions, dinner music, evening concerts, church services, sporting relays, overseas re-broadcasts, and others. One-third of the total number of hours were devoted to evening entertainments. The afternoon concerts occupied more than one-fifth of the service. The hours devoted to musical items totalled 5070.

"Anyone curious to know how many individual items were sung or played during that period is thus provided with an interesting arithmetical problem. If a total number of items in the vicinity of 70,000 be arrived at, the calculator can consider himself not far wrong. During the past year, 31 re-broadcasts of overseas stations were carried out. Next to the concert programmes, the children's sessions claimed most time, then came the dinner music, after that the news sessions. Sporting broadcasts, numbering 180 from all stations, represented 6.8 of the total broadcast hours, and church broadcasts 3.3.

"The Broadcasting Company's service is a happy mixture of information and entertainment, and an endeavour is made to cater for all tastes some of the time, for it is not possible to please all tastes all of the time. Lately, the Broadcasting Company has lent its service to the Department of Education for the purpose of broadcasting lecture-lessons to the schools throughout New Zealand. Every Tuesday afternoon, from 2 to 3, these broadcasts by officers of the Department of Education take place. This is but the embryo stage of education by the aid of radio broadcasting.

"A few months ago we at 2YA had the pleasure of introducing to listeners an interesting departure in the way of entertainment. I refer to the international programmes which are broadcast every Wednesday evening. The presentation of these exclusive programmes was made possible by the visit which Mr. Harris made overseas last year, when he arranged for the provision of feature attractions, recorded by artists of international re-

pute. So popular have these Wednesday evening programmes been, that in deference to many requests it has been decided to broadcast them from 1YA, Auckland, and 4YA, Dunedin. The first broadcast will take place from Dunedin on Monday, May 11.

"In respect to programmes generally, I might say that the efforts of the Broadcasting Company in the direction of securing entertainment for listeners are unceasing. The difficulties in the way are very great. The Broadcasting Company enlists the services of the best available artists in New Zealand. Last year, for instance, over 1500 contributed to the programmes, quite apart from bands, orchestras and other combinations.

"In conclusion, I would again, on behalf of the general manager and staff of the Broadcasting Company, congratulate the radio dealers of Dunedin on their enterprise and extend to them our best wishes for the success of the exhibition."

World Radio News

THE discovery of a short-wave receiver hidden beneath a gangster's motor-car in America has brought about a prohibition against the carrying of short-wave receivers on private motor-cars. The car in question was able to intercept messages from the police headquarters to the patrol wagon and thereby elude capture.

WHILE testing a new "talkie" installation in a Newcastle picture theatre recently, the engineers were amazed to hear, instead of an actor's voice, that of a clergyman preaching a sermon. Though there is no wireless apparatus in the theatre whatsoever, a powerful broadcasting station is located nearby, and it is thought that in some inexplicable manner the transmissions are picked up and reproduced through the "talkie" apparatus. Pending a solution of the mystery, the theatre remains an exponent of the "silent" screen.

A SHORT time ago the Danish Parliament passed a law concerning power interference. If one or more listeners are troubled by an electrical installation in their neighbourhood and the Electrical Commissioner certifies that such interference cannot be overcome without considerable expense to the listeners, the owners of the offending installation must take effective measures to remove the cause. Special permits, however, are issued in the case of apparatus that can be proved to function only imperfectly when such measures to reduce interference are employed. Under these circumstances the equipment must not be used on Sundays or holidays, nor between the hours of 6 p.m. and 12 p.m. In those cases where the trouble is brought about by defective parts, these must be remedied. Listeners themselves are forbidden to use their receivers in a manner calculated to cause annoyance to others. The Controllers of the Radio Council and the Electrical Commission have the right to examine any electric installation, including wireless receivers, in any house or building. Infringement of the law is attended by fines which go toward the betterment of radio service.

Broadcasting a Hundred Years Hence



HERE is no reason to suppose that any of the mediums of art, entertainment, or information which we know at present will cease to exist, any more than the arrival of films has killed the art of printing. One can contemplate a greater and greater multiplicity of means of expression and communication, all fulfilling their various functions side by side. It is a safe assumption that no innovation will kill anything which exists at the time of the new arrival, except those things which are attempting to fulfil the same function in a less satisfactory way.

When broadcasting began, it was said that among the many things that it would supersede were printing and the gramophone. It has, however, been found that, on the contrary, the only effect that broadcasting has had on these has been to encourage and increase them to a degree unparalleled by any previous stimulant.

There was a method by means of which performances at theatres and concert halls were taken through a microphone and delivered to the subscribers' homes over a telephone wire. This was a less satisfactory form of broadcasting, and so went by the board. The train killed the stage coach, but the telephone did not kill the letter. Therefore, we may conclude that in the year 2030 broadcasting will still be carried on. Its highly specialised technique will have been developed and developed until the many deficiencies which listeners put up with to-day will have disappeared. Deficiencies in reception and deficiencies in matter received.

When the tendency toward supplementing natural light and air with artificial light and air has been carried to its logical conclusion, life as we now know it, will be changed in its times and seasons. We shall not be so much affected by the time of day or the time of year. Having daylight and fresh air available all through the twenty-four hours in every city, large sections of the community will be about their business and pleasure at times when now all but a few stragglers are asleep. Therefore, the broadcasting service, like the electric light service, will be continuous. There will be no hour in the twenty-four when the needs of some section of the public in regard to news, music, drama, religion, education or discussion, will not be capable of instant satisfaction.

A Forecast of the Radio World in 2031

The maintenance of such a service will naturally entail not only an enormous reinforcement of the present station staffs, but also a certain amount of carefully-arranged repetition. It will be assumed that the listener who hears a play or talk at 4 a.m. will be asleep by 6 p.m., fourteen hours later. Therefore, the same items will be given again on the same wavelength. The players and talkers of the first occasion will in many cases be in bed on the second occasion. Their performances, having been recorded, and bottled, will be transmitted again without them.

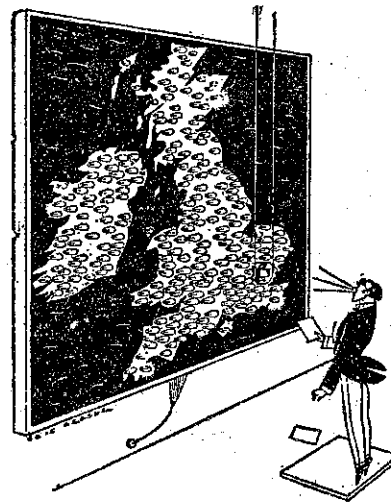
Internal Organisation.

THE internal organisation of the broadcasting service will probably have undergone enormous changes, the results of which the public will be aware of without knowing or caring how they have been brought about. Technical research having made it possible to devote more wavelengths to broadcasting, it follows that a great many more programmes will be going out simultaneously from any one headquarters. There may be ten national programmes in the British Isles alone, while abroad, all over the world, there will be proportionate increase over to-day. This will make for a far greater catholicity of choice in matter, and in manner of handling that matter at the transmitting end.

Certain wavelengths may be permanently devoted to certain things. It would seem likely that at least two wavelengths will be exclusively occupied with music all the twenty-four hours round; one with serious music and the other with flippant music. While obviously news would have a wavelength to itself, since news never

ceases to come in from all quarters of the globe.

Within the central administration there may be subsidiary administrations to some extent in competition with each other, in the same way as theatres and film manufacturers are in competition with each other. But this might not necessarily be regarded



The man in control will be able to tell at a glance what proportion of the public is listening, and where.

as "competition" in the commercial sense, but rather as a means of obviating the sameness of character inevitable in the limitation of to-day. There might be two or three entirely separate staffs responsible for music, drama, and talks, who would bring to their work an individuality which would stand out clearly before the public.

Listening Universal.

THE envisagement of such developments goes, of course, hand in hand with the presumption that everyone who has electric light will also have a wireless license. The present-day income from licenses is spent in service up to the limit, and that limit is a comparatively narrow one. But by the year 2030 it will be as rare to find a person who is not a listener in some form as it is to find a person who cannot read to-day.

Technical research, both by broadcasting authorities and wireless trading companies, will probably have conquered the interferences of oscillation, atmospheric, heterodyning, and fading, and perfect reception will be a matter of course all over the world. By that time, too, receiving sets will have become far cheaper, and the distortion and poor quality which many listeners put up with, under the impression that they are getting the best that can be got, will have disappeared for ever.

Broadcaster's Indicator.

HAVING now thoroughly got underway with intelligent anticipation, will venture on just one or two more prophecies and then stop.

At present those conducting a broadcast programme are quite unable to tell how their work is being received. Now it is extremely important to know this. Therefore, research will have to be carried out, and in course of time an indicator will be constructed. This will probably consist of a vast block of electric points, each one of which will begin to glow as soon as any listening set is tuned into the wavelength concerned. It will be arranged geographically, and from it the man in control will be able to tell at a glance what proportion of the public is listening, what part of the world they are in, whether they come in at the beginning, if they are late, if they stop listening before the end, and so on.

For instance, during an unimportant item only a point here and there would glow—a few listeners scattered about the world. But when a programme of first-class importance, interest, and popularity is on (having been well advertised beforehand), the indicator would be a great blaze of light.

Outside the stations the business of publishing books and newspapers, of conducting theatres, talking and silent film houses, and of selling gramophone or kindred records, will continue in whatever improved forms they may have assumed. While inside the business of conducting broadcasting programmes, silent television programmes, and audible television programmes, will be carried on by staffs who have by that time one hundred and eight years of experience to guide them.—L. de G.S. (in "Radio Times").

THE DIFFERENTIAL SERIES OF RECEIVERS

Has been so popular that we are making it a SPECIALITY LINE. Write us for ADVICE re these sets and it will be gladly given. Our Coils are Tested before despatch—No disappointments.

Ask for our special "Differential"

Price List.

We have a few Lotus .0002 Differential Condensers, Supplies due any time. 8/6 each.

WRITE US TO-DAY.

—THE—

C.A.S.

(Country Accessories Supply)

29 VENTNOR STREET, SEATON, WELLINGTON.

"DX" CLOCKS.

No radio enthusiast should be without the "Radio Record" "DX" CLOCK, as it correctly gauges the time as compared with ours in every part of the world.

By using the "DX" CLOCK, the right time to tune in for overseas stations may be obtained, and with use it will be found to be of permanent value to all radio receiver owners.

Send for Your Copy To-day. Price 9d.

"RADIO RECORD," P.O. Box 1032, WELLINGTON.

Notes and News

Daylight Saving Time.

AS daylight saving time commenced in England and parts of U.S.A. a week ago, the short-wave stations in these countries will commence and sign off one hour earlier during the next few months.

W8XAL, Cincinnati.

IN reply to a report on reception of W8XAL, the following letter, dated March 18, has been received:—"We wish to advise you that station W8XAL has been off the air for some time as we have been constructing a new ten kilowatt transmitter.

"At the present time station W8XAL is carrying on a series of test programmes each morning from about 1 to 3 o'clock E.S.T. (5.30 p.m. to 7.30 p.m. New Zealand time), on a frequency of 6060 kilocycles, or 49.5 metres, using about 3½ kw. "As soon as we are on a definite schedule we will advise you. Thanking you for your interest, and assuring you that we will be very glad to receive your comments and reports, we are, etc."

Short-wave News from U.S.A.

AN interesting letter has just been received from a short-wave friend, Mr. Joseph B. Sessions, of Connecticut. The following excerpts will interest New Zealand short-wave listeners:—

"I have had quite a successful winter, and have succeeded in locating quite a good number of new stations. Two new stations, in Rome, 12RO and HUJ, are both received very strongly. I believe I have heard OXY, Lyngby, Denmark, but am waiting for verification. There are also a number of new South American stations on the air, especially in Colombia, and I have heard recently from HKA in Barranquilla. Another new one is known as El Prado, in Riobamba, Ecuador, also HKE in Boyota, Colombia. VRY, of Georgetown, British Guiana, has returned to the air after quite an absence. One evening early in the winter I picked up KIO, Kankuku, Island of Oahu, Hawaii. Rabat, Morocco, I get at quite fair strength on Sunday afternoons. G2NM, the English amateur station, is now coming through fairly well on Sunday afternoons, but is generally buried in code.

"NRI, Heredia, Costa Rica, has changed his call to T14—NRI on account of protest by the Navy Department, U.S. Government. 'N' belongs to the Navy. He has been off the air for about a month, but will resume soon, so I am advised by 'Cespedes'.

"PCJ, Holland, is now commencing to come through after having been extremely poor all winter. I heard VK3ME, Melbourne, for the first time a few weeks ago.

Mr. Sessions is a member of the advisory board of the International Short-wave Club.

HKD, Barranquilla.

ANOTHER new short-wave station in South America is owned by Mr. Elias J. Pellet, of Barranquilla, Republic

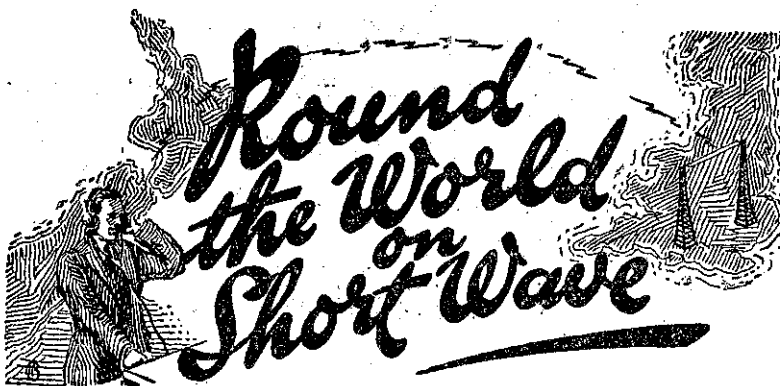
FOR SALE OR EXCHANGE

The rate for small advertisements under this heading is 1/6 cash for 20 words, and twopenny for every other word thereafter.

MIDDLE-AGE Stouthness removed by taking Youth-O-Form Capsules. 20lb. reduction 6 weeks. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

HEALTH and Grace Restored by Youth-O-Form which permanently reduces stoutness. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

19ST. Wellington man reduced 2st and feeling fitter by taking Youth-O-Form. 6/6 posted. A. C. Timms, Chemist, Pahiatua.



THIS page is conducted in the interests of shortwave enthusiasts. A weekly log comprising notes of reception and interesting topical events is contributed by Mr. F. W. Sellens, Northland, Wellington, but all listeners are invited to send in paragraphs of general interest.

of Colombia. The call is HKD. Power 7 watts, wavelength between 41.1 and 42.9 metres. HKD is on the air every Tuesday, Thursday and Saturday between 1 p.m. and 3 p.m., N.Z. time. Reports are asked for, and should be addressed to "Radio Station HKD, Box 715, Barranquilla, Republic of Colombia, South America."

Log for Week Ending April 25.

RV15, Siberia, 70.1 metres: Volume good as usual each evening. Static bad most evenings.

HUJ, Vatican City, 50.26 metres: From 6.30 a.m. at R9. Always talk.

W9XF, Chicago, 49.83 metres: Saturday, R8 at 4 p.m., soon reaching R9. Static very bad.

Russia, 49.2 metres (about): Each morning at good volume. One of the best stations just now.

W8XAL, Boundbrook, 49.18 metres: Sunday, volume good, spoilt by static. Saturday, R9 from 4 p.m., reception quite good.

W2XE, New York, 49.02 metres: Saturday, weak and gushy at 4.30 p.m.

F31CB, Saigon, Indo-China, 49 metres: Static was very bad each time this station was tuned-in last week.

HRB, Tegucigalpa, Honduras, 48.62 metres: Saturday at R8 till 4.30 p.m. but modulation very poor. Signed off at 4.30 p.m. in two languages, English and another.

Moscow, 45.4 metres (about): Each morning except Thursday, at R8. Static bad every day.

"Radio Maroc," Rabat, Morocco, 32.26 metres: Monday from 7.30 a.m., R9 at excellent quality, music and talk as usual. Slight static.

VK3ME, Melbourne, 31.55 metres: Wednesday and Saturday from 9.30 p.m. at R9. Excellent reception marred by severe fading at irregular intervals.

OXY, Denmark, 31.51 metres: Tuesday, 6.35 a.m., orchestra, R8, static bad. A lady announcer. Thursday and Friday not so loud, but still static.

W2XAF, Schenectady, 31.48 metres: Sunday and Saturday, R8 at 2 p.m., spoilt by static and gushiness.

Zeesen, Germany, 3.138 metres: Best about 7.30 a.m. each morning, but quite good much earlier.

W1XAZ, Springfield, Mass., 3.135 metres: Spoilt by static on Sunday. Friday, 11.45 p.m., R8, but very gushy. Saturday afternoon very good. At 3.45 p.m. Joe Ryan and his orchestra at Boston were heard with dance music at R8-9. An organ recital was heard later.

K1XR, Manila, 26.1 metres: Friday, after 11 p.m., at R8, with long, slow fades and a noisy background. The call was not heard, but the voice was the one we used to hear from Radio Manila a few weeks ago.

G5SW, Chelmsford, 25.53 metres: Each morning (except Sunday and Monday), starting at 5.30 a.m., volume is poor and signals gushy. Saturday being Anzac Day, I was able to try 5SW later, and was surprised to find that, although at 7.30 a.m. they were gushy and quite unintelligible, at 9.30 a.m. Billy Mason and his orchestra at the Cafe de Paris were coming through at full speaker strength, and that every word was perfectly clear. At 10.30 a.m., Big Ben striking midnight (daylight-saving time) boomed in, followed by 5SW signing off till "10.30 a.m., G.M.T., Monday next. Good night, or good morning." On Friday night they were tuned in just before 11 p.m., the Greenwich time signal—six pips—was heard at 11 p.m., when the Wellington Post Office was striking the hour here via 2YA. Talk and music was very poor, much weaker than their carrier.

12RO Rome, 25.4 metres: On Monday morning at 6.25 a.m. a station was being relayed by Rome that made all announcements in English. H.M.V. records were being played, the names and numbers being given. After each item a dog barked, or a similar noise, followed by "calling." Could not get the name of who was calling. At 6.40 a.m. the Englishman said good-night, followed after a brief pause by Radio Roma giving their call, etc. 12RO has been very good every morning, being best about 7.30 a.m.

W8XX, Pittsburgh, 25.25 metres: Sunday and Saturday afternoons early, reaching R8 by 1 p.m.

Short-wave Club

From the Secretary's Pen

THE lecture and demonstration mentioned last week will be held in Nimmos' Concert Hall, corner Willis and Bond Streets, at 7.30 p.m. on Thursday, April 30 next.

The activities of the club appear to be arousing interest; many people are going in for short-wave sets who have never bothered about radio before. Our badges seem to create interest owing to their distinctive design.

Let's look to the mailbox. Here is a correspondent in Akaroa jibing at the wrapping paper on his cards; to salve my wounded conscience he sends a donation for the mimeograph. There are several letters from Nelson. Lower Hutt is coming on; it is time we had a representative there. A gentleman of over 60 writes me from Christchurch and gives me interesting news. He tells me about the Morse which they received on a tape before I was born, and wishes us every success.

I have received many letters thanking me for introducing members as pen-pals. One member said his sub. was repaid by some tips he received from another.

There are many members out-back on lonely farms and stations who would appreciate a letter, if members would like to correspond I will supply them with addresses or forward a letter on. One of our objects is to afford members opportunity of meeting or corresponding on subjects of interest. The club is intended to be a fraternal organisation of short-wave representative of the whole of New Zealand, and there are many things which we, united, can do for the advancement of the movement.

Now, what about some more suggestions? We are working on some now, but members' letters are always welcome at headquarters.

Will members sending postal notes please make them payable to Secretary, N.Z.S.W.C., and give their call in their letters. Saves me looking up files. Address your letters and inquiries, A. B. McDonagh, Secretary, N.Z. Short-Wave Club, 274 Cuba Street, Wellington. Inquiries and suggestions are welcomed.

Berlin's Broadcasting Home

New Studio Design

A FEATURE of the partially completed Berlin Broadcasting House is the fact that from each of the three halls, each capable of seating over one thousand people, concerts will be relayed regularly.

Up to the present, only one of the three halls has been completed, and in this experiments are being carried out

DX COMPETITION.

Entries for second period close June 30. Certificates for winners in each district. Verifications are required for every station logged.

to determine the manner in which the other two will be finally equipped. The principle upon which the designers are basing their plans greatly differs from that usually employed. There are no sliding walls or screens, but three sides of the hall are padded with compressed fibre, and the fourth, in the immediate background of the orchestra, is of marble.

The sound is thus reflected back into the hall, and the compressed fibre of the other three walls prevents an echo. To regulate the acoustics, the fibre panels may be opened or closed at will. Built into the marble wall at the back is a vast organ, which is invisible.

ARRIVED!

A comprehensive Tuning Chart of Short-wave Stations all over the world has been specially prepared for all

ADD-A-PHONE USERS

and Short-wave listeners. So don't fail to get one. It's the most up-to-date list obtainable. All times are stated in New Zealand time. See EVERY CALL SIGN AT A GLANCE.

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COMING---WAVE METERS

For Short-wave. Get in early. Book yours NOW and don't be disappointed.

MACK'S RADIO SERVICE,
76 KENT TERRACE,
Tel. 23-448. WELLINGTON.

FEW things were more interesting, amid wealth of lovely objects at the Four Georges' Exhibition in London, than an exquisite tiny miniature of "Mrs. Fitzherbert's Eye," which was painted for George IV, and enclosed in a small oval gold locket so that the devoted lover could wear it round his neck. A very beautiful eye it looks—large, lambent, soft, quite in keeping with all that we know of its owner's charming disposition. How many lovers nowadays would think of such a quaint and touching conceit?

IT is quite a problem to decide how much or how little hair to show under those revealing hats we all seem to be wearing. Sometimes one sees women with large faces who look grotesque with half their heads exposed—just a dab of material stuck on the back of them. Alas, it is given to few women to have a noble brow, or, as the years go, a serene one. Much depends, also, upon the kind of hair vouchsafed by good or bad fairies at one's christening.

"BEAUTY is truth, truth beauty," remarks a contemporary, but the mayor of a town in the south of France who has, perchance, never heard of the "Ode to a Grecian Urn," has different views, and roundly informed the young women of his commune that "To exhibit your pretensions to beauty is to lay out your claim to stupidity." Possibly this mayor, like many other people, is sick of beauty competitions and the toothsome aspirants to notoriety whose irritating smiles have greeted readers of many newspapers during the past decade. So, being invited to look out for candidates for a competition of this nature, the doughty civic magistrate declared he would have none of it. It



may be, also, that he did not want to run his head into a noose such as that from which the jury recently electing Beauty Queen of Paris had to extricate itself. The charming young person upon whom choice fell subsequently proved to have violated two of the conditions of the contest, in that she was not a Parisian by birth and was likewise the owner of a four-months-old baby! Hastily the lovely lady was deposed from sovereignty, but, on the strength of being "Miss Paris," during the interregnum had well and wisely dug herself in as cabaret queen. After impassioned pleadings by eminent members of the Paris Bar in the court case that eventuated, the judge unimpressively declared that, though the title of "Miss Paris" was debarred, the soubriquet of "Miss ex-Paris" might be retained. With which decision, no doubt from motives of expediency, the astute beauty concurred.

"CITY LIGHTS," written and produced by Mr. Charles Chaplin, is a synchronised picture absolutely without dialogue, but with music and sound effects, and incidental music that is also composed by the world-famous comedian. The approximate cost of production is stated to be approximately £300,000, and in it the inimitable "Charlie" once more "tells the world"

what genius can do in the way of farce and burlesque that tickle the eyes and ears of the groundlings, with an occasional subtle play upon heartstrings of those who are attuned to life's deep pathos and heartbreak.

SWALLOW-TAIL coats for women are one of the startling notes of the mode. Worn by a six-foot mannequin at a recent London show, the coat was of black cloth, like a man's, the swallow tails being exaggerated to the ankles. With it went voluminous ankle-length pyjamas of black satin, so full that unless the legs were crossed one failed to realise that they were not a skirt. Curly hair and pearls added feminine touches. In this show were included a Persian mannequin, and one whose youthful face was beautified by snow-white hair.

THE passion for bridge accounts for more afternoons and evenings than any other pastime, says one who knows. Of course, if you are not a bridge enthusiast, it is easy to underestimate its value as a training for the mind. That is what they all say: "It is such a good mind-training." It may be, but that is not why they play it. They play it first because they like it, and then because they must. Some freely admit that it is a pastime, and as such it is entitled to

rank with the theatre, dancing, reading, or any other form of entertainment. But there are few gulfs so wide as those dividing the bridge-fiend from her counterpart. They eye each other with a gentle pity born of lack of understanding.

MR. SAMUEL YARROW, a hale and hearty resident of Ontario, aged 94, who has eight children, 47 grandchildren, 35 great-grandchildren, and five great-great-grandchildren, has married his third bride, a widow of 63, the courtship being conducted by post. This enterprising benedict, who first entered the holy estate at the age of 20, thus advises: "I wouldn't advocate everyone marrying early. Some young fellows are too wild. But if a man is willing to settle down and treat a woman right, then I say, the younger the better. My rule is always to give them lots of love."

A CORRESPONDENT tells us that slowly, imperceptibly, a great change is coming over the homes of England. In the years after the war women were restless and unsettled. They would do anything rather than stay in their homes and look after them. Now they are flocking back to the fireside, and the Englishman's home looks like becoming his castle once more. Thousands of little homes are springing up all over the countryside, and they are being bought and lived in. Some of the mistresses who reign inside those four walls know all there is to be known about running a home, and ignorant ones realise they must get down to hard facts and learn how to make one shilling do the work of two. Even the business girl has one great ambition—to have a home of her own, even if she hasn't a husband to share it. It is years since there was such a "back to the home" rush.

Radio is a Mystery to Mother—

She lets Jim do all the tuning and "fiddling" he likes. But when it comes to cooking, to cake-making in particular, well—Mother knows her job. All the family praise her delicious scones, pastry and cakes. They always turn out so light and "scrumptious" because, says Mother, she always uses "Anchor" Skim Milk Powder.

"Anchor" Skim Milk Powder makes your bakings light, moist and very nutritious, and keeps it fresh longer. Keep a tin handy—it's always ready for use.

Your grocer stocks it. 1/2 per tin.



ANCHOR

SKIM MILK POWDER

FREE! Write for copy of the folder of "Tested Recipes," to "Anchor," Box 115, Auckland.

Hints for the Housewife

Window Cleaning in Cold Weather.

WINDOW-CLEANING during cold weather is made easier if a little paraffin is added to the pail of warm water used for washing the glass. For the final polishing put a few drops of glycerine on the cloth or leather. This will prevent the windows from becoming steamy. Or use a reliable waterless polish.

Shifting Tight Screws.

SCREWS that are tight can be loosened if a screw-driver is placed in the head of the screw and tapped gently with a hammer. This will loosen any surrounding paint, and the screw can be easily removed with the screw-driver in the ordinary way.

Renovating Chipped Hearths.

TILED hearths which have become cracked or chipped can be made to look like bricks if they are painted with a mixture of size and red brick dust. Dissolve the size in sufficient boiling water to make a consistency like gum, stir in the brick dust, and paint on in two coats to the tiles.

Dry Cleaning Upholstery.

UPHOLSTERY of Chesterfields and lounge chairs can be dry cleaned at home by rubbing the surface gently

with a piece of flannel dipped in warm bran. You can, if you prefer, sprinkle the bran lightly over the furniture. Brush off afterwards and repeat if necessary on extra dirty parts.

Mending Linen.

WHEN darning a hole in a tablecloth, serviette, or bed-linen, tack a piece of fine muslin behind the worn surface before you begin. This will make the darn much stronger and once the article has been washed it will be quite unnoticeable if the edges are cut away when the work is finished.

Cough?

NO!

Pulmonas

PASTILLES are INVALUABLE

... With ... BOOK and VERSE

By "John O'Dreams"

Prize Poem Competition

IN "Certain People," a collection of short stories by the accomplished author of "Summer," "The Glimpses of the Moon," and other notable novels, Mrs. Wharton, with sure and subtle understanding, touches upon widely differing environments, social conditions, and the secret springs of mind and spirit animating her puppets. For fidelity of portraiture and skilfully suggested atmosphere, "The Refugees" is a small and consummate work of art. An inoffensive little American professor of languages, travelling in France in 1914, finds himself swept into the world vortex, is mistaken for a refugee by an enthusiastic English spinster, taken under her wing in spite of stammering endeavours at explanation, and hurried with hundreds of struggling unite to London. Willy-nilly the bewildered and inarticulate little man is hurried to one of England's ancestral homes, which appeals to a latent vein of romance, and proves so beautiful and congenial a haven that he succumbs to the temptation of making a brief sojourn, under false colours, in this new and intriguing world. Mrs. Wharton's subtle and succinct analysis of activities of certain war-time ladies of high degree, each intent, with enthusiasm and without humour, on what was known colloquially as "doing her bit," makes excellent reading: manners, oddities and extravagances having been observed with meticulous accuracy, and set down for our delectation, if not in malice, with a substratum thereof that adds literary salt and savour to this excellent impression of a section of English society in abnormal times.

"Atrophy" tells of a woman's attempt to see her lover in his last illness. Leaving convention overboard, she visits his home, where, beautiful, daring and gifted though she is, she is balked, intimidated, and incontinently driven forth by an apparently ineffective, but bitter and vindictive female relation of the dying man; who exercises, without a spark of pity or generosity, the power in domestic milieu conferred by imminent approach of death. This is a masterly presentation of a type that, unable to inspire devotion, resents and revenges itself upon the beloved woman.

"A Bottle of Perrier" has a touch of stark horror that makes it memorable, in its visualisation of stark tragedy enacted amid unutterable loneliness of the African desert. The continuity and cumulative effect of this story of murder, with Nemesis in hot pursuit, are conveyed rather than narrated; and in reading it we record impression that the hand of the creator of Ethan Frome has not lost its cunning.

THE prize of half a guinea in the current competition is divided between "Elizabeth Anne" and "Ginger," for "Similitudes" and "Autumn Evening" respectively. We have adopted this course as being a fair one, each of the poems mentioned having, in our opinion, an equal degree of merit. The latter appears in this publication, but, owing to pressure on space, "Similitudes" will be held over for publication next week.

"Awake, Awake, Our Patriotic Pride": The first verse of this ambitious effort conveys topical counsel in swinging rhyme; but later, words and expressions are utilised that assuredly do not lend themselves to metrical expression.

*"Until the politicians find a way
The penny postage rates to give us back,"*

Though a consummation devoutly to be wished, does not suggest inspiration of magical Muse.

"Poppies": It's been so much better done.

"Bush Boys": We suggest that a paper for juveniles might prove the best avenue for appearance of this somewhat immature contribution.

D.A.S.: You are under a misapprehension as to the words "Selected for commendation." They imply no promise of publication, but are simply an expression of appreciation of work appealing to us as above average merit, though not up to prize-winning standard.

"Milk" is an interesting attempt to convey life in the real, as apprehended by eye and ear of sensitive awareness.

"Moonspun Dreams": Truly an apt title, breathes responsiveness of romantic youth to nature's beauty.

"Merrie" is possessed of at least one attribute of poesy: imaginative vision. But obscurity of phrasing should be guarded against, and much study devoted to rhythmic effect.

"Pippa" is a brave lass, but over-pessimistic for her years. She should read Browning's poem about her namesake and take heart of grace.

"Clarion": Words, words, words, signifying nothing at all.

... Autumn Evenings ...

*Slowly the days draw in—so slow,
We scarce see Summer go;
Slowly the leaves drift down,
The clouds sink low;
Warmly the red fires glow—so warm;
Far, far outside the storm
Seems just a fantasy.
Vague thoughts take form—
Puppets against a curtain of pipe smoke—
Love, dream, dance to and fro;
Slowly at last they fade . . .
So slow we scarcely know.*

—"Ginger."

THE B.B.C. gives its listeners a diversified and fascinating literary diet, ranging from the classics, represented by six talks on "The Dialogues of Plato," and a survey of Virgil and his times, to "Modern Literature," the exposition of the latter being entrusted to Mr. J. C. Squire, the witty and erudite critic, essayist and poet. Mr. Desmond MacCarthy and Miss V. Sackville-West, both novelists of note, give regularly over the air concise reviews of books; Mr. Duff Cooper and Mr. Michael Sadlier discourse on novels that are new; while Mrs. Oliver Strachey is responsible for morning talks on "Books about People." An interesting programme, expounded by a galaxy of able and interesting "people of importance" in their field, who without doubt are competent to mingle manner and matter into an attractive whole.

TO many omnivorous novel-readers the name of Horace Annesley Vachell is one with which to conjure. My own predilection for this versatile and agreeable writer dates from when the world was much younger, and I made acquaintance with "Quinney's," which I found delightful, and "The Hill," which held me enthralled. Not up to that high standard is all of Mr. Vachell's considerable output, but invariably it has an attractive flavour for his large and admiring retinue, who will find much entertainment and considerable matter for reflection in his latest work, "Into the Land of Nod." Primarily a deification of maternal love and self-abnegation, it is also the story of Michael Lynn, his loves and struggles and years of wanderjahr. In the family history of this engaging youth is an hereditary taint which, skipping his own generation, is transmitted to his child, begotten of an idyll of light love in his roivings in Brittany. Nemesis exacts heavy toll from Michael and his beautiful Primrose, between whom flames a passion which suggests comparison with "Paul and Virginia," that classic of tragic youth. Michael goes through dark days of tribulation, but regeneration is effected through love and sacrifice, his son's physical taint is overcome—a fact accepted with some strain on one's credulity—and the story finishes on a hopeful note of courage and high endeavour.

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The 1931 "Guide"

IS ON SALE EVERYWHERE!

For the last six months our readers have been anxiously awaiting the publication of the 1931 edition, and we now have pleasure in announcing its appearance for sale. Copies may be obtained from any bookseller or radio-dealer right throughout New Zealand.

As in former years, every phase of radio has been exhaustively and simply discussed and tables and charts brought up-to-date, whilst the stations calls section now covers twenty-three pages, so those who purchase the latest work are sure to find that they once more have obtained a wonderful book of reference and instruction.

CHAPTERS OF INTEREST

Chapter 1.—Radio in New Zealand.
Chapter 2.—A brief account of the technique of broadcasting. Linking up with recording for gramophones and talkies. Selectivity and the Robinson Radiostat. Sets: How they work. All types, from crystals to super-heterodyne.

Chapter 3.—Gramophones section. Notes on popular gramophone topics, pick-ups, etc.

Chapter 4.—Construction, including tips and jottings, and how to make all types of sets with complete circuits.

Chapter 5.—Transformer construction.

Chapter 6.—Short-wave reception and transmission. Complete circuits for different types of short-wave sets and adaptors.

Chapter 7.—Trouble tracking method fully described.

Chapter 8.—Call Book. Every station that can be heard in New Zealand is listed, giving full details as to call sign-frequency, etc.

Chapter 9.—Reference section.

Chapter 10.—Glossary of wireless terms.

For Amateur Constructors

Many new ideas are shown in this year's circuits, all of which have been tried and proven in the laboratory before inclusion in the Guide.

Constructors may build with our guidance any set up to five valves, no matter whether it be A.C. or battery, combination or shortwave, should they desire to do so.

Perhaps the most popular shortwave circuit will prove to be the screen-grid A.C. receiver using four valves; the test model in our laboratory has brought in England, Holland and America with full loud-speaker strength, and the other circuits described are equally as good as this one in fulfilling the purpose for which they were designed.

The "Call Book" Section

The most comprehensive CALL BOOK ever published in the Southern Hemisphere will be included in the 1931 Guide. All the New Zealand and Australian stations listed will have complete particulars of call-sign, address, power, wave-length frequency, and hours of operation.

For the purposes of overseas compilation we have had numerous official correspondents in many parts of the world forwarding full details of the stations in their particular countries.

Sufficient is it to say that over 400 American stations are listed, giving all details, with the exception of hours of operation. Stations in such countries as Canada, Mexico, Cuba, Japan, and China have also been similarly dealt with.

The most important shortwave transmitters in all countries are given, with their hours of operation in New Zealand time.

RADIO GUIDE and CALL BOOK

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