

PUBLISHED WEEKLY

THE RADIO RECORD



Vol. IV., No. 35.

WELLINGTON, FRIDAY, MARCH 13, 1931.

Price, 3d.

Wonderful Money's Worth in screen-grid radio...

RADIOLA 48

ONLY **£52/10/-**

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Specifications—
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HEAR and SEE
RADIOLA 48 to
appreciate its
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CIRCUIT: Latest development in Radiola
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TUNING DIAL: Illuminated and magnified
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for Free Demonstration.*

MR. WATT DOES SOME RESEARCH WORK



"I once wanted to know why, when I bought a new set of Philips Valves, I got better results than before. Looking up my radio encyclopædia I found the following explanation:—

"On account of the continual electron-emission at high temperatures, the filaments of the valve deteriorate after a period of use with the result that a decrease of the electron-emission takes place which affects the quality of the reception. As the emission decreases very slowly the deteriorating tone of the receiver is scarcely noticeable, and only by comparison with new valves can it be determined. Therefore, it is wrong to use valves too long and those who require consistently good radio must renew their valves when necessary."



PHILIPS VALVES

A "CHEAP" TUBE IS "CHEAP" IN NAME ONLY W60R

Advt. of Philips Lamps (N.Z.) Limited, P.O. Box 1673, Wellington. Auckland Office: Paykel's Building, Auckland Ave. Christchurch Office: 226 Tuam Street.

BBROADCASTING in Europe? Well, though I visited nearly every musical centre of importance on the Continent during my last trip there twelve months ago, I did not come into contact with radio in them all. However, I will tell you of the few occasions when I did.

My route lay from London, by air to Paris, then on to Berlin, via Brussels, by train. A few days in the German capital, sight-seeing and visiting colleagues in the musical and operatic world, and then I left for Dresden and Stuttgart.

Though time was always short, I yet found opportunity to listen-in occasionally to several of Germany's premier broadcasters, and I discovered something that brought back not over-pleasant memories of listening-in in America. In Germany they also allow radio advertising—but with a difference. In America radio is advertising—all else is subservient to it. But in Germany the advertiser is rigorously watched. He is bound hand and foot with legislation, and any mention of extending the limited times allotted him brings down on his unfortunate head the just wrath of the authorities.

And thus I have discovered that radio advertising properly controlled is not the insidious disease it is claimed to be. I found it exceedingly convenient and presented in excellent taste.

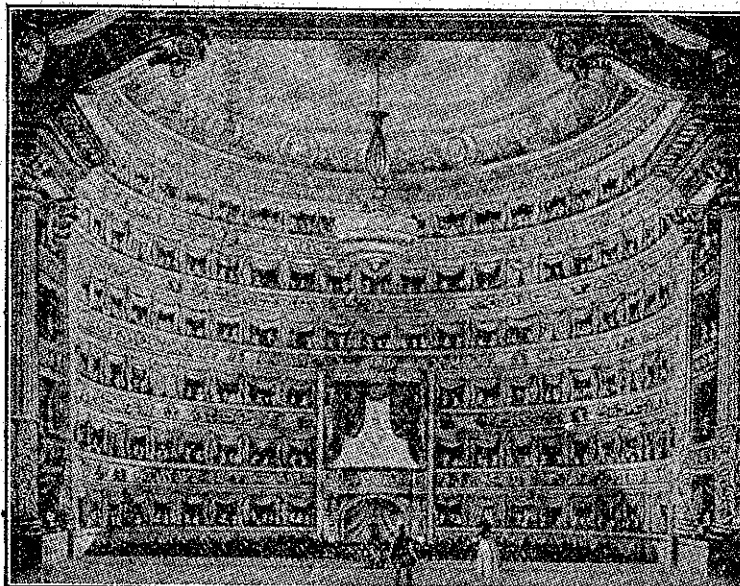
Another innovation. While in Stuttgart I was mystified while listening-in one morning to hear what appeared to be a chemistry lecture in progress—a lecture bristling with technicalities and shorn of the usual padding in which science is often clothed when presented to a usually indifferent public. I marvelled at the unusual mentality and application of the people whose country I was visiting—until I discovered later that I had been listening to a university lecture.

An excellent idea, don't you think?

Students in far-off villages and in the country no longer find it necessary to pinch and save for fees paid for lodgings near a university. No. They just listen-in at their own homes at given times, and the lecturer is brought to them.

Leaving Germany, I spent several weeks in Switzerland, and then on to Italy. Here, of course, I spent most of the time during my tour. Under the Mussolini regime, Italy has progressed wonderfully. Industry appears to be the watchword everywhere. I was delighted to discover also that music and art in most forms are strongly encouraged.

Broadcasting, also, has been allotted its share—a very important one, too—in the social, political and economic reform which



The interior of La Scala, the world-famous historic opera house of Milan.

Signor Lucien Cesaroni, who comes from a musical family well known in the realm of grand opera on the Continent, has been acclaimed by the world's leading critics as one of the greatest Mozartian interpreters of the present day. In this country, however, he is more widely known as an operatic bass of exceptional talent. In the following interview he gives his impressions of European broadcasting, gained during a recent visit there.

Let us Travel with
SIGNOR
LUCIEN CESARONI

on

one sees everywhere. Lectures on patriotism, music, art and a diversity of subjects are broadcast each day to hundreds of thousands of school children, land cadets and naval cadets. Occasionally the children themselves are permitted to broadcast talks to their comrades. They appear to pay much more attention to a radio lecturer than they do, unfortunately, to their teachers. I pondered for a long time over this, and then decided that a person whose presence and personality might not be all it should, could often command more respect when speaking into the microphone.

While staying in Naples, just after last Easter, a curious happening occurred at Salerno, a small town some 60 miles distant, which incidentally is the birthplace of Signor Truda, conductor of the ZYA Orchestra.

One day a youth of seventeen, living in Salerno, announced to the world that he had invented a device which could collect electricity from the air, and collect it without expending any energy whatsoever. Quite a stir was caused throughout Europe and America at the time, though I do not think more than a whisper of the news penetrated as far as New Zealand. Photographs and articles appeared in most of the Continental dailies and were flashed across to America. Science and industry revolutionised. It was enough to stagger the world.

And then it was announced that though the sensational claim was correct, no method had been discovered of controlling the derived electricity. This proved insurmountable, and people ceased their speculations and grumbled about hoaxes. But I am satisfied that it was no hoax.

It was decided to encourage the young inventor in every possible way to pursue his investigations, and for all I know he is probably working on his sensational discovery at this day. Perhaps we may hear more of him in the future. . . .

Further wanderings led me up the west coast of Italy to Milan, famous for its historic opera house, La Scala. Grand opera is immensely popular in this town, and always has been. Of course, people have been brought up to appreciate it, and they regard it as part of their lives.

I notice with interest that on one night of the week, I think a Tuesday, the evening performance is broadcast. No, it does not affect the attendances in the slightest. It is meant, just, perhaps, as the occasional "talkie" relays from ZYA, for those people who find it (Concluded on page 30.)

A Musical Pilgrimage Through Europe

PHENOMENAL RADIO BARGAINS

Huge Reductions in Parts and accessories FOR ONE MONTH ONLY

To save transportation costs pending removal to larger premises, we find it necessary to offer the following Parts and Accessories at unprecedentedly low prices.

These are available FOR ONE MONTH only, and are quoted subject to prior sale.

PLEASE NOTE:

Cash must accompany order with sufficient additional to cover freight or postage.

CONDENSERS, Variable

Midget and Neutralising	2/9
Ormond .00013 with 4 inch plain dial	5/-
Lissen .0002, .0001 and .00035	6/6
Emmco Triple-gang with double drum dial and knob .00035	£2/12/6
W.R.C. Loloss .00025 and .00035	4/6
Lissen Reaction .0001, 17 plate	4/6
Radiokes Reaction, 5 plate	4/-
National 270 deg.	7/6
National 270 deg., double speed	7/6

CONDENSERS, Fixed, By-pass, Buffer etc.

Polymet Moulded .00025, with Grid Clips	1/3
Polymet Moulded, .0001	1/-
Polymet Filter, 4mfd.	5/9
Lissen fixed, .0001, .00025	1/-
Lissen Mansbridge, 1, 250v. D.C.	2/6
Lissen Mansbridge, 4mfd. 250v. D.C. working ..	5/9
Yesley Tropical. Especially suitable for transmitters, 2000v. test 1	5/6
Yesley Tropical. Especially suitable for transmitters, 2000v. test 25	6/3
Yesley Tropical. Especially suitable for transmitters, 2000v. test 5	7/9
Yesley Tropical. Especially suitable for transmitters, 2000v. test 1mfd.	9/-
Yesley Tropical. Especially suitable for transmitters, 2000v. test 2mfd.	10/6
Yesley Tropical. Especially suitable for transmitters, 1000v. test 25	3/-
Yesley Tropical. Especially suitable for transmitters, 1000v. test 1mfd.	4/6
Yesley Tropical. Especially suitable for transmitters, 1000v. test 2mfd.	8/-
E.Z. Fixed .00025, .00005	9d. each

PICKUPS

Lissen, with track arm, latest needle armature type	£2/5/-
Lissen, heads only, with volume control	12/6
Amplion Vivavox	£1/10/-
Blue Spot	£1/15/-
Webster	£3/3/-
United, with volume control	£1
Marconiphone (1 only)	£4/12/6
Merola, with volume control and adaptor, for A.C. sets	£1/15/-

SWITCHES

S.P.D.T. Porcelain base	1/-
Carter Jack, No. 22 S.P.D.T.	3/-
Carter Jack, No. 44 D.P.S.T.	3/3
Carter Jack, No. 66, D.P.D.T.	4/6
Lissen (locking) Key	1/6

TERMINALS AND PLUGS

Farnstock Wander Plugs	3/- doz.
Lissen Terminal Blocks, A. & E. or L.S.+ L.S.—	1/3 each
Hoosick Terminal Strips, engraved, 9 Terminals	2/6
Farnstock Terminal Strips, engraved, 7 Clips	1/-

TRANSFORMERS, Audio

Lissen, Super, 3½—1	17/6
Rauland Lyric, 3½—1	£1/2/6
All American, 3—1 and 5—1	12/6
General Radio	4/-
Ferranti, A.F. 5	27/6
Ferranti A.F. 50 Push-pull input	30/-
Ferranti O.P.M. 4C Push-pull output	25/-

COIL KITS AND COILS

Aero Short-Wave Tuner Kit, 15-130 meters ..	£1
Radiokes, Bayer Circuit	15/-
Radiokes Circloid Coils	7/6
Radiokes Reinartz Shielded	15/-
Radiokes 3-Circuit Tuner	10/6
Radiokes Portex	10/-
Radiokes Split Secondary Shielded	15/-
Radiokes Low-Wave Tuner, 15-130 meters, 3 Coils	25/-
Radiokes Screen-Grid Strobodine	£3/10/-
Radiokes R.F. Coil Kit Screen-Grid Circuit ..	29/-
Twin Coupler R.F. Transformer Coils	5/-

CHOKES

Lissen, L.F.	6/6
Lissen H.F. Short-Wave	7/6
Radiokes, Anticapacity Chokes	6/6

GRID LEAKS

Lissen Variable, 1/4 to 10 meg.	2/-
Lissen Variable, 8, 9 and 10 meg.	6d. each

LOUD SPEAKERS AND UNITS

Fairfax 8ft. Exponential Horns, soiled, with new Baldwin Rival Units	£3/15/-
Fairfax 4ft. Exponential Horns, with Fairfax Unit	30/-
Lissenola Horn Speakers	15/-
Amplion B.A. 2 Speaker Unit	£1/12/6
Ammervox Dynamic 230v. A.C.	£6
Lissen Permanent Magnet Dynamic	£6/10/-
Lissen 230v. D.C. Dynamic, without transformer	£5/2/6
Amplion A.R. 19 Oak Horn Speaker	£4/2/6
Amplion A.C. 4 Cabinet Cone,	£4/17/6
Lissenola "Super" Speaker Unit	17/6
Lissenola Speaker Units	12/6
Blue Spot, 66K, Cone Unit	17/6
Cone Washers and Nuts for Speaker Cones ..	4d. per pair

RHEOSTATS, RESISTANCES, etc.

Carter Adjustable Resistors, 75 ohms.	4/6
Carter Adjustable Resistors, 1000, 2000, 3000 ohms.	5/3
Carter Midget Rheos, 3, 10, 20, 30, 75 ohm.	2/3
Carter Potentiometers, 6, 10, 15 ohms	3/6
Carter Midget Heavy Duty Potentiometers, 7500 ohm. Tapped 3000 ohm.	6/6
Carter Auxillary Vol. Control 5 meg.	9/6
Carter Hi-watt Rheo, 10 ohm.	4/6
Carter Hi-Ohm. Vol. Control, 50,000:100,000 200,000:500,000 ohm.	10/6
Carter Hi-pot Potentiometers, 10,000:200,000 and 500,000 ohm.	10/6
Carter Heavy Duty Resistors, 2, 3, 4, 6 and 1,000 ohm.	2/-
Carter Wire Wound Resistors, 6 ohm. centre tap 400, 500, 700	3/-
Carter Wire Wound Resistors, 1,500:1,500:2,000	3/6
B.M.S. Midget Rheos, 30 ohm.	1/6
Radiokes Wire Wound Resistors, 200 ohm.	1/6
Variable Center Tap, as recommended for Loftin-White	3/3
Lissen Rheostats, 7 and 35 ohm.	1/6
Lissen 5000 ohm. wire wound Resistors	4/6
Lissen 50,000 ohm. wire wound Resistors	4/6
Amperites Automatic Rheo. for all types of Valves	6d.
Lissen ½ meg. Potentiometers	6/-

SETS

Baird Short-wave Adaptor for A.C. set, complete	£5
Baird Short-Wave Adaptor Battery Set, complete	£5

SUNDRIES

Lotus Remote Controls, with relay for two rooms	12/6
Lotus Remote Controls, with relay for one room extension	3/6
Emmco Dial Illuminators	6d.
Formapex Bakelite Panels, Black polished one side 3-16in. thick, 7in. wide x 12in.	5/-
Formapex Bakelite Panels, Black polished one side 3-16in. thick, 7in. wide x 15in.	6/-
Formapex Bakelite Panels, Black polished one side 3-16in. thick, 7in. wide x 18in.	7/-
Formapex Bakelite Panels, Black polished one side 3-16in. thick, 7in. wide x 21in.	8/-
Hoosick Valve Sockets, UX	1/3
Lissen 5 Pin Valve Sockets. Can be used either for English base or English 5 pin base Valves	2/-
Kester Resin Cone Solder Tins	1/9
Kester Resin Cone Solder, 1lb. reels	7/-
16 gauge Square Bus Bar, 2ft lengths 1/6 per doz.	1/6
Loudspeaker cords, 6ft.	1/6
Loudspeaker Extension Cords, with connectors, 20ft.	4/9
Loudspeaker Extension Cords, with connectors, 30ft.	5/9
Loudspeaker Cords, 5ft. 3-way pin tips	1/6
Headphone Cords, 6ft.	1/9
Phone Cord-tips	1/6 per doz.
Multiphone Connectors, for connecting up to 10 headsets or speakers	1/6
Carter Loudspeaker Outlet Jacks, for wall mounting, No. 630, with vol. control	9/6
Carter Loudspeaker Outlet Jacks, for wall mounting, No. 650, for exposed wirings	3/6
Carter Loudspeaker Outlet Jacks, for wall mounting, No. 600, radio or speaker	3/-
Carter Loudspeaker Outlet Jacks, for wall mounting, No. 620, aerial and ground	3/3
Carter Tip Jacks	6/- per doz.
W.R.C. Duo Jacks, takes one Jack plug and 2 phone tips	1/-
G.R. Banana Plugs, will fit Philips eliminators and Continental sets	1/6 doz.
Western Voltmeter, 0-50 volts	4/6
Western A Battery test meters	4/6
Harlie A.C. Gramophone motor, latest type with Harlie Pickup, mounted on metal stand ..	£9/9/-
Temple Comparators, for comparing the tones of loudspeakers	7/6
Guy Wire Shackles, galvanised	9d.
Pilot, No. 4 "A" Power Kit	£2
Bezels, nickel-plated, 1 inch and 1½ inch. 6d. doz.	£1/17/3
Lissen D.C. Eliminators, 20 mil. output	£1/17/3
Lissen D.C. Eliminators, with voltage controls	£2/2/6
Loudspeaker Grille Cloth, 47 inch wide. Green and Gold shot	7/6 yard
Radio Call Books, with lists of American and foreign stations, back numbers	6d.
P.R. 20-volt H.T. Accumulators	12/6
Deal "B" batteries, 45-volt standard	15/6
Portrola, portable electric gramophone and pickup in carrying case	£12
Lissen Neutralising Condensers	3/6
Lissen 6-pin coil bases	1/6
Colvern Coil Formers and Bases	6/-
Colvern Coil Formers, without bases	4/-
Valve Prong Contacts, with template, sufficient for 6 Valves	1/6

Radio Supply Store, High Street, Auckland

Albert Ketelbey tells how fame and fortune were found In a Monastery Garden

On March 19 the Commercial Travellers' and Warehousemen's Orchestra will present from 2YA a special concert entitled "A Night with Ketelbey." Probably the most famous of this composer's works is "In a Monastery Garden," and in the accompanying article Albert Ketelbey himself gives away the secret of how it came to be composed.



WHEN I was a boy I had a strong inclination to become a monk, or, alternatively, a sailor, voyaging (by preference) to Eastern lands. There are nasty people about who, no doubt, devoutly wish I had become

anything but what I am, for then I might not have inflicted on their quivering nerves *In a Monastery Garden*, or *In a Persian Market*; but not caring a brass farthing for nasty people's nerves, I resolutely resisted the youthful inclinations to retire to a cloister, or to go and get drowned, and decided instead, to become something really bad, namely, a "popular" composer.

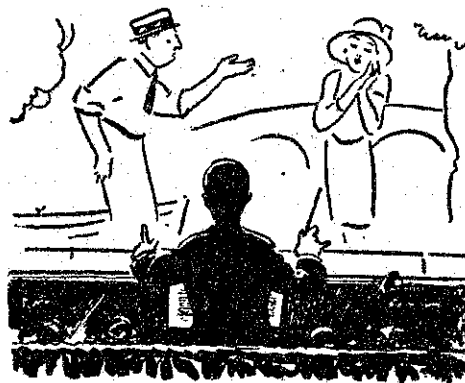
I started by composing, at first, little things such as a *Sonata for Violin and Piano*, a *Sonata for Piano Solo*, a *Concerto for Piano and Orchestra*, a *String Quartet*, a *Quintet for Piano and Woodwind*, a *Dramatic Overture* for full orchestra, etc., and I even ventured gingerly into the exciting domain of grand opera (during which period I developed into a very Fregoli of many voices).

Then I had the temerity to try to sell some of these little efforts to publishers, as I found it unfortunately necessary to live (after a time) unaided. "Je n'en vois pas la nécessité," says the nasty person, but I never did care what nasty people said, so I persisted in going on living (or trying to) and making myself into a popular composer, by endeavouring to sell my Concerto and Sonatas, etc., to suspicious publishers, whom I tried to hoodwink by enlarging upon the melodious character of my "second subjects."

I STUCK it for quite a long time (several years, in fact), but no! either my beloved "second subjects" were too melodious, or they were not melodious enough, and there was "nothin' doin'"; neither popularity nor a decent living seemed to lie this way for me, and I began to wonder whether I should ever have anything better for dinner than a cold sausage and a cup of coffee, and

whether I was to be condemned for ever to share the third floor back of an apartment house with ladies who very plainly loathed my French-horn playing, so that I was eventually compelled to practise this (for beginners) doleful instrument on the roof.

But, lo! and behold, one fine day I had a bright idea; I took one of my melodious "second subjects" bodily out of its natal surroundings and dressed it up as a "Something in Z Minor"—the miracle happened, I got it published, and the publisher actually sold quite a nice number of copies on which, however, he had successfully resisted the temptation to pay me a royalty. Still, it was a beginning; I began to see the faint dawning light



... Just the thing for a nice little river scene in a music-hall sketch. ...

of a possible popularity, and I was encouraged to go on murdering my innocents and pay my way instead of having to borrow fivers from trusting acquaintances.

In due course I lost all sense of shame and boldly chopped off whole limbs of my poor children without a blush or the tremor of an eyelid, and what was once a tragic theme in a dramatic overture became a sweet little thing for "pianists with small hands." Having now tasted blood my appetite grew by what it fed on, and I began to search—yes, actually search—for despicable opportunities of becoming popular.

I FOUND that the slow movement from a String Quartet, for instance, was just the thing for a nice little river scene in a music-hall sketch—certainly the musical director of the musical-hall, good fellow, seemed to suspect something, for he said: "This is rather above the average of the stuff we get here;

you really ought to try and write some serious work." I thanked him cordially for his encouraging words—and laughed in my sleeve.

About this time a friend of mine was conducting at a Yorkshire resort, and he had asked me to compose for his orchestra a special "exclusive number"; he had rather a flair for spotting "winners," and I think he suspected that I was threatened with popularity, and also that if he had a tuneful piece that no other orchestra was playing, it would give him a "pull" in the scramble for re-engagement.

DURING a week-end visit I paid him, we went for a motor-car trip, and *en route* we stopped at a beautiful monastery, or priory. The day was glorious, the birds were singing, the whole place was bathed in sunshine and serenity, and the picture made a vivid impression on my mind, so that when I got home again it occurred to me that the beautiful monastery garden I had seen would form a very appropriate and probably inspiring theme for the "exclusive" piece I had promised to write for my friend.

I therefore tried to put into simple melodious form my own impression of the scene, and, for the moment at least, became the "poet lost in reverie in the quietude of the monastery garden."

The piece was completed in due course, and obviously had to be entitled *In a Monastery Garden*. I sent it to my friend, who played it and reported "great success." I was myself rather sceptical about this great success; I had heard so many pieces so described that I did not attach much importance to the friendly verdict. However, my friend played it again the next season, and yet again the season after that, always reporting "great success," but (very artfully) advising me not to publish it. After a while, however, I began to receive inquiries from publishers with regard to publishing it. The first



(Continued on
page 20.)

The New Zealand Radio Record

—AND—

Home Journal

(Incorporating the "Canterbury Radio Journal.")

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

WELLINGTON, FRIDAY, MARCH 13, 1931.

THE PRESS AND RADIO.

A SOMEWHAT provincial and narrow mind is revealed by the Hawera "Star" in an editorial published recently, discussing the respective services of broadcasting and the Press, following on the Hawke's Bay earthquake. In our issue of Friday, February 20, we took the opportunity to pay tribute to the special services rendered to the public by Station 2YA in connection with the disaster, mentioning particularly two points: First, the use made of the broadcasting station by many organisations, such as the Post and Telegraph Department, the Railway Department, the Transport Department, the Salvation Army, the Y.M.C.A., the Red Cross, St. John Ambulance, the Wellington Automobile Club, and others, for broadcasting their needs to the public and instructions to their staff and helpers for facilitating rescue work; secondly, the services rendered to both sufferers and the public by the station broadcasting inquiries for missing friends and relatives, thus enabling the restoration of family and friendly ties at the earliest possible moment. The discharge of these social services imposed a great strain upon the staff of the station. That strain was met with unswerving patience, loyalty and enthusiasm for helping others. Throughout those early days, when the attention of the whole community was concentrated upon the earthquake and gratitude was being expressed on all sides to the YA stations for their work, and when the daily Press itself, of course, was full of earthquake news, scarcely a word of praise or recognition of the definite aid rendered by radio was given by the Press. This point was commented upon in more quarters than one by the general public, and we deemed it but fair to the cause of radio to pay our tribute to that modern marvel and to the staff of 2YA for their services. We think we were justified.

THE Hawera "Star," however, apparently detecting in radio some danger to the might of the Press, saw fit to question our editorial, and advanced a specious and parochial plea for the Press on points we did not raise. The "Star," in point of fact, defended the Press as the only reliable medium for the dissemination of news, and cast aspersions upon the reliability of radio news, claiming that the Broadcasting Company was not organised for news gathering. We never claimed that it was, and the Hawera "Star," if it will exercise its intelligence, knows very well why it is not so organised and why the authorities have in essence confined radio to the entertainment and educational fields. As one of the "Star's" own correspondents states in reply to this editorial: "If radio were in competition with the Press they could put the news of the world into practically every house in the country while the press was still banging the linotype." We could not put the position better, so that the "Star's" jibe may be allowed to pass.

BUT when the "Star" goes on to say that "all sorts of rumours were floating about, most of them attributable to radio," and to claim that it was not until the mighty Press Association got to work that the public knew where it was, we definitely join issue. We were in the studio of 2YA throughout the night of the earthquake, and can definitely state that nothing about the earthquake was put over the air that was not officially received from the Secretary of the Post and Telegraph Department, the then only source of official information. Rumours a-plenty were in circulation throughout that evening, but the announcer and authorities of 2YA were most meticulous in using only official information, and we challenge the Hawera "Star" to prove its assertion or do the gentlemanly thing and withdraw the charge so far as it affects 2YA. Listeners in general, who listened that evening and on subsequent evenings, will appreciate that the YA stations throughout, under definite instructions, adopted the uniform policy of giving in the first instance only official news; and if on subsequent occasions, after the first stress was over, Press statements were used, their authorship was given, so that those Press writers who, as the "Star" itself admits, may have been guilty of irresponsible and hysterical stories could have the full credit for their ingenuity and skill.

AS at present constituted and planned, radio is not a competitor in the news-gathering field, and the Hawera "Star" can take what pride it finds occasion for in the performances of the Press and its attitude to radio. We would, however, venture the observation that through radio and contact with short-wave enthusiasts within the Dominion, the Sydney papers gave their readers a definitely better service in the early days of the earthquake than did the New Zealand newspapers. Listeners to Sydney radio stations on the evening of Wednesday, February 4, heard news and estimates of the killed and injured in Napier and Hastings that were not available to New Zealand newspaper readers till the Thursday. We do not charge this deficiency against the New Zealand Press Association or the New Zealand Press people. They were working under difficulties with which we quite sympathise, but radio, working from the centre of the disaster, did excel and give Sydney its priority. Where time counts, radio obviously is invaluable, and it was because of the instantaneous character of its appeal that 2YA was able to render such outstanding service. Without radio the rescue services and their organisation, and the discovery of the fate of loved ones, would have been sadly delayed. These were the points upon which we accorded radio praise in our editorial, and paid our tribute to those responsible. It would have been, we think, much more generous and dignified, not only for the Hawera "Star" (and for that matter for the Press in general), to have recognised this, and not to have raised the bogey of the alleged failure of radio in a field in which it is permitted only limited entry. So far as the "Radio Record" is concerned, we were struck very early by the value of the amateur radio transmitters in conveying news to the outside world and calling for assistance, and we dispatched two members of our staff to secure their story, first hand from the transmitters concerned. That story and a considered summary of the disaster was published in our issue of February 13, with a tribute to Mr. Tyler, of Napier, Mr. Mills, of Hastings, and Mr. Hands, of Gisborne. Listeners will appreciate that they are entitled to the recognition given them.

IN conclusion we feel bound to say that the editorial of the Hawera "Star" appears to be rather selfish special pleading, apparently occasioned by concern as to the future of the Press in face of a possible rival. For the satisfaction of such nervousness, however, we would like to say that in our view the Press has its place and radio has its place. They are not in essence competitors: they are supplemental to one another in the services they can render humanity. In some phases radio is superior; in others the Press emerges supreme. The Press is required, and always will be required, because of the more permanent nature of its record and the selection of time and place readers are enabled to bring to perusal of its contents. Radio has the ability to disseminate news over a wide area faster than any other possible agent, but because of the inability of a whole population to remain in range of a loudspeaker till each individual secures the news he requires, the Press is necessary and always will be necessary. The Press, by virtue of its established prestige, its long services given to the public, and the continued need of the public for its services, can well afford to be a little more generous in its attitude to radio, and on occasions such as that through which we have passed give unstinted recognition to the social services rendered by it.

Earthquake Service

Appreciation from Y.M.C.A.

THE General Manager of the Broadcasting Company has received the following letter, signed by Mr. L. J. Greenberg, General Secretary of the Wellington Y.M.C.A.:

"I wish to convey to you and your staff the sincere appreciation of this association for the excellent services rendered by your staff in connection with the recent earthquake inquiries. Almost daily we had occasion to consult your people or ask for favours in connection with the broadcasting of information, and at all times we were received with the utmost courtesy, and the service was carried out with willingness and efficiency. I am sure your company has won nation-wide commendation for this work so excellently and gratuitously performed."

Church Services

Are They Appreciated?

FOR some little time past members of the Auckland Ministers' Association have been broadcasting on Sunday morning, through Station 1ZR, a church service. This has involved the payment of a fee to the station for the privilege of going on the air. To enable an idea to be formed as to whether the broadcasting of this service at the cost involved is worth while, members of the Auckland Ministers' Association would be glad if listeners who have benefited by or have appreciated the service would write Pastor C. Chant, Grey Lynn, Auckland.

4YA to Hold Radio Picnic

AT a meeting of the 4YA Children's Sessions Advisory Committee it was decided that a radio picnic should be held.

The Rev. S. J. Cooper (Anglican Boys' Home) presided over the meeting, when there were present: Mrs. Benton Leech, League of Nations' branch and National Council of Women; Miss Telfer, Presbyterian Social service; Miss Anita Winkel, Aunt Anita, Pastor W. D. More, children's organiser; Mr. A. H. Williamson, Headmasters' Association; and Mr. A. F. O'Donoghue.

The picnic is to be held on Saturday, March 21, at Evansdale, and the transportation of the crowd expected is to be carried out by the Railway Department. All preparations for the picnic are now in full swing.

Reporting to the meeting regarding the installation of sets in hospitals, Pastor More said sufficient money had been raised to wire the whole of the Wakari shelter, erecting a new aerial, and presenting 30 sets of headphones. There was in hand a credit balance of 35/-, which will be used as the basis for a fund to wire up the children's ward in the Public Hospital.

The committee expressed great pleasure at what had been accomplished.

"My Irish Rose"

Appropriate to St. Patrick's Day, 4YA will relay from Gore, Ben-hare's comedy-drama, "My Irish Rose," which is to be played there by a strong cast,

under the direction of

Molly O'Sullivan
F.T.C.L.

Tuesday, March 17



A Mystery Play

by

A Well-known Resident of New Zealand

ON Friday, March 13, 1931, the great unseen audience of New Zealand

listeners-in will have the opportunity of hearing over the air, from Station 1YA, Auckland, a mystery play entitled "The Price."

It will be produced by Mrs. Zoe Bartley-Baxter and her talented helpers. Knowing full well how this lady's previous productions have been enjoyed by radio audiences, listeners may confidently expect an interesting interpretation of the work. Mrs. Bartley-Baxter's efforts are always artistic and finished.

The play was written by the well-known Auckland surgeon, Dr. Geo. de Olive-Lowe, a brilliantly versatile and intellectual man. The theme is one of revenge, but mysterious revenge. Until practically the last words are spoken no one will know the mysterious secret which the author has so cleverly hidden. The dialogue is always tense and gripping. The situations are natural. There is no stilted striving after effect. When the climax is reached it is unexpected, sudden, and bewildering. The author is to be congratulated upon having hit upon a clever plot, and on having so ingeniously hidden the mystery.

Dr. de Olive-Lowe is not only a writer, but is a composer as well. He has also produced several works. One of the most beautiful entertainments that Aucklanders, or New Zealanders, have seen was produced by him. This was "Living Whist" and "Living Chess," at the first Auckland Exhibition. He is the author-composer of "The Lady Typist," produced in Auckland in 1906, also author-composer of "The Tea Girl," and "The Gay Hussar." He composed the music for Mrs. Isobel Maude Cluett's comic opera, "Sixes and Sevens," and set her delightful "Songs for Children" to music. The score of Mr. J. Youlin Birch's comic opera, "Manuella," was written by Dr. de Olive-Lowe, also the

score for the same author's opera, "The Golden Wedge."

In 1908 Dr. de Olive-Lowe, together with the Rev. Father Farthing, produced "Maritana" in the old Opera House. The doctor conducted the work, and Miss Rosina Buckman sang the name part. The late Mr. Tom Pollard played several of the doctor's musical comedies and light operas throughout Australia and New Zealand. He has also written three historical tragedies in blank-verse, "The Doge of Venice," "Caesar Borgia," and "A Royal Revenge," the last-named dealing with the murder of Rizzio, and the assassination of Darnley.

Dr. de Olive-Lowe is a lover of good gramophone music and has all the best records in his extensive library. Radio interests him keenly, and he is a constant listener-in. For a great many years the doctor has acted as honorary surgeon to the J.C.W. firm, and to the theatre generally. Therefore, he has been enabled to meet all the most interesting people of "stage-land." Many wonderful and lasting friendships have thus been formed with artists and artistes of note.

There have been only two poems written. One is that most delightful by Mr. Alfred Hill and the other, "Karo," written and composed by the doctor. It is to be regretted that the recording of this number is very poor, and does not do anything like justice to the song.

Dr. de Olive-Lowe is well known as an interesting lecturer. His lectures embrace a wonderful field of subjects, and in style range from the gravely scientific to the humorously gay. From earliest boyhood he has been a keen entomologist, and has made a study of the lepidoptera and coleoptera of the British Isles and of the North Island of New Zealand. He is a collector of old engravings (of which he has a wonderful collection), etchings, and old pewter. He himself is no mean artist in water-colour. He is an enthusiastic photographer and has done

The Week from 3YA

Some Notable Performers

APPEARING on 3YA's programme next week will be Miss Nellie Bilcliff, a Christchurch teacher of music, who has an excellent mezzo-soprano voice.

Mr. J. Haydn Williams, tenor, is a brother of Mr. T. D. Williams, the well-known 3YA artist. He was born in Wales and inherits the family musical talent. During the war he was on active service with the Navy in all parts of the world, from Archangel to New Zealand. His ship was torpedoed on many occasions, but he bore a charmed life and had several miraculous escapes. On one trip of the troopship Tahiti he was a member of the naval crew in charge of the anti-submarine gun, this trip being in the nature of a "rest."

Mrs. S. W. Williamson, who will sing for 3YA on Monday evening, hails from Kaikoura. Listeners will enjoy her fine contralto voice, which will be heard on the air for the first time.

Mr. Lyndon Christie, saxophone player, and his accompaniste, Miss Olive Winston, are well-known Christchurch musicians. Mr. Christie has recently returned from Australia, where he has been for several years. He was conductor of the orchestra in the Wentworth Hotel Dance Cafe, Sydney. His saxophone will be heard from 3YA on Wednesday evening.

When listeners hear the contralto voice of Mrs. F. Nelson Kerr on Wednesday evening, they will hear a Christchurch singer who has appeared with much success at concerts given by the Harmonic Society.

Professor R. C. Zimmermann, who is to contribute violin solos, with orchestral accompaniment, on Thursday evening, is a musician of very high standing in Christchurch, both as a violinist and conductor. Recently, when an Earthquake Benefit Concert was given, he was leader in an orchestra, composed of some sixty professional musicians, under the conductorship of Mr. A. Bidgood.

A singer from the West Coast, Mrs. H. Turnbull (mezzo-soprano), now of Dunsandel, will sing on Friday evening. She had the distinction of winning the championship at the Grey-mouth Competitions Society.

The Hawaiian Harmony Four, to perform on Saturday evening, is a new combination—three steel guitars and a banjo-uke—which will meet with the approval of listeners.

work in all branches of this art-landscape, cinematography, bromoil, and both micro-photography and photo-micrography.

When "The Price" is produced at 1YA on Friday evening, it will be quite interesting to note how it is received by listeners-in, knowing that it has been written by a man whose life has been, and is so full—may we say "packed full"—of all those beautiful things which really count in life.

"Radio Record and Home Journal."

12/6 in Advance; 15/- Booked.

BOX 1022, WELLINGTON.

St. Matthew Passion Music

Broadcast from 2YA

ON the evening of Sunday, March 22, Passion Sunday, music-lovers will be afforded the opportunity of hearing what is accounted the most beautiful Lenten music ever written.

This is "The Passion according to St. Matthew," set to music by John Sebastian Bach. A selection from this work will be broadcast from St. Paul's Pro-Cathedral. Mr. Robert Parker, C.M.G., whose work for music in New Zealand for many years past needs no comment here, is the organist and choirmaster; Miss Ava Symons and Mrs. Furner Steers will play the violin and piano parts respectively, and the soloists will be Mrs. Alexander, Mrs. Wilfred Andrews, Mr. Chas. Williams and Mr. Binet Brown.

The St. Matthew Passion Music was first sung at the Church of St. Thomas, Leipzig, on Good Friday, 1729, and was revived by Mendelssohn in Berlin in 1829, exactly 100 years after its first performance. In England it was first given by the Bach Society under Sterndale Bennett in 1854. Bennett's productions of the work were conspicuous for the excellence with which he brought out the loving piety of the work; later conductors have laid more stress on its dramatic character. Performances of the St. Matthew Passion Music were given by Sir Joseph Barnby in Exeter Hall, Westminster Abbey, and the Royal Albert Hall, and it is performed annually at St. Paul's Cathedral, London, in Holy Week.

2YA Church Committee

A MEETING of the 2YA Church Committee was held on Tuesday, March 3, the Rev. O. V. Rooke (representing the Anglican denomination) presiding. There were also present: Revs. R. J. Howie (Presbyterian), H. W. Newell (Congregational), T. R. Richards (Methodist), Pastor W. G. Carpenter (Church of Christ), Mrs. Daisy Basham, Mr. J. Ball.

An apology for absence was received from the Rev. E. N. Goring (Baptist). A resolution expressing sympathy with all who were bereaved or suffered loss in the Hawke's Bay earthquake was passed. Arrangements in connection with the Easter broadcasts were outlined and approved.

No Depression Here

Radio Licenses Increase 500 in January

A RETURN showing the number of radio licenses as at January 31, 1931, indicates that in radio at least business is prosperous. Not only has the grand total increased five hundred since December, but there are twelve more dealers:—

	Receiving.	Transmitting and receiving.	Dealers.	Experimental and special.	Free.
Auckland	18,339	89	309	2	98
Canterbury ..	10,098	55	261	2	56
Otago	6,817	42	186	2	35
Wellington ..	25,371	121	504	6	54
	60,625	307	1,260	12	243
Total: 62,447.					

From League of Nations Secretariat

A New Zealander on Furlough

MAJOR E. S. HARSTON, who is the Chief of the Documents and Distribution Service at the League of Nations Secretariat at Geneva, is at present in New Zealand on furlough, and is to talk from 2YA on Friday, March 20.

In this talk he will give a description of the interesting personalities who are always in Geneva, the cosmopolitan life of the city, and the work of the League.

Major Harston was educated at Napier High School and St. John's College and University College, Auckland. He went to the front with the Main Body, and was invalided home in 1917, and after working on General Headquarters practised as a solicitor in Taumarunui. After some time spent in Switzerland for health reasons, he has been a member of the League of Nations' Secretariat for the past four years.

"My Irish Rose"

APPROPRIATE to St. Patrick's Day 4YA will relay from Gore on Tuesday, March 17, Walter Ben Hare's comedy-drama, "My Irish Rose," which is to be played there by a strong cast, under the direction of Mrs. Molly O'Sullivan, F.T.C.I.

It is a play in three acts, and the scene is laid in Ireland. Listeners will be introduced to several interesting characters, and the dialogue will prove most entertaining. The leading role, that of Rose Creigan, a little Irish country lass, will be taken by Mrs. O'Sullivan. The course of true love is said never to run smoothly, and Rose found this out.

In the first two acts there is much conspiring and misunderstanding, and the plot thickens in the third act, resulting, however, in a happy denouement.

Maurice Fitzgerald, a wealthy Dublin artist, falls in love with Rose while painting her picture. He proposes marriage, and is accepted. Shortly after he learns from his family lawyer, Mr. Pepperdine, that his cousin has been killed, and that he is a baronet, heir to the estate. Mr. Pepperdine suggests that he break off his matrimonial entanglement, but Maurice spurns the suggestion with contempt. Lady Agnes Barricklow has long been in love with Maurice, and now that he is a wealthy baronet, decides to marry him.

She arrives at the farm with Eileen, Maurice's sister, and tries to break off the match between Rose and Sir Maurice by suggesting to Rose that her lover is already engaged to marry Eileen (who is really his step-sister). Rose sees Maurice embrace his sister, and thinking she is his betrothed, agrees to break the match. But Archibald Pennywitt, a blundering English tourist, explains that Eileen is Maurice's sister, and Maurice introduces Rose to all as his affianced wife.

In Act 3, the return of Rose's brother, who has been cashiered from the army and gone to America increases the complications, but listeners must tune in to 4YA and hear for themselves.



MISS MAISIE OTTEY,

who will make her next appearance at 3YA on March 20 as a novelty pianist. Prior to coming to New Zealand she was frequently engaged at 2FC and 2BL, and her orchestra gave regular afternoon performances. For the past thirteen months she has been in Dunedin, supplying the music for the most popular tearoom there. She is now resident in Christchurch, and 3YA listeners will welcome her as an acquisition to the ranks of radio artists.

Federal Radio Commission

Annual Report Criticised

STRONG criticism is descending on the annual report recently submitted to the U.S. Congress by the Federal Radio Commission.

The critics draw attention to the fact that the report contains not a word about the pressing problem of high power, nor a syllable in recognition of the broadcasters' demand for yearly instead of three-monthly licenses. The report is also silent upon what is described as the fundamentally unsound zone system of administering radio by segments of States, regardless of the fact that radio knows no artificial geographical boundaries.

The commission includes among its recommendations a plea for power to penalise offending stations by ordering them "off the air" for 30 days. It refuses to "recognise visual broadcasting as having developed to the point where it has real entertainment value."

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"Tom Brown's School Days"

"Tom Brown's School Days," the finest and most famous example of stories, depicting English public school life, was written by Thomas Hughes and published in 1857, when the author was a young barrister of thirty-three. It leaped at once into a deserved popularity it has never lost. Tom is a typical middle class lad with the distinctive British virtues of pluck, honesty and the love of fair play. The story portrays his life from the moment he enters the lowest form of the great school, a homesick timid lad, who has to fag for the older boys, and has his full share of the rough treatment which obtained in the Rugby of his day, to the time when he has developed into a big brawny fellow, the head of the school, a football hero, and ready to pass to Oxford—another story, a failure, being devoted to his experiences there.

A faithful, life-like, and most entertaining picture of the Rugby of Dr. Arnold is given; its social habits, methods of teaching, its sports, beliefs, and ideals. The wide influence of that great man is sketched with hearty appreciation and in another figure—that of the gentle, high charactered lad Arthur—one may recognise Dean Stanley in his student days.

Individual scenes, like the bullying of Tom when he is "green" in the school, the football match, and the boat race, will always cling in memory for their graphic lines and fullness of life.

To read "Tom Brown" is to have an exhilarating sense of the vigorous young manhood of that nation, its joy in fruitful activity.

TOM was the eldest of the children of Squire Brown, J.P. for the County of Berks. He was a Tory, but nevertheless held divers social principles, the foremost of which was the belief that a man is valued for what he is, apart from all externals. Therefore, it did not matter a straw whether Tom associated himself with the sons of lords or ploughmen. It is not to be wondered at that, when the time came for Tom to go to Rugby, there was great grief among all the village boys.

It was long before the time of motors, and trains were few, so in the cold grey hours of the morning Tom crept up beside the driver of the stage coach that would pass through Rugby.

"And now, Tom, my boy," said the squire, "remember you are going to be chucked into this great school, like a young bear, with all your troubles before you—earlier than we should have sent you perhaps. You'll see a great many cruel blackguard things done and hear a deal of foul, bad talk. But never fear. You tell the truth and keep a brave heart, and never listen to or say anything that you wouldn't like your mother or sisters to hear, and you'll never feel ashamed to come home, or we to see you."

Something choking welled up inside Tom at the mention of his mother, and he would have liked to have hugged his father. But he couldn't do that now, so he only squeezed his father's hand and said bravely, "I'll try, father."

The coach rumbled into Rugby just in time for dinner, and as Tom passed the school gates and saw the boys standing there as if the town belonged to them, his heart beat quickly and he felt proud. One of the younger boys ran out and greeted him by name. Tom was terribly astonished, but the boy explained that his aunt lived somewhere near his home and knew his father.

"She asked me to give you a lift," he went on, "and I want to please the old lady, for she gave me a half-sov. this half, and perhaps she'll double it next, if I keep in her good books."

Tom rather resented the patronising air, for this boy, East, was scarcely older than himself, and, as it transpired, in the lower fourth while Tom was joining the third. In this form, Tom made great progress and earned a good reputation. As a new boy, he was excused from fagging, though, in his enthusiasm, took turn about with East and the others of the fourth. So he soon gained the character of a good-natured, willing fellow, ready to do a turn for anyone. Tom came up into the lower fourth as one of the "good boys" of the third, but he rapidly fell away, and at the end of two months, his character for steadfastness was gone. For years after, he went up to the school without it and regarded the masters as a matter of course and as his natural enemies.

FAGGING was on the increase, but it would not have mattered so much if the fifth hadn't started it. It was all right for the sixth, they were privileged, but apart from them—well, it shouldn't be.

Tom, who shared a study with East, was one night brooding over the wrongs of the school, and the abuse of the fagging system, in particular.

"Do you know, old fellow, I won't fag except for the sixth."

"Quite right, too, my boy. I'm with you and all for a strike myself. It's getting too bad," cried East.

At that particular moment there sounded from down the corridor the well-known voice of "that blackguard Flashman."

"Fa-a-a-g," but the call was not answered. It came again and again, but each time the voice died away without any reply. The colours of the revolt had been hoisted. Tom bolted the door and East put out the candle.

"Now, Tom, no surrender."

The assault was a rough one, and one (Continued on page 31.)



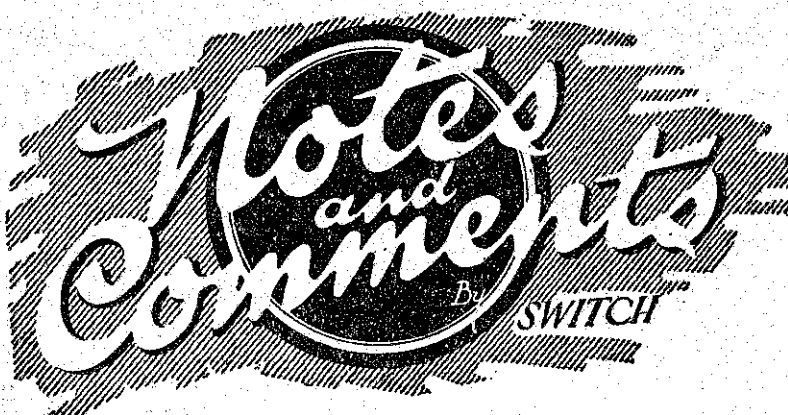
Scenes from this great School Story from 4YA, Friday

HOPES have been entertained by New Zealand listeners for a considerable time past that the proposed Empire short-wave broadcast station in England would become a reality. The writer has heard rumours that progress has not been made in connection with the establishment of this station, but is unable to gather anything definite about the matter. Perhaps some readers of the "Record" can furnish information on the subject.

SOME petulant person has been writing to the Press expressing disappointment with the Broadcasting Co. for having relayed the Blay-Donovan fight at New Plymouth instead of relaying items from an earthquake relief concert at the Wellington Town Hall. He asserts that the concert items would have been of more general interest than the fight relays. "Switch" cannot ignore figures, and it is a safe bet that if the same couple of boxers were to meet at each of the principal towns throughout New Zealand and the said concert items were put on at the same towns the attendances at the boxing contest would overwhelmingly outnumber the attendances at the concerts.

AN Invercargill listener mentions in last week's "Record" that he had experienced bad fading in 2YA during the last two or three weeks. "Switch" suggests that this may have been due to a seasonal cause. In these notes recently reference was made to the persistent fading of 4QG, Brisbane, a station which had previously been a fairly steady performer. There is much in radio which scientists have yet to solve.

MR. S. ELLIS mentions in last week's "Record" that there is a Moscow station operating on 1450 k.c. (207 metres) with a power of 40 k.w. which he says should be easily heard this winter. The call-sign is RA1. "Switch" is inclined to believe that the Moscow giant will be picked up in New Zealand during this winter. The best time to look for the Russian would be just before dawn, thus permitting the maximum amount of darkness to cover the globe between New Zealand and Russia.



A COUNTRY dealer informed "Switch" the other day that listeners inland now realise that broadcast listening is the cheapest form of entertainment in existence, besides fur-

this summer the best for new trade during his experience.

Reception Table for Australian Stations

FOR the guidance of those who wish to check their reception of the Australian stations, "Switch" prepares weekly a table showing the average relative strength with which he has obtained reception at 11.30 p.m. during the past week:—

2FC, Sydney	10
2BL, Sydney	10
2NC, Newcastle	9½
4QG, Brisbane	8
3LO, Melbourne	8
7LA, Launceston	6
3DB, Melbourne	6
2GB, Sydney	6½
2UE, Sydney	5½
3AR, Melbourne	5
3UZ, Melbourne	4½
7ZL, Hobart	3½
5CL, Adelaide	2½
6WF, Perth	2
2KY, Sydney	1½

The above figures are the points assessed, with 10 as the maximum.

nishing news in a concise form. He stated that now that money was tight country people had less spare cash for the usual entertainments and were looking to radio to supply a substitute. He had been in the radio business for four years, and had found

As a matter of fact, an electric globe drops considerably in efficiency some time before it burns out. A radio valve may continue to light for years, but its average efficient life is a thousand hours.

A WELLINGTON listener showed the writer an a.c. valve which had petered out after five months' use, averaging three or four hours nightly. The valve was of an obscure make, and the only advice "Switch" could tender was to replace it with one of a well-known make, several of which are advertised in the "Record." Beginners should insist upon having the best valves when buying a set; "boot-leg" valves are a snare.

THE writer resumed short-wave listening last week after a long spell, and found that by sitting up late one is able to get many a thrill and plenty of entertainment. Some time ago there was only the Siberian station at Khabarovsk with its endless talk and very little music, in the evening. Now there are a number of others which give good entertainment. The best reception obtained by "Switch" was from the short-wave station at Saigon, French Indo-China.

"SWITCH" found Saigon gradually increase in volume as the night wore on until it was quite pleasantly audible on the loudspeaker from a two-valve receiver. The music comprised native songs and instrumental melodies of a thoroughly Eastern character, and high-class European gramophone records. The announcer calls "Allo, Allo, Allo!" and speaks in the native tongue in the early portion of the programme, but later uses the French language. After each announcement he beats one stroke on a sweet-sounding gong. The native melodies are to the Western ear far more musical than the Japanese.

TUNING in to the British short-wave station G5SW, Chelmsford, after midnight, "Switch" has heard some excellent musical items. An organ recital from All Saints' Church, Margaret Street, London, came through full and rich. The writer was using headphones on a two-valve receiver. Dance music, presumably from the Savoy, had an enchanting lilt, although 5SW pulsed slightly with the usual gusts which characterise long-distance short-wave reception.

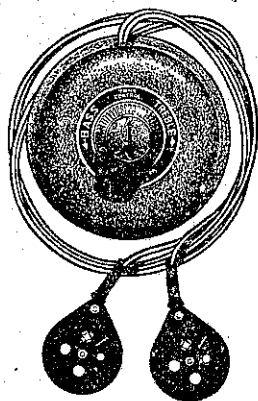
"SWITCH" discovered a strange station heterodyning with 2FC, Sydney, on a recent night. The newcomer was not loud enough to spoil 2FC's reception, but, nevertheless, he was distinctly audible as a whistle until 2FC closed down. A bubble in the stranger's whistle could be identified as music at times. When 2FC went off the air the stranger was only faintly audible though the rhythm of music was still distinguishable.

"SWITCH" tenders his congratulations to Mr. S. Ellis for having won the "Record" DX Cup with his wonderful log of 89 verified stations. The Pierce Earh System which Mr. Ellis adopted some three years ago is an American idea, and its virtue has been proved by many. One, however, must have a good receiving set and aerial system and, in particular, a favourable locality to compile a log like Mr. Ellis's.

BRISBANE had its own disaster recently when the river overflowed and flooded large residential and business areas. 4QG, Brisbane, rose to the occasion, and broadcast a series of bulletins giving the latest news of the flood from all points.

ANOTHER station is being erected near Brisbane, and, from latest advices, is likely to be heard over a wide area of New Zealand. The station is located about six miles out of the city. The two aerial masts are to be 160ft. in height, and constructed of tubular steel. The task of raising the masts is proving a strenuous undertaking.

A LISTENER who has operated a set for over a year surprised "Switch" recently by inquiring whether a valve was good until it burnt out, "just the same as an electric light."



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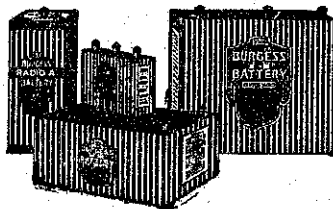
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BURGESS RADIO BATTERIES

Our Mail Bag

While we welcome the expressed views of listeners on topics pertaining to radio, we ask that these communications be kept to minimum length, as heavy demands are made upon space. Mere reiteration of arguments cannot be accepted for publication, and we cannot take responsibility for views expressed. Address communications to the Editor, and sign all correspondence, though a nom-de-plume might be used for publication.

Amateur Transmitters.

ON reading last week's "Radio Record" I noticed that in an article headed "Transmitting from Napier" the Western Electric Company claim that the majority of the credit for the wonderful work done by the radio "Hams" during the terrible disaster recently in Hawke's Bay is due to their Mr. Cooper, who was dispatched by their firm to Napier. (I presume he took a W.E. transmitter, as nothing else would be capable of doing the work.)

This article I have read with disgust beyond words. After reading "With Towns Crashed in Ruins" ("Radio Record," February 13), and after hearing on my own S.W. receiver the wonderful work that was done in the first 24 hours of the disaster by the "Hams" in Napier, Hastings, Wairoa and Gisborne, I can only say that they deserve praise beyond words, and the majority of the credit is theirs.

Possibly W.E. Co. think New Zealand "Hams" and experimenters don't know the technical and practical side of radio science, but allow me to inform them that some of the greatest work in the world has been done by New Zealand "Hams" in the past years, and that those boys in Hawke's Bay have done only what a New Zealander could do. Let's have fair play. —T. W. Ward (Tariki).

Open-air Dance Broadcast.

I HAVE just been listening to the fourth "International" programme from 2YA and thought it was excellent. Anyone who considers the American accent in the different recordings harmful and unpleasant to listen to should either buy a new speaker or else dismantle their sets altogether. I would also like to praise the open-air dance programme put over the air by 3YA on Monday last. The band music came through beautifully, and any person hearing it must have longed to be there to join in the dancing. —T. M. McKinnon (Kurow).

Remarks Too Sweeping.

MIGHT I be permitted to comment on the remarks of Mr. Jno. Bishop and Mr. Reg. Morgan? Both these gentlemen are correct, but their remarks are too sweeping. We musicians know the fine qualifications of Mr. Bishop, and endorse his remarks to a degree, but he would be more correct if he referred to some broadcast items, and to "tosh" as being more correct in some instances. Of this there is no doubt, but at the same time ar-

tists of the calibre of Leon de Mauny, W. Haydock, Claude Tanner, and many others appearing nightly (and too numerous to mention), are always worthy of the highest praise. I am sure they are not intended to be included in Mr. Bishop's remarks.

The great point to remember is that a "recording" of "tosh" or anything else, is infinitely superior to poor artists, because in the former, items are always well performed, otherwise records are not released. As a case in point, "tosh" is included, with some other excellent items, in the much-discussed 2YA Wednesday programmes, but the quality of the broadcast cannot be adversely commented on. My receiver (9-valve, 4-screen grid) gives excellent reception. Nevertheless, some of the recent New Zealand numbers have been terrible, more noticeable by comparison with recordings of the same type which have appeared on the same programme. Instances could be quoted, but that is for the station directors (or whoever responsible) to find out, and suggest they listen in over the air some night, as the microphone is more critical than the human ear, and over the air faults are more easily detected.

Two of the southern stations are the biggest offenders, and when including dance bands I do not refer to Mr. Morgan's, as this gentleman (judging by reception) certainly knows his business, but I would have liked him to have heard another jazz band recently when one of the brass instruments was nearly a quarter tone sharp. This, in addition to the unmusical performance. Many band players are afflicted with "ear" (or lack of it), and this where the listeners suffer. Listen to band "recordings," and the difference is obvious. —(Gisborne).

Blay-Donovan Fight

THE broadcast of the Blay-Donovan boxing match, which took place at New Plymouth on Saturday, February 28, provided a greatly appreciated interlude in the broadcast programmes. The broadcast was carried out by 2YB, New Plymouth; 2YA, Wellington; 3YA, Christchurch; and 4YA, Dunedin. It was an event which all sport lovers throughout New Zealand thoroughly enjoyed.

A BRIEF SUMMARY OF THE CHAPTERS IN THE 1931 RADIO GUIDE AND CALL BOOK

For the past three years we have regularly published a Radio Guide and Call Book, which deals competently and thoroughly with every phase of radio. This year our fourth publication will completely eclipse all our previous efforts, as the "Guide" will be larger and incorporate many new features which will undoubtedly be of definite interest to those who are familiar with the workings of radio, or to the veriest amateur who can easily understand all the articles, as they are written by trained journalists and technicians in an easy to understand style. The most complicated processes are explained very simply.

Below we briefly summarise the different chapters which will be published.

Chapter 1:—New Zealand broadcasting. A review of the Broadcasting Co., and the story of radio in New Zealand generally. The "B" class stations. Events of the year.

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:—Gramophone 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:—Power packs and chokes. Matching valves to speakers.

Chapter 6:—Short-wave reception and transmission. Complete circuits for different types of short-wave sets and adaptors.

Chapter 7:—Valves and their characteristics.

Chapter 8:—Trouble tracking fully described.

Chapter 9:—Tables, resistances, condensers, coils, etc.

Chapter 10:—Call Book. Every station that can be heard in New Zealand will be listed, giving the wavelength and frequency.

Chapter 11:—Glossary of wireless terms.

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13/3/31

Addresses and Addresses Wanted

H. McM. (Dunedin): KGO, National Broadcasting Co., Inc., San Francisco, Calif.; KNX, Western Broadcast Co., Hollywood, Calif.; KGU, Marion Mulrony, Advertising Public Co., Honolulu, Hawaii.

H. F.A. (Masterton): ZLIBH, A. H. Hudson, 15 Mt. Hobson Street, Remuera; ZL4BT, J. C. Callander, 121 Richardson Street, Dunedin.

"OSCAR" (Marton) would like call and address of the European station at Bratislava, from which Mr. L. Peters recently received a verification.

D. L.C. (Hamilton): There is no station with the call WBIP given in the latest call-book.

Identification Wanted

ON Feb. 28 station heard at 12.15 a.m. at 60 and 60½ on my dial. Two organ recordings were heard. The announcer, whose voice was marred by static, then stated that two violin solos were to follow, one being "— in the Twilight." He then faded out, and I was unable to pick him up again. Was this 6WF, Perth? I receive Wellington at 53 and 2FC at 65. Another station, evidently a Jap, heard at 12.35 on 79. A lady was delivering a lecture and was very clear, but I received no call (3AR on 73 and 7ZL on 84). Another Jap two degrees above 2BL (former on 46, 2BL on 44).—"Mark" (Dunedin).

STATION heard from 1.30 a.m. until 2.15 a.m. on the 3rd on approximately 700 k.c. (428 m.), 56 on dial (2YA 50, 6WF 57). Call sounded like JOXRI, Lombasa (or Mombasa). Announced proceeded to speak about the Peace Conference and the benefit France and Italy would derive from the same. Also about the progress made in Paris and the understanding between France, Italy and America. At 1.40 gave call and went on to musical items. Second disc called "Abandon, Norado" (song). Also station on 800 k.c. (375 m.) (41 on dial), broadcasting orchestral items at 2.15 a.m., and a Hawaiian instrumental number at 2.17. Both were waltzes. Gave call, but conditions prevented my hearing this. Would this be 7CA, Calcutta? Also a Jap on 1830 k.c. (225 m.) (7½ on dial), talking at 7.30 p.m., on March 4, quite clear and strong. Congratulations to Mr. Ellis on his popular win of the first DX Cup. Quite a number are now after his "scalp," myself included.—R.L.W. (Nelson).

News and Views of the D.X. CLUB

AMERICAN station heard on February 22 on 950 k.c. (315.6 m.) from 8 to 10 p.m. He came in when KFWB closed down. Fading was bad. The first two letters of the call sign were "K.M." Another American on 810 k.c. (370 m.) relaying dance music from the Hotel, on March 1. Closed down about 7.30.—N.J. (Masterton).

STATION heard at 7.55 p.m. on March 3. Call sounded like "GBO." One of the items was entitled "Don't Forget Me in Your Dreams." Prior to closing the announcer gave the time as 12.1, followed by the weather report from different American States. Frequency given as 1290 (232 m.). Above this was an American telling fortunes or forecasting. The announcer had a very deep voice and was very hard to understand.—"Big Bill" (Timaru).

AMERICAN on 690 k.c. (435.5 m.) about 1½ deg. above WLW.—"Ray Dio" (Shannon).

WELL, DX-ers, this is my initial entry into the club. Having recently logged my 25th American, I feel entitled to say something as well as the other boys. Foreign station which sounded Chinese heard about 7.15 and 8 p.m. on 225 metres (1330 k.c.) on February 27. Items, which included stringed instruments and singing, lasted about 15 minutes. Static was heavy and no call was heard. Congrats. to S. Ellis on his fine achievement in carrying off the Cup. Drop me a line if you like, Mr. Ellis. I also correspond with our friend in Cincinnati. Address Box 9, Tuakau.—"Ray DX" (Waikato).

STATION heard at approximately 11 p.m. on February 26 operating between 7ZL and 3AR. All speech was foreign and sounded like either Japanese or Chinese. Wavelength about 395 metres (760 k.c.). Would this be XOW, Nanking?—E.W.D. (Invercargill).

AMERICAN on 950 k.c. (315 m.) heard at 8 p.m. on February 24 at 8 p.m. Strength was good, but electrical interference spoilt signals, and only one item, "Singing in the Rain," was recognised. Announcer remarked they were playing request numbers for people, whom he named. He was still on the air at 9 p.m., when 2GB was heterodyning him. This is probably the station mentioned by WSK (Nelson). Another American on 745 k.c. (402 m.) heard at 7.30 p.m. on March 1. Signals were at good strength, but gradually faded until they were just audible. Item "You're Just Love." Call sounded like KBL, Tacoma. I picked up two stations on the same frequency this evening between 7.15 and 7.40 p.m. One gave his call as WBAL, Baltimore. I heard the following from the other: "We'll continue with the test programme of Victor Orthophonic Recordings—(a) 'Dream Lover,' (b) monologue, (c) 'Lonesome Little Doll.'" Note.—Frequencies given above are dial readings and are 15/20 k.c. below the station frequencies.—"Seven Kicker" (Okoroire).

STATION on 1300 k.c. (230.6m.), heard at 8 p.m. on March 5. I could not catch the call, but I heard Dunedin mentioned. One item heard was "Happy Days are Here Again," and then another station came on the air and spoilt the transmission.—"Yankee" (N.P.).

Stations Identified

"DINK" (Helensville): Station on 1YA's frequency is without doubt KHJ, Los Angeles, on 333 metres (900 k.c.). During last winter I heard him every Monday night, but he has not been so good lately.—"Ray DX" (Waikato).

"OOL" (H. Bay): Station broadcasting foreign music was probably KGMB. The station puzzled me until

Relay from Whangarei

LAST year a number of very successful relays from Whangarei were carried out by 1YA, when concerts given by the Whangarei Municipal Band were broadcast. On Wednesday, March 25, 1YA has arranged another such attraction, and listeners can look forward to a very enjoyable programme.

I heard the announcements a few nights ago. "Sneak" (Christchurch): WBAF has been testing for several nights lately on 660 k.c. (45 metres).—N.J. (Masterton).

"DORIS" (Dunedin): KFOX, Long Beach, California. A.M.H. (Tirau): Probably KFWB, Hollywood, California. "Oscar" (Marton): Station on 680 k.c. (441m.) is KPO, San Francisco, and the other on 640 k.c. (469m.) is KFI, Los Angeles. "Clive" (Cambridge): All the New York stations' calls commence with "W," and not "K."—"Yankee" (N.P.).

DX Topics

A New Jap?

WHILE listening-in on the 31st at 7.40 p.m. I heard what I thought was a new station, but I was surprised to hear Mr. Drummond's voice announcing race results (probably 2YA's first harmonic, on 208.2 m., or 1440 k.c.). A few minutes afterward I received KGMB, Honolulu, for the first time. On March 3, at 7.45 p.m., I tuned in to the latter and heard a Japanese voice. Then followed some typical Japanese music and the announcement KGMB, Honolulu. The remainder of this was obliterated by a local power leak. Would this be a new Jap, or Honolulu broad-

casting a Jap record? KGMB, California, was logged shortly after, and also a station with a call that sounded like KNX. As the latter was on a slightly higher wavelength than Honolulu, however, and as KNX is listed as being on 286 metres (1050 k.c.), it does not appear possible that this call was correct. My total log, including 5 Japs and 18 Americans, is 81. I attribute my success to the earth system used, which comprises eight 4½ ft. long pipes driven into the ground. A coil of heavy copper cable is used to connect them together and to supply a lead running to the set. The pipes are not driven in in a straight line as in the Pierce system, but are two feet apart and zig-zagged to ensure contact with different stratas, as earth resistance varies every few inches.—"Wireman" (Masterton).

WJZ Testing.

RECENT loggings include KHQ, Spokane, on practically the same frequency as 2ZR; WMAQ, Chicago, just below 2FC and heterodyning with it; and WJZ, New York, a little above 4QG, with whom they were heterodyning from 7.45 p.m. onward on March 4. WJZ (the "Z" is pronounced "Zee") stated that they were testing. Reception was marred by a peculiar "shaking" effect which seemed to vary in speed every few minutes or so. When it slowed down the station appeared to be surging, as on shortwave. Following this it would quickly speed up until the effect on speech or music was almost like a.c. hum. Several of the American seem to be afflicted periodically with the same trouble, notably KFOX, KFWB and WTIC, on 650 k.c. (461 m.). Has anyone else noticed this?—"Ray Dio" (Shannon).

Beverage Aerial Successful.

I HAVE just rigged up a Beverage aerial, 400 yards long and 16 feet high, and although I am using only a home-made resistance, pencil lines on a piece of card, at the distant end, the first try-out indicates that it would prove a complete success. KYW, KFBD, KEJ, WSUI (heard this station for the first time) and KTM coming in so strongly that volume had to be cut down. KGO was at the same strength as 2YA at 7.45 p.m. In addition I also logged four new stations. As a test I tuned in KTMH, Hollywood, using the Beverage. Announcements were clearly heard. Then I changed to my inverted "L" aerial, 132 feet long and 35 feet high, but could not even get a whisper from this station. In just under seven months DX-ing I have heard the calls of 49 Americans.—"Seven Kicker" (Okoroire Springs).

European Reception.

AT 5 a.m. on February 28 I heard four foreign stations coming in at R7. The station on 780kc. (384m.) was at excellent strength, and the music could be heard all over the house. The music was of a classical nature, one item taking 15 minutes to complete. Announcement was in a foreign language, and this, combined with static, prevented my getting the call. I presume this to be a Rumanian station on a power of 12 kw., though my latest call books are of no assistance in identifying this. Stations

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also heard working on the following frequencies: 1085kc. (276m.), 1070kc. (280m.) and 840kc. (357m.). The language from all these was foreign. A man and a woman were speaking from the one on 1085kc. (276m.), and no doubt they were conducting a children's session. This is the station Mr. Peters (Pahiatua) has received verification from. According to my latest call book, the station call is OKR, Bratislava. Reception of distance stations is excellent at present, and I would advise DX-ers to rise at 4 a.m. in the morning to log these Europeans. I am writing to the station on 780kc. for a verification.—S. Ellis (Okato).

An Excellent Suggestion.

RE the DX competition. Would it not be a good idea to divide New Zealand into a number of areas and give the winner of each a certificate (as well as presenting the DX cup to the grand winner)? Conditions vary very much in different parts of New Zealand, and the above-mentioned scheme would give those of us who live in bad reception districts a little more interest in a competition we have small chance of winning. My own experience is that reception in Taranaki is 40 per cent. better than I obtain in my present shingly situation. Moreover, it gets dark much earlier in the north. Incidentally, as daylight reception of Australian A class stations is to be allowed, what do you define as daylight reception?

Would R.J.R. (P.N.) tell us what it is that he knows now and did not know before? I am in the same predicament as he, for I have often picked up that European station on 278.8m. (1080kc.), e.g., 4.7 a.m., piano and violin, followed by announcement, "Bramolatum (??) . . ." Then lady singing, followed by announcement by a lady, etc., etc. Then suddenly in English, "Hullo, everybody . . . four rograd . . . another number . . . Fox-trot Answer," static being responsible for the gaps. The Japs. give me the same trouble in securing enough data to write for verification. Another European station heard between 4 and 6 a.m. on 315m. (950kc.). A man counts in English to orchestral accompaniment as though at drill, but his numbers sometimes get very complicated, e.g., 1, 2, 6, 7, 1, 2, 3, 5, etc. Others heard on 338m. (837kc.), 359m. (837kc.), 360m. (838kc.), 378m. (794kc.), 389m. (770kc.), 400m. (750kc.), and 467m. (642kc.).—A.N. (North Otago).

Your suggestion for the DX competition is being adopted. An announcement to this effect will appear shortly.—Ed.]

Recent Loggings.

AS "Dink" (Helensville) remarks, KHJ is the station behind IYA. He was fairly roaring in on the 4th, until he closed down at 8 p.m. Latest loggings are: COMK, China; KGA, Washington; KJR and KOMO, Seattle; 2AY, Albany; and 3KZ, Melbourne. I would like to know how "D.T.H." (Timaru) got the calls of 32 Australians in one hour or so, for it took me over half an hour to get one the other evening. He must have influence or something. Most of the Jap stations have language courses, mostly English, for 30 minutes from 6.30 p.m., Japanese time, and give their time signal at 9.40 p.m. The children's hour commences at 6 p.m., and often includes English music.—R.L.W. (Nelson).

Identifying Japs.

THANKS, J.C.S. (Beckenham) and J.P.C. (P.N.) for information about WBBM. Since writing I have heard their call distinctly. D.T.H. (Timaru): When listening to the Japs I usually wait until singing commences (this comprises about half of their programme), and then give the exact time and describe it (high or low, etc.). It is practically impossible to

describe their music. The Jap A.F. (Waverley) heard below 2BL is JOAK. The time would be 7 p.m. approximately. I have just been listening to the new French short-wave station on approximately 32 metres. It is R9 with a fine orchestra.—H.F.A. (Masterton).

Schedule of 1ZH.

SCHEDULE of Station 1ZH, G. S. Anchor and Co., Radio House, Hamilton, is as follows:—

Monday, Wednesday and Friday: 12 noon to 1 p.m.

Tuesday and Thursday: 12.30 to 1.30 p.m.

Saturday: 12 noon to 12.30 p.m.

Wavelength, 480 metres (630 kilocycles); power, 50 watts.

Interesting Booklets.

J.P.C. (P.N.) has forwarded us three interesting booklets received by him, one from WBBM, Chicago, and two from a station in Salt Lake City. The former contains numerous photographs of the studios and artists, and



DUNCAN BLACK.

An Auckland bass of outstanding merit, who will be heard in several numbers on March 18.

—S. P. Andrew, photo

excellent map which renders the geographical location of American stations a simple matter, and, most important of all, a complete and up-to-date list of American broadcasting stations, giving full particulars of each.

The other two booklets contain lavishly-illustrated descriptions of the beauties of Salt Lake City and its surroundings, including the famous Yellowstone Park.

DX Competition.

I CONSIDER the barring of all New Zealand stations and most of the Australians in the DX competition most unfair. This means to say that only owners of receiving sets with not less than seven or eight valves would have a chance of winning. Would it not be better to judge a DX-er's results according to the number of valves his set uses? I have a four-valve set, and during the last six months I have logged 60 identified stations, which includes only two Ameri-

cans. How would this compare with some of your runners-up with their eight and nine valves? I notice in the last issue of the R.R. several readers report receiving a station with the call "2NG" on 2YB's wavelength. Others refer to this station at "2MO." It is, of course, "2NC."—"Constant Reader" (Wellington).

[We are afraid that your suggestion, i.e., that of judging DX-ers' results by the number of valves used, would in practice be impossible. Also the discrepancy between a seven or eight valve commercial a.c. and a well-designed five-valve battery-operated one is, for DX-ing at least, not as great as you seem to think. The competitor who secured third place in the recent DX competition operated a four-valve B.D. Finally, these stations were barred so as not to encourage oscillating receivers on local frequencies.—Ed.]

Frequency Determination.

HOW do DX-ers determine the frequencies of the different stations mentioned in the DX notes? Are they guided by a call book, are their dials set so that they can determine just what frequency they record, or do they use a wavemeter?—"DXGC" (Ohura).

[All these methods are used, but the first two are the most popular. One of the easiest methods is to draw up a chart or graph, showing dial readings and wavelengths or frequency of stations you can receive regularly. Then by a comparison between these readings and those of unknown stations the frequency or wavelength of the latter can be determined accurately enough for identification purposes.—Ed.]

Australian Programmes

Times Corrected for New Zealand

Thursday, March 12.

STATION 2FC: 10 p.m. and at intervals throughout the evening, the A.B.C. Military Band. 10.25 p.m., and 11.23 p.m., Harry Klass, violinist.

10.44 p.m. and 11.58 p.m., Clifford Lathlean, basso.

2BL: 10 p.m., twenty minutes of well-known operas. 10.20 p.m. and 10.41 p.m., Minette Canny, monologues. 10.27 p.m., Clive Amadio, saxophonist. 10.34 p.m., Neville Beavis, baritone. 11 p.m., Presentation of the opera, "Maritana."

3LO: 10 p.m., Early English music. 10.15 p.m., dance items, interspersed with vaudeville numbers.

3AR: 10.15 p.m., programme of studio reproductions.

Friday, March 13.

STATION 2FC: 10 p.m., organ and choral recital, relayed from St. Andrew's Cathedral. 11.15 p.m., relay from 3LO, Melbourne, of a brass band recital.

2BL: 10 p.m., "On the Patio," a Mexican entertainment, featuring the A.B.C. Orchestra, Gaby du Valle, (soprano), Mayne Lynton and Nancy Stewart (instrumentalists). 10.20 p.m. and 10.48 p.m., Hilda Grace, novelty pianist. 10.27 p.m. and 12.0 p.m., James Donnelly, negro spirituals. 11 p.m., "Literature," a drama in one act.

3LO: 10 p.m., "The Minstrelsy of Scotland." 10.30 p.m., organ recital. 11 p.m., "The Travels of Baron Munchausen." 10.15 p.m., brass band recital.

3AR: 10.20 p.m., community singing transmitted from the Mechanics' Hall, Geelong.

Saturday, March 14.

STATION 2FC: 10 p.m., The A.B.C. 1931 Revue, a variety entertainment.

2BL: 10.0 p.m., 10.14 p.m., and 11.37 p.m., The A.B.C. Dance Band. 10.7 p.m., R. A. Bartleman, baritone. 10.21 p.m. and 11.44 p.m., Oash and Carry, entertainers. 11.30 p.m. and 11.53 p.m., Billee Cresswell, popular vocalist.

3LO: 10 p.m., "Highbrow and Lowbrow," an attractive entertainment in which each orchestral number, song, instrumental solo, monologue or play is followed by its "lowbrow" counterpart.

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Children's Sessions

AT 2YA.

MONDAY, MARCH 16: Kipling Lady is bringing with her to-night a band of cousins playing ukuleles, steel guitars and mandolins under the baton of Mrs. Mildred Kenny. Uncle Jeff will send birthday greetings.

TUESDAY: Mr. Claude Sander's little pupils will be welcomed to-night. They dance so cleverly and rhythmically. Hear them in Dutch and Highland dances. There will also be chorus work and solo singing. Uncle Toby and Jumbo will send out the Birthday greetings.

WEDNESDAY: To-night we are to have a little dialogue written by a Wellington lady for the "Cheerful Chirpers." It is called "A Birthday in Fairyland," and introduces some pretty songs. A jolly story from our new book called "The Meeting Pool," will also be read. Birthday greetings, as usual, of course.

THURSDAY: Uncle George and Big Brother Jack will introduce to-night some little cousins who have been practising nursery rhymes, pianoforte trios and little songs. Miss Lee will bring them to the studio.

FRIDAY: Uncle Jim and Story Book Man will take all in the Studio for a special Radio Train Trip to New Plymouth, so they can have a row on the lake and a bathe in the sea, and also listen to a little A. A. Milne Concert which has been prepared by Mrs. Percy Wood's pupils.

SATURDAY: Aunt Molly and Uncle Jasper will have the pleasure of welcoming to the Studio to-night "The Ariel Singers," who will sing Nursery Rhymes, about "Willie Winkie," "Hunting of the Snail," and a delightful "Lullaby." The last time they came they brought some biscuits for Spot, so he can be expected to be here, too.

SUNDAY, MARCH 22: Uncle George will conduct the service to-night, and he will be assisted by the Children's Choir from the Miramar Methodist Church, under the conductorship of Miss Vanstan.



Mr. Will Bishop and party, who are to commence upon a series of bright revues from 2YA. Reading from left to right: Elsie Croft, Rita Kemp, Will Bishop, Will Hancock, Gretta Stark, and Will Hancock. —Andrew, photo.

AT 3YA.

MONDAY, MARCH 16: A bright little session to-night with Cousin Margot, The Mystery Man, and a group of Mrs. Frye's little pupils. And Cousin Gwen will provide some zither music.

WEDNESDAY: Uncle John on deck to-night with a crew of little helpers, who are all pupils of Mrs. Tumber. So we expect to have some cheery songs and choruses.

THURSDAY: Ladybird, with her pretty songs; Uncle Frank, with his funny stories; and Uncle Dick, with his own little songs that he makes up for the little radio children.

FRIDAY: "Chuckie" will chuckle in good style to-night, and Cousin Frances will be there to help him.

SATURDAY: "Mother Hubbard" is in charge to-night, as Aunt Pat is off on a holiday. There will be lovely stories for you, and songs from the boys from the Grammar School.

SUNDAY: The Methodist Sunday School will provide the Song Service to-night.

KNOW the time all over the world with a **DX Clock.**

2YA Musical and Dramatic Committee

MR. V. R. BENNETT (representing the Harmonic Society) presided at a meeting of the 2YA Musical and Dramatic Committee on Monday, March 2. There were also present: Mr. H. B. Robb (Orpheus Musical Society), Mr. J. Carr (Charley's Aunt Club), Mr. I. Levy ("Radio Record"), Mr. R. Lyon (Savage Club), Mr. E. M. Pankhurst (Commercial Travellers' M.V. Choir), Mr. L. J. Retallick (Apollo Singers), Mr. W. A. Jameson (Wellington Amateur Operatic Society), Dr. I. L. G. Sutherland (Workers' Educational Institute), Mr. Owen Pritchard, Mrs. Daisy Basham and Mr. J. Ball.

Apologies for absence were received from Mr. E. Palliser, Mr. E. A. Anson and Mr. H. Hardcastle. A cordial welcome was extended to Dr. Sutherland. A letter from Mr. A. R. Harris intimated that the subsidy to musical societies would be continued during the coming year. Several members stated that their societies would be participating as before.

In regard to the Hawke's Bay earthquake, the chairman said that the Broadcasting Company deserved to be congratulated on the splendid service rendered.

"Broadcasting was the only way of circulating news during the early days, and a further great service was rendered in finding people for anxious relatives. 2YA was quick to seize a great opportunity for public service, and the staff worked indefatigably. The community owed a debt of gratitude to the Broadcasting Company." The following resolution was carried:

"That this Committee desires to place on record its high appreciation of the great service rendered by the Broadcasting Company in connection with the disastrous earthquake in the Hawke's Bay district; and to compliment the officers and staff of 2YA on the zeal and efficiency with which they handled their long and difficult task."

Mr. Ball outlined some of the outstanding features of the station's work in connection with the disaster, and said that the response of the listening public had been wonderful. He thanked the Committee for its resolution and then introduced Mrs. Basham and Mr. Pritchard.

The programme organiser reported on programmes, and informed the Committee of the intention to use orchestral accompaniments to a much greater extent than in the past.

USUALLY the more screening-grid volts applied to a pentode (within the maker's limits) the better its performance, but the greater the plate current required for it.

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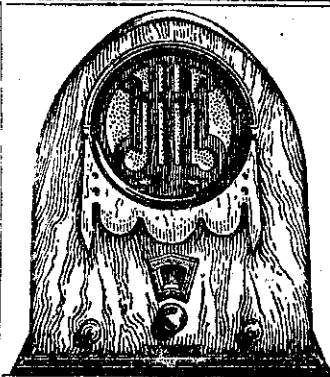
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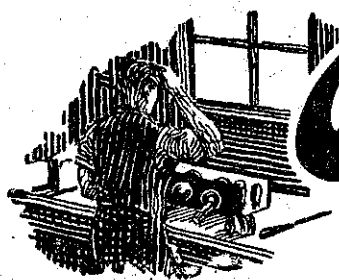
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Questions and Answers



NORTENDER (Dunedin): What voltage should I wind on a transformer to supply two 240 volts from the last valve, allowing for drop in choke in the rectifying valve, and in the biasing resistance?

A.: If you wind your transformer for 300 volts, you will have ample for P825. It requires 24 volts bias at 250 volts plate, and will require a 1000 ohms biasing resistance. This evidently is the valve you require for the last stage.

2. Does automatic grid bias result in drop in plate voltage?

A.: Yes. A drop in plate voltage equal to the amount of bias supplied results when automatic bias is provided for. You must always add the amount of bias to the plate voltage.

3. Can you give a method of positive biasing an a.c. valve?

A.: There is no need to do so. A.C. valves are constructed for a negative bias, even when acting as detector. Should you require a positive bias, the easiest manner to obtain one is with a battery inserted in the grid return of the valve. The positive will be toward the grid, while the negative goes to the cathode and earth.

A.C.E. (Kakahi): Is the number of pipes used in the Pierce earth system of any importance?

A.: Pierce, the originator of the earth system says that his reception improved as he added more pipes until he got to about a dozen, when more were not worth adding. Measurements, however, show that unless the pipes are separated by six feet or more, there is nothing to be gained by putting down large numbers.

2. Does the bottom pipe of the radiator have to be blocked to hold the water?

A.: It should not be watertight, but allow the water to leak away slowly into the ground.

3. What length should the pipe be?—Six feet.

SCREEN GRID (Trentham): Can I use a pair of phones in parallel with the speaker?—Yes.

2. Would it be possible to reduce the a.c. hum in the phones?

A.: Not without greatly interfering with your set.

3. The set works just as well without an earth. Would I get better results if I improved my earth?

A.: Probably not, many a.c. sets work better without an earth than with one.

L.B.D. (Mt. Eden): I could get only a .0002 differential condenser for the Night Hawk. What effect would this have upon the set?

A.: It would be an improvement. The .0002 is more serviceable than the smaller capacity condensers.

MAXIE (Auckland): I can get hardly any strength on by dynamic speaker, though I get quite good volume on the horn. Would a power valve improve things?

A.: If you have connected up the field supply and are quite certain that this is getting to the speaker itself, i.e., that the cords are not damaged in any way, you should have your speaker tested. The horn speaker would be more sensitive, but not greatly so. A power valve would not strengthen yourself. You can get a much better tone through its use, but strength would if anything be weakened.

KOIL (Timaru): What is the resultant capacity when a .0001 and a .00035 condenser are connected in series?—.00008 approximately.

2. How is a fixed condenser placed in parallel with a moving condenser?

A.: By connecting the one terminal of the fixed condenser to the moving plates and the other to the fixed plates.

2. What do you consider to be the better type of reaction control for short-wave, (a) differential, (b) resistance?

A.: There is very little to choose between them if the resistance is of good quality.

3. Would a .00025 or .00015 condenser be suitable for the differential short-wave adapter for tuning?

A.: The coils are designed for a .0001, or really for a .00008 moving condenser, though .00015 could be used without alteration to the coils.

J.A.E. (Wellington): I enclose a diagram of a three-coil tuner which I wish to make into an all-wave receiver. Could you supply a diagram?

A.: You cannot make a short-wave set from a broadcast three-coil tuner. Better scrap the set, saving what parts you can and make up the Differential One-valve Set.

SYD. (Otahuhu): I am unable to obtain five-prong bases for the differential series.

A.: You can use four-prong bases if you use the circuit that is given in last week's "Radio Record," and wind your coils as shown in the accompanying diagram.

JOWL (Wellington): Can phones be connected to my all-electric set?

A.: Yes, but you would need an electrician to do the job.

DANIELL (Nelson): Can I add a further stage of screen grid to my three-valve screen grid job without altering the present wiring?

A.: It is not an easy job to add a further stage to a commercial receiver. No doubt it could be done if you were very familiar with the circuit.

2. What amount of current would the Daniell cell charger deliver?

A.: About half an amp.

3. What amount of current does my set use?—A $\frac{1}{2}$ amp.

4. Can I better my valve combination?—No.

XYZ (Wanganui): Can I use 34 gauge enamelled wire instead of 36 or 38, and will the number of turns remain constant if I construct a celluloid choke?

A.: You may use 34 gauge and the same number of turns, but your choke will be much bulkier than if you use 38.

H.C. (Dannevirke): Could the Differential Four be better than my commercial kit set?

A.: We are inclined to think it would.

2. Would the Outspan Five be better than the Diff. Four?

A.: The Outspan Five is the culmination of the series of articles of the Diff. series. It is better than any of the smaller ones.

3. Could I use any parts of my set for a Diff. Four?

A.: Yes, quite a number of them.

4. What ratios are the transformers in my set?

A.: As far as we know, 3 $\frac{1}{2}$ to 1.

A.E.S. (Hastings): I am interested in shortwave work, but am quite an amateur. Could you suggest a book on shortwave receiver construction?

A.: If you are interested in short-wave you should get in touch with the Sec. of the N.Z. Shortwave Club. Suitable books on the subject are the "Radio Guide," and for those a little more advanced, Handy's Handbook.

TWO-VALVER (Christchurch): Is the enclosed circuit the combination of the detector circuit of the B.D. and the amplifier in the Crystal Valve and Amplifier, satisfactory?

A.: Yes, we have indicated the position of an essential condenser and one or two values.

2. What would be the value of the biasing resistance for the 171A's?—2000 ohms.

3. Would a 112A valve in the last stage give more volume?

A.: Yes, it might even be better for you to use a high gain power valve such as B605. This would require a biasing resistance of 2250 ohms.

RADIO (Mosgiel): Has automatic volume control any decided advantage?

A.: It is a handy refinement, but that is all.

2. Can anything easily go wrong with it?

A.: We are not in a position to say, as we have had no experience of this new feature.

3. I am told tone control is not satisfactory. Is this true?

A.: Tone control is only a method of introducing a certain amount of distortion, but you need not use it unless you like. A set although provided with a tone control, can be equally as good for real reproduction as one without it.

Note.—We cannot answer your last question as we have had no experience of the receiver in question.

C.G. (South Dunedin): I intend to build the Outspan Five. Would the tickler coil be satisfactory if placed inside the secondary at the opposite end to the primary?

A.: Yes, if about 60 turns are used.

2. Is my valve combination suitable?

A.: Yes, but bias the second last valve with 4 $\frac{1}{2}$ instead of 9.

3. I am using .0005 tuning condensers. Will 60 turns be correct for the secondary, 30 for the primaries, and 25 for the aerial coils?

A.: Approximately, yes. The primaries may possibly be reduced to 25, but try 30 to start with, and if the set is difficult to control reduce to 25.

4. Would a separate rheostat for the detector valve be an improvement?

A.: It would not be worth its inclusion in the circuit.

5. How is the third aerial terminal connected?

A.: It is connected through a .0001 fixed condenser to the plate of the a.g. valve.

6. I have two a.f. four transformers and a 5-1 of another make. How should I use them?

A.: Use the two A.F.4's.

7. Which is correct for the differential condenser, a .002 or a .0002?

A.: The .002 was a misprint; it should have read .0002.

8. I have a 10-1 ratio dial and two ordinary dials—which would be better for the detector stage?—The 10-1.

CORRESPONDENTS must attach this coupon to all queries sent to the Technical Editor (Box 1032, Wellington). Questions arriving without it are likely to go astray or be delayed.

Name of set

Number of Vales

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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9. Would a 3-ply panel be satisfactory?

A.: Yes, if coated with Sapolin or some insulating paint of that description.

10. Would two shielding boxes as used for the old B.D. Five be satisfactory?

A.: Quite, only they are a little more cumbersome.

11. I have an r.f. choke of 1000 turns wound in slots. Is this satisfactory?—Yes.

J. H. (Auckland).—Would a low loss coil be sufficiently efficient for the wave-trap described by "A.H.H."?—Yes.

2. Would the efficiency of either the set or the wave-trap be impaired if the latter were constructed in a cabinet?

A.: Yes; the wave-trap should if possible be shielded and away from the set.

3. What is the capacity of the variable condenser?

A.: .00035, but see our amended article last week.

4. Would you tell me the method of determining the capacity of variable condensers?

A.: The capacity in mfd. is equal to .0885 x N x S divided by 1,000,000.

Where S is the area of a moving vane in sq. centim. D is the air gap and N the number of vanes.

5. Would d.s.c. wire do as well or better than d.c.c.?

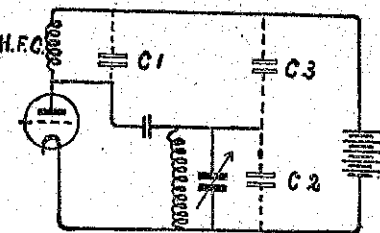
A.: The silk covered would be the better though, there is very little difference.

6. What is the best earth?

A.: We cannot do better than refer you to a very complete article which was published in the "R.R." on June 6, 1930.

IGNORANT (Johnsonville): I can get numerous stations on the higher wavelengths, but below everything seems distorted. I am using 5 201A valves.

A.: It seems that your set oscillates on the lower frequencies owing to there being no adequate means of controlling feed-back. Your set is evidently an old one, and should be taken to a reliable radiotician for overhaul. Some type of power valve should be used in the last stage, and because of this the connecting link between the bias of the last two valves should be broken. If your diagram is correct then your C battery has been reversed. C—should go to the grid return, that is, the g.b. terminal of your transformer. A different amount of



Types of Condensers.
C1, C2 and C3 are bypass, while the unfettered fixed is a grid condenser. C3 on page 16 is a blocking condenser.

bias should be placed on each valve, the last one having much more than the first.

2. Is it possible to alter the set to include a s.g. valve, and would this give better results?

A.: It is possible unless your set is awkwardly laid out. It would not be a very simple matter, but it could be done by anyone who knew something about the job, and it would improve your long-distance reception.

3. When I rotate the two ganged condensers I get a loud crackling noise in the loudspeaker.

A.: This is due, probably, to the moving and fixed plates touching one another. See that there is no dust between the vanes, and examine them very closely, at the same time moving the condensers.

4. Would a power valve improve quality from 2YA?

A.: It would very much improve the tone, but as we have pointed out before, would need to be biased correctly.

5. Is there any difference in the construction of the following fixed condensers: By-pass, grid, blocking, and between the following variable condensers: Tune, reaction, straight line frequency?

A.: Very little. It is really only a difference in their use. The term "by-pass" is used generally with reference to condensers that are between a high tension supply and earth to conduct any stray high frequency current that may be where it should not. Grid condensers are of small value, and are used in the grid circuit of the detector valve, in conjunction with a grid leak to cause the valve to rectify. Whereas the capacity of a by-pass condenser ranges from .25 upwards, the grid condenser ranges from .0001 to .0003. A grid condenser can be used in other parts of the set, such as across the transformer primaries. A blocking condenser might be anything, because any condenser blocks l.f. current. When the term "blocking" is applied it generally means that the condenser is placed in a circuit so that it will prevent the passage of low tension current, i.e., the current used for ordinary power work, having a low frequency, if a.c. On the other hand, h.f. current has a frequency of many thousands and is rarely measurable in volts.

As for the variable condensers, a tuning condenser is any condenser that is connected across the tuning coil to make it resonate at any particular frequency. In other words, it is the condenser which,

when used with a coil, enables a station to be tuned in. A straight line frequency condenser is a type of tuning condenser so named because of the shape of its plates. A reaction condenser is, in construction, the same as a tuning condenser. It is used to control the amount of h.f. energy fed back into the detector coil, this process making the set more sensitive. There are a few special reaction condensers that are not used for tuning. Outstanding among these is the differential condenser.

A. F. (Auckland).—I am using commercially made shortwave coils, and reaction is controlled by .0005 differential condenser. Could I replace this by a differential without alteration to the coils?

A.: In all probability, no. The tickler would probably be too small.

2. I wish to add another stage of amplification to my two valves. Would it be better with a s.g. as in the Diff. Three or a stage of audio?

A.: It would be better to use the s.g. h.f. stage.

3. I am using a 7 meg. leak. Would a 10 meg. be better?

A.: 10 megs. is the better for shortwave work.

AUSSIE (Wellington).—Interference from power leakages is completely ruining by reception. I am told a counterpoise improves matters. Could you possibly describe one.

A.: A counterpoise is a second aerial slung very carefully underneath the proper aerial. It is about 10 feet from the ground and every care must be taken to insulate it from anything grounded. By a lead-in it is brought to the set and attached to the ground binding post. The ordinary ground must be disconnected.

E. J. (Coleridge): Is it possible to purchase "A," "B," and "C" eliminators?

A.: We do not know of any particular "A," "B" and "C" eliminators, though the Atlas people turn out a "B" and "C" eliminator and a trickle charger combined. This is arranged so that when the eliminator is switched off the charger is switched on. In reality, of course, this is an "A," "B" and "C" eliminator. If you can obtain a "B" and "C" eliminator you can always have an "A" eliminator made up, or can purchase one. You must use a voltmeter, and keep a fairly constant check to see that it is not delivering a voltage that is too high, otherwise your valve filaments will suffer.

OHM (Oamaru): Is the enclosed circuit suitable for shortwave?

A.: Yes, but substitute the C1 and C5 with a single small value condenser such as .0001.

2. What Osram valves do you suggest for the circuit?

A.: H410 and L410.

3. What is the difference between a differential condenser and an ordinary one?

A.: A differential condenser has two sets of fixed plates and one set of moving plates. An ordinary condenser has one set of fixed and one of moving.

NINETY-ONE M. (Otorohanga): I have been troubled with heavy interference which entirely blots out reception. A neighbour living about a mile away suffers equally badly. A high tension transformer runs right up to the house about a chain distant from the aerial. I have complained to our local power board, but they cannot offer any solution. Could you or any of your readers assist in identifying the interference?

A.: We suspect the transformer. If you have complained to the power board and do not get satisfaction, write direct to the District Radio Inspector and restate your complaint. Perhaps other listeners in that district seeing this note may care to write us on the subject.

FRESH (St. Heliers): Could you advise me where I could get a book dealing with the subject of radio right

from the beginning? I want to know something about the "How and Why"?

A.: Probably the best book in your case is "Wireless, the Modern Magic Carpet," sold by the Te Aro Book Depot, Wellington. The "Radio Guide," published by ourselves, contains a big section devoted to the elements of radio, but is not, of course, as full as the "Magic Carpet."

H. J. P. (Blenheim): Will the values of the fixed condensers, audio choke and variable resistances in the "Guide" be satisfactory for my valves?—Yes, quite.

2. What is your opinion of the s.g. as a detector?

A.: It is quite a good valve for the purpose, especially for shortwave reception.

MUG. (Mangapuroto).—My Daniells cell charger will not keep my six-valve set supplied with current. If sets the accumulator run down. The consumption of the set is approximately an amp and a half.

A.: This is far too much for the Daniells cell charger. It is only a $\frac{1}{2}$ amp charger. It is not intended for a heavy current such as your accumulator will be called upon to supply. We advise you to keep it on your accumulator, though, now you have it in operation, as it will no doubt charge it slightly, and pay for itself. You, of course, will have to take it along to the battery charging house regularly. It appears that you have made it up quite correctly. If you want to use lower consumption valves you should try the new 221's where you have 201A's, and a B605 where you have the 171. You would find, then, that the charger will keep your accumulator charged for a very much longer time. Only the other day an accumulator was shown us which had been kept charged by Daniells cells for three years, and there was not a trace of sulphation upon the plates. The set, however, was drawing only $\frac{1}{2}$ amp.

E. J. G. (Marton).—When I first bought my set a buzzing noise could be heard in the speaker when the grid leak was removed. Now it does not make any difference.

A.: You have omitted to tell us the essential fact. Is your reception any weaker now than when the buzzing occurred, and if not, the phenomenon need not worry you, as it is due probably to characteristics of the detector valve.

E. M. F. (Invercargill).—I have a seven-valve a.c. receiver, and I wish to build an a.c. shortwave adapter. Could I use one such as shown in the enclosed circuit?

A.: Not without introducing a great deal of hum. A.C. shortwave adapters have not proved themselves satisfactory. We have a good one in last year's "Guide," but it used a small "B" battery. The trouble generally is hum, as it is almost impossible to keep this out of shortwave reception unless special precautions are taken.

TENDERS RADIO INSTALLATION

TENDERS for the above, endorsed "New Plymouth Hospital Radio Installation," will be received by the undersigned up till 12 noon on Wednesday, April 8, 1931.

Plans and specifications will be supplied upon payment of £2/2/-, which will be refunded upon receipt of a bona-fide tender.

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W. H. QUICKFALL,
Hon. Secretary, N.P. Hospital Radio
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- "Radio Manual," by Sterling and Kruse, 26/.
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- "Radio Physics Course," by Ghirardi, 14/.
- "Radio News Handbook, 1930," 2/9.
- "Radio News 1001 Radio Questions and Answers, 1930," 2/9.
- "Radio News 101 Hook-ups," 1/9.
- "How to Electrify Your Set," by Osgood (U.S.A.), 1/9.
- "The All-Electric Receiver," by "Listener-In," Publishing Co., 3/6.
- "Radio: A Study in First Principles," by Burns, 11/.
- "Mathematics of Radio," by Rider, 10/6.
- "Radio Operating Questions and Answers," by Nilson and Hornung, 14/.
- "Radio Amateur Handbook" (Handy's), latest edition, 5/3.
- "Radio Amateur Call Book" quarterly, 5/8.
- "Theory of Radio Communication," by Filgate, 12/.
- "Principles of Radio Communication," by Morecroft, 41/6.
- "Elements of Radio Communication," by Morecroft, 29/.
- "Direction Finding," by Keen, 27/.
- "Radio Data Charts," by Beatty, 7/9.
- "Seeing by Wireless" (Television), by Ralph Stranger, 1/6.
- "Collins's Wireless Diary, 1931," 4/.
- "Thermionic Vacuum Tubes," by Van der Bijl, 26/.
- "Radio Receiving Tubes," by Moyer and Westrel, 14/.
- "How Radio Receivers Work," by Roberts, 8/.
- "To Design," 1/- per copy.
- "Radio Engineering" (a monthly issue), 21/- per annum.
- "Projection Engineering" (monthly) 21/- per annum.
- "Wireless, the Modern Magic Carpet," by Ralph Stranger, 4/9 (favourably reviewed by Editor "Radio Record").
- "Radio Citizen's Call Book" quarterly, latest January, 1931, 2/9.
- "1931 Radio Listener's Guide," 2/10 posted.
- "1931 N.Z. Radio Handbook," 2/10 posted.

Write us Now.

TE ARO BOOK DEPOT,
64 Courtenay Place, Wellington.

SANIO (Timaru).—Can I use power grid detection with PM4DX valves?—Yes.

2. Would there be any gain in amplification if I altered the connections of my audio transformers to the shunt feed audio, as shown.

A.: You may gain in quality slightly, though you will lose in volume. If you are to employ it in the last stage it would be advisable for you to apply grid bias by breaking the return between plate terminal of the transformer and earth, and inserting therein a grid bias battery with the positive terminal toward the earth. The value of this battery will depend upon the bias to be applied to the valve.

HUGO (Greymouth): Can I use .00035 condensers for the Outspan Five? Or could I reduce their capacities by removing plates?

A.: You could use .0005 condensers for the Outspan quite well by winding about ten turns less on the secondary coils. The primaries will have to be reduced by approximately two turns, but the tickler should remain the same.

2. Could you forward a rough sketch of the coils somewhat similar to the sketch of the regenerative?

A.: The coils were really so simple that we did not bother with a sketch. If you send a stamped and addressed envelope we will send you the necessary diagrams.

3. Does the diameter of the coil former affect the number of turns?

A.: Yes. If the former is larger than that specified there are fewer turns, and if smaller there are more.

4. Could I procure a blue print for the Outspan Five?

A.: No, a blue print has not been issued. If you have any difficulties we will try to clear them up in Q. and A., if necessary devoting a special article to their elucidation. Would any other correspondents who have experienced any difficulty with the Outspan Five let us know as soon as possible, for this is really a splendid set and very easy to make. The fact that our diagrams were very badly treated in the printing process has caused a certain amount of confusion among readers. If there is the demand we shall supplement the previous article with a redescription of certain points that may not be clear, and suitable drawings.

G. L. (Auckland): Which is the better, a single or double-wire aerial?

A.: A double wire, providing the wires are spaced at a greater distance than six feet, and that the total length of the wires added together do not exceed 100 feet.

2. Which is the better, enamelled or bare aerial wire?

A.: Enamelled is the better because bare wire corrodes.

3. Which is better to have in series with the aerial, a midget variable or fixed condenser?

A.: A midget variable, because it is easier than to alter the capacity of the aerial to suit the particular frequency being received.

4. For efficiency is it better to vary the grid bias to suit different valves?

A.: Most decidedly, yes. Some valves take more bias than others.

5. Which is the best way to vary the grid bias voltage?

A.: By shifting the wander plug to the most suitable tap. Another method is to connect a potentiometer of 2000 ohms across the bias battery and vary the centre tap to give the best results. This method, although it permits of finer adjustment of grid bias, places a certain bleed upon the battery. It is, however, very small.

6. Are 4-volt valves as efficient as 6-volters?

A.: For all practical purposes, yes.

7. What make of transformers do you advise and what ratio?

A.: It pays always to use high quality transformers having a ratio of $3\frac{1}{2}$ or $4/1$.

E. J. L. (Ohura): I want a long and shortwave receiver. Do you know of one? It must be battery operated.

A.: The Philips is the only one we know of, although you could have one of the R.R. receivers made up by any experienced radio dealer.

G. A. T. (Invercargill): My commercial super heterodyne receiver produces a ploppy sound in the speaker when the announcer pronounces a word with an accent on the "t" or "th." What is the reason and cure for this?

A.: The reason is due probably to oscillation caused by the high frequency sounds of the consonants you mention. The cure can be brought about only by the agents for the receiver.

RAY DX (Waikato): Which is the best method of coupling valves—by transformer, as in the Outspan Five, or through a condenser as in September 5 circuit?

A.: The Outspan Five is the better method of coupling s.g. valves. It is conducive to greater selectivity, though sometimes the pickup is not quite as great.

2. For a primary I use 30 turns of 30 d.s.c. on a 2in. former. Is this enough to get maximum results?

A.: It sounds about right.

3. Would it be worth while changing the detector coil to the regenerative as in the Outspan Five?—Yes.

4. Would the regenerative make the set more selective?

A.: Reaction always tends to make a set slightly more selective than a set not using reaction.

5. Does painting a coil with shellac lower its efficiency?

A.: Shellac will dissolve the enamel of covering of wire, but for a space wound cotton or silk-covered wire, shellac does not have a detrimental effect.

STEP DOWN (Taumarunui): Could you supply data for shortwave coils mounted on valve sockets?

A.: A complete table was given in the R.R. of January 30, 1931. Furthermore, details were given in connection with the Differential One, and these could apply to a .0001 condenser.

2. Can you give me information on constructing step-up, step-down transformers to work on 110 volts, 50/60 cycles a.c.?

A.: This information was given in the 1930 Guide, and a table will appear in the 1931 Guide.

Useful Hints

SUPER-POWER valves should be worked at the maximum rated plate voltage with the correct negative grid bias specified, if the best possible quality is to be obtained.

CORRECT grid bias is particularly important for the last valve in a set, and too little grid bias will inevitably shorten the valve's life, introduce distortion, and waste B battery current.

THE chief disadvantage of using wood for a panel is that panel-mounting components are designed for panels of a quarter inch or less in thickness, and that wood of this thickness is not usually sufficient rigid.

ALTHOUGH a small grid bias battery as used for R.F. stages has a very long life, do not imagine that it is everlasting, or you may be troubled with a mysterious and hard-to-define loss of efficiency and crispness.

New Recording Device Of Topical Interest

German Invention

(By "Switch.")

A NEW process for the recording and reproduction of sound vibrations has been devised by a German inventor. It is in many respects similar to the telegraphone, in which recording was carried out by imparting varying degrees of magnetism to a steel wire as it passed between the poles of a magnetic system.

Whereas in the telegraphone the variable magnetism of the steel wire is used to record and reproduce, the sound in this new method is first converted into fluctuations of light.

Photographic emulsions containing metals such as silver, chromium, platinum, etc., are used exclusively, the carrier being a band of celluloid film, metal, paper, or fabric, in the form of tape, strings, or wires. The amount of metal left at the various places on this carrier will be larger where the light has been more intense.

If such a carrier is made to pass through (or close to) a coil situated in the magnetic field of another coil, fluctuations will be set up in this second coil corresponding to the amount of metal at the various points of the carrier-band or string.

These current fluctuations will affect any suitable instrument inserted into the circuit of the second coil. In a telephone receiver a reproduction of the original speech or music would be heard. Any amplifier of the type used in radio practice could be used

THE writer in resuming short-wave listening has been converted back to battery reception. The set he operates is a special circuit and employs only two valves which are of the latest low-consumption 2-volt type. The drain on the "B" batteries is only 2 milli-amperes, and at a conservative estimate, high-class, fresh dry batteries which operate this set should last well over a year. Battery reception is, of course, delightfully quiet, and static even when fairly vigorous on the broadcast band was merely a soft background to the stations to which "Switch" listened.

THE Wellington-Sydney trans-Tasman public radio telephone has often been heard by "Switch" lately. Wellington and London have been testing exhaustively through 2ME, Sydney, but in the evenings the results have not been as good as desired. 2MD, Sydney, however, has given quite satisfactory loudspeaker volume, with the use of only two valves previously referred to. The writer's proximity to the transmitting station of 2YA, Wellington, has resulted in some harmonics from the "big voice" coming in on his short-wave receiver, but as these harmonics are needle-sharp they are readily tuned out.

to increase the power of the fluctuations.

This process of reproduction can be used either in connection with a moving picture or as a substitute for gramophones.

RADIO DIRECTORY

What to Buy and Where

CITIES

ACE and HAMMARLUND SETS, Johns, Ltd.

WESTINGHOUSE Rectifiers Chancery Street, Auckland.

BURGESS RADIO BATTERIES, All Radio Dealers.

LOFTIN-WHITE AMPLIFIERS Stewart Hardware Ltd., Courtenay Place, Wellington.

MAJESTIC RADIO RECEIVERS Kirkcaldie & Stains, Wellington Agents, Lambton Quay.

MULLARD VALVES ... All Radio Dealers.

N.Z. DISTRIBUTORS PILOT PARTS AND RECEIVERS, INCLUDING PILOT SUPER-WASP and GILFILLAN ELECTRIC RECEIVERS Harrington's, N.Z., Ltd., 40-42 Willis St., Wellington. 142 Queen St., Auckland.

RADIOLA RECEIVERS and Farmers' Trading Co., Ltd., Expert Radiola Service. Hobson Street, Auckland.

STEINITE RADIO ... G. G. Macquarrie, Ltd., 120 Willis St., Wellington.

COUNTRY TOWNS

PHILIPS VALVES AND APPARATUS All Good Radio Dealers.

The Five Way Valve

The Pentode in Action--II

by

W. M. DAWSON

A.M.I.R.E. M.I.W.T.



THE pentode has yet another considerable advantage over normal power valves in that to produce the same volume as a three electrode power valve the pentode requires only a fraction of the a.c. grid voltage that would be required for the triode.

If the pentode is fully loaded it gives a larger output of better quality with smaller input signal voltage, and of course a smaller negative grid biasing voltage is required.

Eliminating One Audio Stage.

AS a result of the pentode advantages discussed above, it is possible and practicable to eliminate the normal first stage of a.f. amplification with its valve and coupling transformer.

In addition to the reduction of expense thus involved there is a definite gain in quality, as even the finest components are not 100 per cent. efficient, and every additional stage of a.f. amplification must add something to the overall distortion.

The amplification possible with the pentode is of special appeal to the home set builder on account of the savings shown above. The set may also be smaller and more compact, and requires less power for operation.

As less preceding amplification is required, this gain can often be used to advantage to increase the selectivity of the set by making the radio-frequency stage couplings looser without reducing the signal strength too much.

By virtue of the good high note amplification, the selectivity of the set may be much greater, than with a triode power valve, without seriously impairing the quality of the reproduction.

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Pentode Can be Used in Every Set.

THE only external distinguishing feature of the pentode is an extra connection for the screen grid.

The pentode can thus be readily adapted to existing sets by simply making an extra connection from the power pack (or B battery).

Many enthusiasts are now using the pentode with excellent results. In some cases, however, users have been unable to achieve success, and whenever these cases have been investigated the writer has invariably found that the operating conditions have been quite unsuited to the valve, considering the associated equipment, and it would seem that the pentode is

is hoped, enable readers to use this remarkable valve intelligently and effectively.

Plate Impedance.

THE matter of pentode plate impedance is a common stumbling block with experimenters, who frequently have visions of attempting to "match" the valve impedance to the speaker by using a high ratio step-down transformer. It has been shown above that an essential fundamental of the pentode circuit is the very considerable valve impedance compared with that of the speaker. What is unknown to most people, however, is that recent research reveals a very definite optimum load impedance for a given pentode valve, and this optimum value does not hold good for other types.

The correct load impedances for the following well-known types are:—

C243		4500 ohms
D243 and E443	..	8000 "
B443		6250 "
C443		9000 "
E443 N & F443	..	10000 "
C643		9500 "

With a triode valve, a considerable amount of mismatching of the load impedance is possible before audible distortion takes place, though the undistorted output of the valve is reduced.

In the case of the pentode, the correct load impedance is more important, and when deviated from, produces that shrill reproduction, with high note emphasis that many people wrongly consider to be a definite characteristic of pentode reproduction.

The pentode can and will give quality at least equal to the triode—reproduction with well-defined bass frequencies and excellent balance.

The Moving-Coil Speaker.

LET us consider first the case of the moving-coil type of loudspeaker, where the impedance of the voice coil is supposed to remain constant at all frequencies in the musical range. In practice we must qualify this by saying comparatively constant, because the impedance does, of course, rise at higher frequencies.

Through a constant impedance load we must pass a uniform current, if we are to obtain uniform power expenditure, and as this "constant current" principle is the main feature of the pentode, it follows that the pentode power valve, plus moving-coil speaker, very closely approaches the ideal in respect to absence of frequency discrimination.

We qualified, and said "very closely approaches the ideal," not because of any shortcomings of the pentode,

but because even the moving-coil speaker is not perfect in that its mechanical and electrical resonances introduce distortion of their own, and a fidelity curve of the acoustic output plotted against wattage input will soon disillusion any who fancy that the modern speaker closely approaches perfection.

In fact, if the speaker inductance, capacity and resistance are known, it is comparatively simple to proportion the values of the shunt capacity and resistance so that the effective impedance of the speaker-filter network remains substantially constant over the useful part of the audio-frequency range.

The "plate-load" of the pentode thus remains constant, as in the case of the moving coil speaker.

The effective impedance of the speaker circuit at, say, middle C (256 hertz), is reduced by the effect of the shunt circuit, and it may then be desirable to use an impedance adjusting device to have the effect of raising the speaker impedance to the optimum value indicated previously.

This can readily be done with an output choke or output transformer, and is amenable to mathematical analysis precisely as shown for the moving coil case.

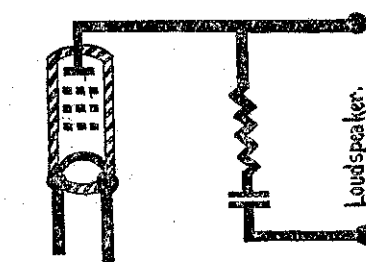
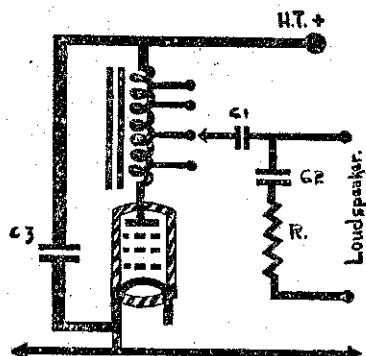
However, as hardly any readers have at their disposal means of measuring their effective speaker impedance or other characteristics, the output choke filter system will be adopted here as it is comparatively easy to build one with the necessary high inductance, and tapings can be readily brought off, and the correct one determined by trial.

The circuit will then be as in Fig. 10.

Alternatively the filter C2R may be shunted round the choke in which case:—

- The breakdown voltage across C2 will be greater.
- C2 requires to be smaller for the same effect.
- R requires to be larger for the same effect.

A suitable choke for any of the pentodes mentioned in this article could



Upper—Output filter circuit for magnetic speaker. C1, 4 mfd.; C2, 4 mfd.; R, 5000-10,000 ohms.

Lower—The elements of the filter circuit mentioned in the article. In this simplified circuit the plate current flows round the speaker windings. Condenser approx. .01 mfd. Resistance approx. 5000-10,000 ohms.

still a very much misunderstood valve with the average radio enthusiast.

No valve can work to best advantage under adverse conditions, and the pentode is as docile and easy to handle as a triode once its little peculiarities are understood.

No apology is therefore required for going into practical considerations in some detail. This, in conjunction with the release of new data, will, it

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then be constructed by winding on a 1/2 in. square core some 9500 turns of 36 s.w.g. enamelled wire.

The core window would require to be approximately 1 1/2 in. x 1/2 in. in view of the desirability of layer insulation, and particularly of adequate end turn insulation from core (the voltages developed across it being several times the plate voltage.) The airgap in the core would be in the vicinity of 1.32nd inch.

An alternative design, using 1/2 in. material for the core limbs, would require 6800 turns of 36 s.w.g. enamelled wire, the window being approximately 1 1/2 in. x 1/2 in., and the airgap about 3/64th in.

Suitable tapping positions from the commencement of the coil (say the top or HT end) are given in the following table with the impedance ratios thus available—they will cover all ratios possibly required.

Impedance Ratio.	Turns Ratio.	Tap at
16 to 1	4 to 1	1/4
12 to 1	7 to 2	2/7
9 to 1	3 to 1	1/3
6 to 1	5 to 2	2/5
4 to 1	2 to 1	1/2
3 to 1	1.75 to 1	4/7
2 to 1	1.4 to 1	5/7
1.5 to 1	1.25 to 1	4/5

If the whole choke is common to both circuits, the ratio is of course 1 to 1. The taps must be well insulated where they are brought out.

It is interesting to note in passing that the average magnetic speaker cone material is made unduly hard to accentuate the high notes, to make up for the triode power valves deficiencies previously discussed. A softer paper can be used to advantage with the penthode valve.

Using the corrective methods outlined above, the penthode user will be delighted with the quality of reproduction obtainable on even a magnetic speaker.

Adjustment Hints.

THE negative grid bias should first be set at the value given by the valve maker for the plate voltage used. This can then be varied slightly under operating conditions until a milliammeter inserted in the B₁ lead shows a minimum of "flicking."

Do not worry unduly about whether the needle flicks upwards or downwards, as this is often governed by another factor which does not seem to be at all well known.

This is the correctness of the plate load, and in general it may be stated that if with correct bias and "B" voltage a strong signal causes the needle to flick upwards, second harmonic distortion is indicated, and a higher load impedance is desirable. This is obtained by using a higher step-down ratio in the output choke or transformer.

If, on the other hand, the milliammeter needle kicks downward, the principal distortion is due to the presence of a third harmonic component, and the load impedance may with advantage be reduced (by lowering the step-down choke or transformer ratio.) Careful attention to these points will prove well worth while.

Caution.

UNDER certain conditions, e.g., with very high impedance plate load, the penthode is capable of developing enormous voltages which may rise to a value many times that of the plate voltage, and this voltage can easily wreck the valve itself, or break down

the choke, transformer, condenser, or speaker insulation.

As an open circuit is an infinite impedance, enormous voltages are developed if any part of the plate circuit is opened with the valve in operation.

It is therefore absolutely imperative that the speaker is not disconnected, while the penthode grid is being excited (i.e., while the amplifier is functioning.)

The above article is by no means intended to be an exhaustive treatment of the penthode, in fact many alluring possibilities, such as its use as a detector, or in other positions have not even been hinted at, but it is hoped that the notes on its handling as a last stage "power amplifier" will at least assist in drawing aside the veil, and making the penthode better understood and appreciated, as it is undoubtedly destined to be used much more freely than at present.

Fortunately, the human ear is very tolerant of imperfections in reproduction—particularly in the matter of relative sound intensities.

A loudspeaker is not necessarily of high excellence because it is a moving coil type, but a good moving coil speaker represents the highest attainment in this field at the present moment, and as explained above, it is peculiarly suited to work out of a penthode power valve.

Match the Moving Coil to the Valve.

MOST manufacturers state the average value of the impedance of the voice coils of their moving coil speakers, while in many cases the necessary transformer is included with the loudspeaker.

Let us take some representative figures, and work out the transformer ratio required to give the ideal impedance match.

Case 1: E443N valve with speaker impedance of 50 ohms, then:—

$$\text{Impedance Ratio} = \frac{10,000}{50} = 200 \text{ to } 1$$

The impedance of a transformer winding at a given frequency is proportional to the square of the number of turns of winding, consequently the impedance relationship between two windings of a transformer is proportional to the square of the turns ratio, e.g., a 10 to 1 turns ratio gives a 10 x 10 or 100 to 1 impedance ratio, so that the required turns ratio for our matching transformer becomes $\sqrt{200}$, approximately 14 to 1.

Case 2:—C443 with 10 ohm coil.

$$\text{Impedance Ratio} = \frac{9000}{10}$$

$$= 900$$

$$\text{And turns ratio} = \sqrt{\frac{9000}{10}}$$

$$= \sqrt{900} = 30$$

And a 30 to 1 ratio step-down transformer is indicated.

If you have tried a penthode-dynamic combination without full success, just check up your operating conditions as above, and make the necessary correction in your transformer ratio.

Magnetic Speakers.

MAGNETIC speakers without exception have a rapidly rising impedance at the higher musical frequencies, in fact the impedance of a so-called "high impedance" magnetic speaker is commonly of the order of 2000 ohms at 256 cycles (middle C), rising somewhat slowly at first, with increasing frequency, but later increas-

ing more rapidly until a value of around 20,000—40,000 ohms is reached at 5000 hertz. (The hertz is now the adopted unit indicating cycles per second.)

Think in terms of triode theory for a moment, and remember the glibness with which speaker impedance "matching" is spoken.

The so-called "match" is made at a comparatively low frequency, say 256 hertz, but as the impedance at 5000 hertz is many times the value at 256, it follows that for high frequencies the speaker is very much mismatched.

With triodes, this results in a drastic reduction of energy expended in the speaker at high frequencies, and the consequent lack of proper proportion of these in the reproduction. Mechanical high frequency resonances cannot properly make up this loss, and the treble is unnatural.

With the penthode, this increased impedance at high frequencies acts somewhat in the reverse manner, and the upper frequencies are accentuated. Further, if the listener is critical, he will notice that distortion first occurs on the higher notes.

Fortunately, this effect can be overcome without much trouble by paralleling the speaker circuit with another whose characteristics are exactly the reverse of the speaker winding.

The speaker winding increases in impedance with rising frequency because it is inductive (the impedance being proportional to $2 \times 3.1416 fL$ where f is the frequency in hertz and L the inductance in henries).

The impedance of a condenser, on the other hand, decreases with frequency increase (being proportional to $1 \div 2 \times 3.1416 fC$, where C is the capacity in farads).

A condenser shunted round the speaker windings then has a marked effect in stabilising the plate load impedance at different frequencies, and this is really the main action of a "tonefilter" used with a magnetic speaker on a penthode output. An auxiliary effect is, of course, the greater "bypassing" of the upper frequencies, but the major effect is ob-

Tips and Jottings

WHEN overhauling a set which has been put away for some time and which is being reconditioned, do not forget the grub screws on the panel controls will probably have worked loose and will need tightening.

A PANEL which has been stood aside for some months may show signs of greyness, but this can generally be removed by a light application of mineral oil, and polishing with a soft, clean duster.

A good stain for darkening baseboards may be made from a solution of permanganate of potash.

IF a cabinet has been scratched badly so as to reveal the white wood, careful treatment with a solution of permanganate of potash will often restore the colour, and enable the scratch to be hidden.

IT is a good rule never to discharge an accumulator at a rate of more than one-tenth of its actual ampere hour capacity. (A twenty actual hour accumulator should not be called upon for more than two amps., etc.)

OWING to evaporation the level of the liquid in an accumulator falls in time, but it should not be allowed to go lower than a quarter of an inch above the top of the plates, when loss should be made good by adding a little distilled water.

TO connect the 'phones the wrong way round in a valve receiver tends to demagnetise them and make them insensitive.

tained through impedance stabilisation.

Such a simple capacity filter helps considerably, and is sufficient in certain cases, but a slight elaboration of this idea is an improvement, and consists of adding a fixed resistance in series as indicated in Fig. 9.

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FEATURE PEEPS

... at ...

FUTURE PROGRAMMES

SUNDAY

From Auckland

THE service, conducted by Pastor W. Campbell in the Church of Christ, West Street, will be broadcast this evening. Then will follow a relay of a concert to be given in the Town Hall by the Municipal Band, under Captain George Buckley.

Wellington Features

THE evening service in St. Andrew's Presbyterian Church will be relayed. The preacher will be the Rev. R. J. Howie, and the organist and choir-master Mr. Frank Thomas.

In the subsequent studio concert the Miramar Silver Band will play, among other numbers, two of the contest pieces, "The Flying Squad" march and the selection "Hamlet," by Thomas. Mr. George Ellwood, cellist, will give a short recital, and Mr. R. J. G. Madigan, bass, will sing "The Monk" and "Pieta, Signore" (O Lord, have Mercy).

Christchurch Notes

THE Rev. L. A. North will be the preacher at the Oxford Terrace Baptist Church on Sunday evening, when the service will be relayed.

Following this broadcast there will be a relay of an open-air concert—the last of the season. The programme will be supplied by the Woolston Band under conductor R. J. Estall, and will be a fitting finale to a very successful series of concerts.

From Dunedin

THE evening service in Hanover Street Baptist Church will be broadcast. The Rev. E. S. Tuckwell will be the preacher, Mr. H. P. Desmoulins will be the choir-master. Afterward a relay will be carried out from 3YA.

MONDAY

Wellington Notes

AT 7.40 p.m. Mr. H. C. South will give his fortnightly talk on "Books—Grave and Gay."

The vocal portion of the programme will be undertaken by Signor Lucien Cesaroni and his talented company, who will provide a splendid variety of numbers, many of them with orchestral accompaniment. Signor Cesaroni will sing "Bedouin Love Song," "Star of Eve," "Song of the Flea," "Macushla," and "The Calf of Gold."

The Orchestra will also combine with Miss Phyllis Hanly, pianist, in presenting the First Movement of Grieg's "Concerto in A Minor" and will play "Valse," by Mischa Levitski, which has not previously been broadcast.

From Christchurch

THE monthly review of books will be given by Mr. E. E. Wiltshire, president of the Linwood Library.

The Christchurch Municipal Band, under Conductor J. Noble, and assisting artists, will provide the evening's concert. The band will present a well-varied programme, including, in view

of this being the eve of St. Patrick's Day, Ord Hume's "Gems of Irish Melodies," and the old favourite, "London-derry Air."

Dunedin Notes

A PROGRAMME of light music will be provided by Pettitt's Sextet. The items will include selections from "The Cabaret Girl," "Country Girl," and "Katinka."



MISS HAMERTON.
A charming 3YA soprano.
—Stefano Webb, photo.

TUESDAY

Auckland Notes

MRS. LES. CRANE will give a further talk at 3.15 p.m. on "The Beauty of Mind and Body in Relation to Diet," and at 7.40 p.m., Mr. Rod Talbot will give a talk on "Motoring."

As to-day is St. Patrick's Day, appropriate programmes will be broadcast. The evening's concert will be devoted to music and humour of the Emerald Isle. The Orchestral Octet, under the direction of Mr. Harold Baxter, will play, among other numbers, "Hibernian Suite," "The Shamrock," and "Three Old Irish Airs." Master Desmond Casey, boy soprano, will sing "Oft in the Stilly Night," "Mother Machree," and "Killarney," and the popular contralto, Miss Martha Williamson, will also be heard in Irish songs. Mr. J. F. Montague will give examples of Irish humour.

FEATURETTES

Cesaroni Recital

2YA, Monday.

"My Irish Rose"

4YA, Tuesday.

"A Night With Ketelbey"

2YA, Thursday.

Professor Zimmerman,

Violinist

3YA, Thursday.

Kenz Orpheans

4YA, Friday.

From Wellington

2YA will be on the air at noon to broadcast results of the Wellington Racing Club's meeting (second day). At 7.40 p.m. the usual weekly talk "For the Man on the Land" will be given by a representative of the Agricultural Department.

At 8 o'clock an Irish concert to be given in the Town Hall will be broadcast. The programme has been well arranged, and the performers include some of Wellington's best instrumental and vocal talent.

The Orchestra, under Signor A. P. Truda, will be heard in a number of Irish selections, including "The Shamrock," "Killarney," and a "Medley of Irish Songs." Items will be given by the choir of Marist Brothers' School, St. Mary's Convent Philomel Choir, Guilford Terrace Convent School Choir, and by numerous soloists. There will be recitations by Mr. S. W. Robson. Mrs. G. Aldridge will be at the piano.

Dunedin Notes

A COMEDY-DRAMA, "My Irish Rose," to be produced at Gore, will be relayed.

WEDNESDAY

Auckland Notes

A BOOK review by Mr. H. Dwyer will be broadcast at 7.40 p.m.

A combination new to listeners, the Auckland Tramways Male Choir, will be heard this evening. This choir, which consists of about thirty voices trained by Mr. Duncan Black, the well-known basso, will sing several male part-songs, and should delight 1YA listeners with their splendid concerted work. There will be solos by Mr. Duncan Black.

The Monte Carlo Orchestra, under the direction of Mr. F. K. Cunningham, will be heard in several instrumental numbers, including "The Geisha," "La Traviata," and "The Girl Friend," and also several of the latest hits. A topical talk will be given by Mr. A. B. Chappell, M.A. The instrumental music will be of a bright and breezy nature and will include the overture "Jolly Fellows," "Busy Bee," a saxophone solo "Saxophobia" (played by Mr. A. H. F. Wright, a member of the Orchestra),

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"Tales of Hoffman," introducing a vocal duet, a selection from "Dorothy," a valse medley "I Keep on Saying Good-night," and a foxtrot "My Ideal." The choruses of both the last-mentioned numbers will be vocal. The session will conclude with dance music of electrical recordings from 9.30 till 11 p.m.

Christchurch Features

THE fortnightly "Radio Service" talk will be given by Messrs. D. Coss-grove and W. Melbourne.

Mrs. H. Turnbull (mezzo-soprano) will make her radio debut this evening. Associated with her on the vocal side will be the ever-popular Miss Nellie Lowe and Mr. A. G. Thompson, who will sing solos and duets. Miss Maisie Ottey, a very clever pianiste, will contribute some novelty numbers. Humour will be provided by Mr. George Titchener. Mr. M. E. Withers, clarinetist, will play Mendelssohn's "Spring Song" and "Les Alsachiennes." Further instrumental items will be provided by the Christchurch Broadcasting Trio.

Dunedin Notes

TWO artists will make their debut at the 4YA microphone this evening. They will be Miss W. Martyn (elocutionist), who will present dialect numbers, and Mr. W. H. Satterthwaite (tenor). Mr. Satterthwaite is one of the leading members of the choir of the Dunedin Returned Soldiers' Association. He is also a member of the choir's standard male quartet, which combination appears regularly at the choir's concerts which are held throughout the year in the Dunedin Town Hall.

The popular Kenz Orpheans also appear on this evening's programme, and have added to their repertoire the very latest hits. The last item of the programme is a new and exceptionally fine popular melody, "Go Home and Tell Your Mother."

Wellington Features

THE next of the Wednesday night overseas recorded programmes will

be presented this evening. At 9 o'clock, Dr. Guy H. Scholefield, O.B.E., will give a talk on "Matters of International Interest." The evening's entertainment will also include a session of international dance music from electrical recordings.

From Christchurch

THIS evening's miscellaneous programme will be contributed by a variety of entertainers.

Dunedin Notes

THE home science talk to be given by the Home Science Extension Department of Otago University will be on "Household Conveniences." At 7.15 p.m. Mr. D. Hercus will speak on "Iodine Deficiency."

The glory of the Russian composers will be brought back to listeners this evening by the items to be played by the Studio Trio. Needless to say, Tschalkowsky is represented on this programme and amongst the others are such brilliant musicians as Sibelius, Arensky and Barmotin. The Studio Trio will present more of the lighter works of these composers.

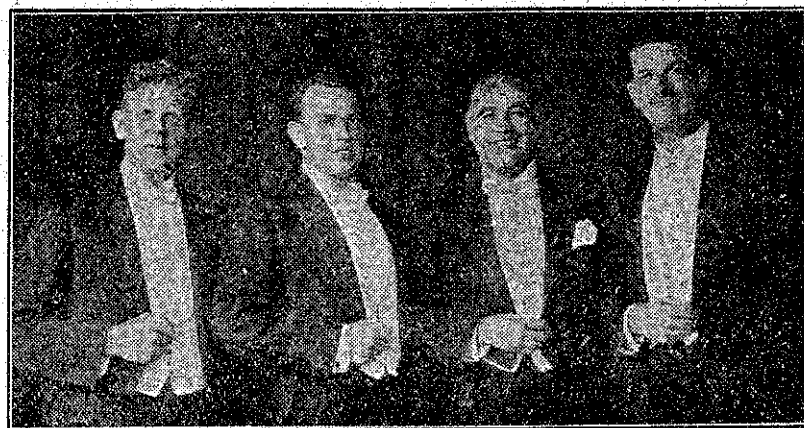
THURSDAY

Auckland Notes

THE subject for the home science talk, prepared by the Home Science Extension Department of Otago University for presentation from 1YA, 2YA and 3YA, will be on "Recipes."

Another of the series of talks under the auspices of the New Zealand Manufacturers' Association will be broadcast from 1YA at 7.40. It will be entitled "Biscuits," and is to be given by Mr. J. P. O'Connor.

Appearing on this evening's programme is a new radio artist, Mr. William Coleman (tenor), who will sing three songs which were popular many years ago, "Come into the Garden, Maud," "Sally in our Alley," and "Bianca." Miss Patti Schnackenberg



THE LYRIC QUARTET.

Broadcasters who make regular appearances on 2YA schedules.

—S. P. Andrew, photo

(contralto), who was last heard at the recital given by the Auckland Piano Students' Association, will also appear, and novelty pianoforte numbers will be given by Mr. D. Armishaw.

The instrumental portion of the programme will be provided by the Orchestral Octet, amongst the numbers being the ballet suite "La Source," and the suite "Four Fancies." The ever-popular Asquiths will present another of their clever drawing-room entertainments and the programme will conclude with a gramophone lecture-recital of the latest recordings to be given by A Commentator.

Wellington Features

THE speaker for the home science talk at 3.15 will be Miss Imelda Meadows.

The Wellington Commercial Travellers' and Warehousemen's Association Orchestra will provide the whole evening's programme. The orchestra is under the conductorship of Mr. J. F. Woodward, who has selected for presentation "A Night with Kettelbey."

This will include numerous works by this popular composer, opening with the overture "Musical Jig Saw" and the selection "Gallantry." Miss K. McIvor (soprano) will be heard in "Down in the Forest" (by Ronald) and "An Island Shelling Song" (by Kennedy-Fraser). Mr. A. I. Murray (baritone) will sing "Farewell to Summer" (by Johnson) and "To-morrow" (by Keel).

Christchurch Notes

Featured on to-night's programme will be Professor R. C. Zimmermann, whose violin solos will be played to orchestral accompaniment. Four items will be played: Beethoven's "Romance in C," Hubay's popular "Hejri Kati," "Legende" by Wieniawski and Kreisler's "Liebesfreud."

The vocal portion of the programme will be provided by the Melodious Quartet, whose concerted numbers will be "On Himalay," by Bantock, and the plantation chorus "Good-night." A number of duets and solos will also be sung, several of them having orchestral accompaniment.

FRIDAY

From Auckland

MR. REG. MORGAN's popular orchestra will provide the instrumental portion of this evening's pro-

gramme, the items including a violin solo by Mr. Gar. Fowler entitled "Hungarian Dances," a saxophone duet by Messrs. C. and V. Hoffman, "La Golondrina," and several dance numbers.

Miss Joyce Seth-Smith (mezzo-soprano) will be heard in a group of classical ballads. Mr. Claude H. Suisted (baritone) is also singing "Red Devon by the Sea," "I'll Sing Thee Songs of Araby" and "Can't You Hear Me Calling?" The Snappy Three are making a welcome reappearance on this programme in several of the latest hits.

Wellington Notes

A LECTURETTE entitled "At Work at the Headquarters of the League of Nations" will be given by Mr. E. S. Harston.

The vocal numbers for this evening's programme will be accompanied by the Orchestralina. Mrs. A. P. Truda (soprano) will sing "Indian River Song," "Waiata Poi," "Jhelum Boat Song" and "Wake Up." Mr. Denis Sheard (tenor), late of the Humphrey Bishop Company, will include among his numbers "I Hear You Calling Me," "When I Go Home," and "Dreams of Long Ago."

Also on this programme will be two performers already known to 2YA listeners, Mr. Billy Hart, (whose songs at the piano are always enjoyable) and Mr. Lad Haywood (exponent of mandola and mandolin). These two artists have combined forces, and should prove very acceptable in instrumental and vocal items with piano, mandola, and ukelele.

SATURDAY

Auckland Notes

THE Auckland Municipal Band concert to be given in the Town Hall will be relayed this evening. A particularly fine programme has been arranged, and items include "Pique Dame" overture, two excerpts from the "Pathetic Symphony," "Kienzi," and "Suite de Ballet."

Dance music will continue from 10 until 11 p.m.

From Wellington

THE first of a series of W.E.A. lectures, "Education on the Air," will be broadcast by Dr. I. L. G. Sutherland, Director of W.E.A. Tutorial Classes.

(Concluded on page 28.)



THE 2YA SKETCHERS.

Miss Madge Thomas and Mr. John Storr, well-known to 2YA listeners as "The Sketchers." Their light numbers are broadcast regularly, and are much appreciated.

Full Programmes for Next

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

Sunday, March 15

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

- 3.0 : Selected recordings.
- 3.30 : Literary selection.
- 6.0 : Children's Song Service, conducted by "Uncle Bert."
- 6.55 : Relay of Divine Service from the Church of Christ, West Street.
Preacher: Pastor W. Campbell.
- 8.30 : Relay from the Auckland Town Hall, of a Concert by the Auckland Municipal Band, under the direction of Mr. George Buckley.
- 10.0 : God save the King.

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

- 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 the Knox Presbyterian Church, Miramar.
- 7.0 : Relay of Evening Service from St. Andrew's Presbyterian Church.
Preacher: Rev. R. J. Howie. Organist and Choirmaster: Mr. Frank Thomas.
- 8.15 (approx.) : Studio Concert by the Miramar Silver Band (Conductor Mr. R. A. Sutherland) and 2YA artists.
March—Band, "Badge of Honour" (Harris): Air Varie, "Edwinstone."
- 8.30 : Bass—Mr. R. J. G. Madigan, "O Lord Have Mercy" (Stradella).
- 8.35 : Cello—Mr. George Ellwood, (a) "Sonata" (Corelli), (b) "Arlequin."
- 8.46 : Male Choir—Ural Cossacks, "Russian Medley Pt. 1" (Sorokin).
- 8.50 : Waltz—Band, "Cinderella" (Raymond).
- 9.0 : Weather report and station notices.
- 9.2 : Trio—De Groot-Bor-Kilbey, "Paraphrase of Strauss Waltzes."
- 9.8 : Selection—Band, "Hamlet" (Thomas).
- 9.23 : Bass—Mr. R. J. G. Madigan, "The Monk" (Meyerbeer).
- 9.27 : Cello—Mr. George Ellwood, (a) "Chanson Indoue" (Rimsky-Korsakov), (b) "Rhapsodie" (Popper).
- 9.39 : Male choir—Ural Cossacks, "Russian Medley Pt. 2" (Sorokin).
- 9.45 : March—Band, "The Flying Squad" (Ord Hume): Characteristic Piece—"Mandy's Wedding" (Johnson): March—"Valorous."
- 10.0 : God save the King.

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

- 8.0 : Gramophone recital.
- 5.30 : Children's Song Service by children of Baptist Sunday Schools.
- 6.15 : Chimes from studio.
- 6.30 : Musical recordings.
- 7.0 : Relay of evening service from Oxford Terrace Baptist Church.
Preacher: Rev. L. A. North. Organist: Mr. Melville Lawry.
Choirmaster: Mr. K. G. Archer.
- 8.15 (approx.) : Relay from a City Band Rotunda of a Band programme by the Woolston Band (Conductor R. J. Estall), assisted by 3YA Artists.
March—Band, "Hercules" (Rimmer): Selection, "Memories of Schubert" (arrgd. Hawkins).
- 8.31 : Bass—Mr. Leslie N. Fleming, (a) "Rolling Down to Rio" (German), (b) "Your Eyes Have Told Me So" (Hardy).
- 8.37 : Characteristic—Band, "The Squirrel Dance" (Elliott).
- 8.44 : Tenor—Mr. James Shaw, "Sally in Our Alley" (Carey).
- 8.48 : Descriptive—Band, "In a Monastery Garden" (Ketelby).
- Xylophone—Bandsman H. Biggs, "Chinke Lee" (Green).
- 9.0 : Weather report and station notices.
- 9.2 : Waltz—Band, "Pagan Love Song" (Browns).
- 9.7 : Bass—Mr. Leslie Fleming, "Land of Hope and Glory" (Elgar).
- 9.11 : Tone poem—Band, "Finlandia" (Sibelius).
- 9.21 : Tenor—Mr. James Shaw, (a) "I Know of Two Bright Eyes" (Clut-sam), (b) "For You Alone" (Geehl).
- 9.26 : Burlesque—Band, "The Laughing Marionette" (Collins).
- March—Band, "Song of the Guards" (Ord Hume).
- 9.37 : From Studio.
Selection—Milan Symphony Orchestra, "Mignon" Overture (Thomas).
- 9.45 : Tenor—Richard Tauber, "Yearning For You" (Stolz).
- 9.49 : Cello—Pablo Casals, "Goyescas" Intermezzo (Granados).
- 9.53 : Tenor—Richard Tauber, "Vienna Town of My Dreams" (Sieczynski).
- 9.57 : Selection—New Light Symphony Orchestra, "Persiflage" (Francis).
- 10.1 : God save the King.

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

- 8.0 : Selected recordings.
- 5.30 : Children's Song Service, conducted by "Big Brother Bill."
- 6.15 : Selected recordings.

6.30 : Relay of Evening Service from Hanover Street Baptist Church.
Preacher: Rev. Ernest S. Tuckwell. Choirmaster: Mr. H. P. Desmoulins

7.45 (approx.) : Selected recordings.

8.15 : Relay of Concert programme from 3YA, Christchurch.

10.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, MARCH 15.

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

Monday, March 16

1YA, AUCKLAND (900 KILOCYCLES)—MONDAY, MARCH 16.

SILENT DAY.

2YA, WELLINGTON (720 KILOCYCLES)—MONDAY, MARCH 16.

- 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.
- 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-4th Movements (Mozart).
- Symphony Orchestra, "Coppelia Variations" (Delibes); "Coppelia—Waltz of the Hours" (Delibes).
- Virtuoso String Quartet, "Londonderry Air" (arr. Bridge); "The Emperor" Quartet (Haydn).
- The London Palladium Orchestra, "Sunset" (Matt).
- 7.0 : News session, market reports and sports results.
- 7.40 : Lecturette—Mr. H. C. South, "Books—Grave and Gay."
- 8.0 : Chimes. Studio Concert by Signor Lucien Cesaroni's Operatic Company and 2YA Orchestra.
Overture—2YA Orchestra (Conductor, Signor A. P. Truda), "Masa-niello" (Auber).
- Trumpet with orchestra, "Sleep, Dear Heart" (Tschalkowsky).
- 8.15 : Bass—Signor Lucien Cesaroni with Orchestra, "Bedouin Love Song." Mezzo-soprano—Miss H. Brady, with cello obligato, "Summer Night." Duet—Miss H. Brady and Mr. G. Gray, "O Lovely Night."
- Bass—Signor Lucien Cesaroni, with Orchestra, "Star of Eye."
- 8.30 : Piano concerto—Miss Phyllis Hanify and Orchestra, "First Movement from Concerto in A Minor" (Grieg).
- 8.40 : Choir—The Singing Teachers' Society of Neukolln, "Melody of Night in the Woods" (Schubert).
- 8.46 : Selection—2YA Orchestra, "Carmen" (Bizet); "La Gitana."
- 9.0 : Weather report and station notices.
- 9.2 : Deman String Quartet, "German Dances, Minuet No. 1" (Schubert).
- Violin—H. Soloway, (a) "The Violin Maker of Cremona" (Hubay); (b) "Romanza Andaluza" (Sarasate).
- 9.14 : Bass and chorus—Signor Lucien Cesaroni and Company, (a) "Song of the Flea" (Moussorgsky); (b) "The Two Grenadiers."
- Piano—Miss Mavis Dillon, "Seguidilla" (Albeniz).
- 9.23 : Cello—Mr. Claude Tanner and Orchestra, "Cantilene" (Gottermann).
- Valse—Orchestra, "Valse" (Mitscha Levitzki).
- 9.38 : Bass—Signor Lucien Cesaroni, with Orchestra, "The Calf of Gold."
- 9.43 : Instrumental—Orchestra, (a) "Zorohaya" (Svendsen); (b) "Valse Triste" (Sibelius); (c) "Dance of the Hours" (Ponchielli).
- 10.0 : Foxtrots—Ben Selvin and His Orchestra, "The Rogue Song." Stellar Dance Band, "Harmony Heaven" (Vincent).
- Paul Tremaine and His Orchestra, "There's One More River to Cross."
- Waltz—Guy Lombardo and His Royal Canadians, "Lazy Lou'siana Moon" (Donaldson).
- 10.12 : Foxtrots—Rhythmic Troubadours, "Without You, Emaline" (de Rose); "You're the Sweetest Girl" (Lombardo).
- Guy Lombardo and His Royal Canadians, "Where the Golden Daffodils Grow" (Archer).
- 10.21 : Vocal—Art Leonard, "Ten, Twenty, Thirty Years Ago" (O'Hagan).
- 10.24 : Foxtrots—Ipana Troubadours, "Blue is the Night" (Fisher).
- Rhythmic Troubadours, "I'm in the Market for You."
- Ipana Troubadours, "Whip-poor-will" (de Voll).
- 10.33 : Waltzes—Stellar Dance Band, "I'll Always be Dreaming of Mary." The Columbia Photo Players, "Dream Lover" Waltz.
- Foxtrots—Ben Selvin and His Orchestra, "When I'm Looking at You."

Week-all Stations-to Mar. 22

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Rhythmic Troubadours, "My Future Just Passed."

- 10.45: Vocal—Art Leonard, "Around the Corner" (Kahn).
 10.48: Foxtrots—Paul Tremaine and His Orchestra, "Swing Low, Sweet Chariot" (arr. Paul Tremaine).
 Fred Rich and His Orchestra, "For You" (Roemheld).
 The Columbia Photo Players, "My Love Parade."
 Fred Rich and His Orchestra, "Dream Avenue" (Richman).
 11.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—MONDAY, MARCH 16.

- 3.0 : Gramophone recital.
 4.25: Sports results.
 5.0 : Children's hour, "Cousin Margot and the Mystery Man."
 6.0 : Dinner music session:
 Paul Godwin's Orchestra, "Through Weber's Enchanted Woods" (Ernst Urbach); "Mignon Entr'acte Gavotte" (Thomas); "Firefly's Idyll" (P. Lincke); "Dance of the Dervishes" (Bendix); "Third Waltz Medley" (Robrecht).
 Members of the State Opera Orchestra, Berlin, "Don Pasquale."
 Paul Godwin's Orchestra, "Suite Algerienne" (Saint-Saens).
 Symphony Orchestra, "Homage March" (Grieg).
 Vienna Schrammel Quartet, "Firefly's Appointment" (Ludwig Siede).
 Polydor Brass Band Orchestra, "Il Trovatore" (Verdi).
 Great Symphony Orchestra, "Paying a Visit to Millocker" (Morena).
 7.0 : News session.
 7.30: Talk—Mr. E. E. Wiltshire (President Linwood Library), "Books."

- 8.0 : Chimes. Band programme by the Christchurch Municipal Band (Conductor J. Noble) and assisted by 3YA artists.
 March—Band, "On to Victory" (Thornton); foxtrot, "The Sunshine of Marseilles" (Gilbert and Nicholls).
 8.12: Mezzo-soprano—Miss Nellie M. Billcliff, (a) "If You Had Nought to Say to Me" (Hart), (b) "Forest Lullaby" (Baynon).
 8.16: Accordeon—Medard Ferrero, "Torrent" (Capitoni).
 8.19: Tenor—Mr. J. Haydn Williams, (a) "When You Are There" (Tate). (b) "All Joy Be Thine" (Sanderson).
 8.24: Medley—Band, "Gems of Irish Memories" (Ord Hume).
 8.34: Humour—Mr. Bert Goodland, "Sport" (Hickory Wood).
 8.44: Novelty—Winkler Trio, "Bavarian Jokes" (Winkler).
 8.50: Contralto—Mrs. S. W. Williamson, (a) "Two Irish Eyes" (Rawlings), (b) "Will He Come?" (Sullivan).
 8.56: Irish melody—Band, "Londonderry Air" (Irish).
 9.2 : Weather forecast and station notices.
 9.4 : Selection—Piccadilly Players Orchestra, "Follow Through" (De Sylva).
 9.12: Mezzo-soprano—Miss Nellie M. Billcliff, (a) "Little Window Looking West" (Montague Phillips), (b) "Stay With Me, Summer."
 9.16: Selection—Band, "Bohemian Girl" (Balfe).
 9.26: Tenor—Mr. J. Haydn Williams, (a) "O Lovely Night" (Ronald), (b) "You'd Better Ask Me" (Lohr).
 9.31: Accordeon—Medard Ferrero, "A Rare Bird" (Damarie).
 9.34: Contralto—Mrs. S. W. Williamson, (a) "The Wedding of Sara Lea" (Easthope-Martin), (b) "Keep on Hopin'" (Stanton).
 9.38: Chorus—The Border Singers, "Sir Harry Lauder Songs" (Lauder).
 9.48: Waltz—Band, "The Rose of Yesterday" (Lehmann); march, "Beacon Royal" (Gordon).
 10.1 : God save the King.

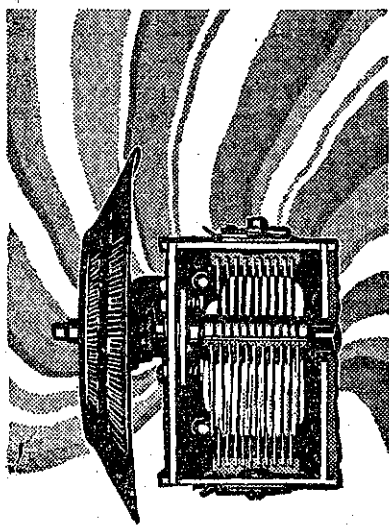
4YA, DUNEDIN (650 KILOCYCLES)—MONDAY, MARCH 16.

- 3.0 : Selected recordings.
 5.0 : Children's hour, conducted by "Big Brother Bill."
 6.0 : Dinner music session:
 Grand Symphony Orchestra, "Suite Orientale": (a) "March," (b) "On the Shore of the Ganges" (Francis Popy).
 Edith Lorand Orchestra, "Toreador and Andalous" (Rubinstein).
 Grand Symphony Orchestra, "Nalla" (Deblies).
 Dajos Bela Orchestra, "Woodland Peace" (Favilla).
 Berlin State Opera House Orchestra, "The Barber of Seville" Overture.
 Edith Lorand Orchestra, "Minuet" (Boccherini).
 Grand Symphony Orchestra, "Suite Orientale," Part 4, "The Patrol" (Francis Popy); "Lustspiel Overture" (Kela Bela).
 Dajos Bela Orchestra, "The Court Ball" (Josef Lanner).
 Grand Symphony Orchestra, "Japanese Lantern Dance" (Yoshitome); "Suite Orientale," Part 3, "The Dancers" (Francis Popy).
 Dajos Bela Orchestra, "Viennese Waltz Potpourri" (Robrecht).
 Grand Symphony Orchestra, "Chinese Street Serenade" (Ludwig Siede).
 7.0 : News session.
 8.0 : Chimes. Overture, National Symphony Orchestra, "Martha" (Flotow).
 8.9 : Contralto—Miss Lucy G. James, (a) "My Lover is a Fisherman" (Strickland), (b) "The Enchantress" (Hatton), (c) "Horses of Dawn" (Brett).
 8.18: Pettitt's Sextet, (a) "Cabaret Girl" (Kern), (b) "Can This Be Love?" (Parry).
 8.30: Baritone—Mr. A. Snell, (a) "Scots Wha Hae" (Burns), (b) "Your Eyes Have Told Me So" (Hardy), (c) "Song of the Rover."
 8.39: Cello—Lauri Kennedy, "Old Scotch Melody" (arr. Kennedy).
 8.43: Soprano—Miss Freda Elmes, (a) "Miss You" (Tobias), (b) "The Market Cart" (Day), (c) "I've a Little Love Song" (Stanelli).
 8.52: Selection—Pettitt's Sextet, "Country Girl" (Monckton).
 9.2 : Weather report and station notices.
 9.4 : Selections—Paul Godwin Orchestra, (a) "Torchlight Procession of the King of Frogs," (b) "Cinderella's Bridal Procession."
 9.11: Tenor—Mr. George Crawford, (a) "She is Far from the Land" (Lambert), (b) "Temple Bells" (Woodforde-Finden), (c) "Afton Water."
 9.20: Chorus—Zonophone Light Opera Company, vocal gems from "The Belle of New York" (Kerker).
 9.26: Selection—Pettitt's Sextet, (a) "Delilah" (Nicholls), (b) "I Don't Need a Television" (Shalson).
 9.36: Mezzo-contralto—Miss Helen E. Roy, (a) "Sweet and Low" (Wallace), (b) "To Tell Thee How I Love Thee" (Willeby), (c) "In My Garden" (Nevin).
 9.45: Selection—Pettitt's Sextet, (a) "To-night's the Night" (Rubens), (b) "In the Garden of To-morrow" (Deppen).
 10.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—MONDAY, MARCH 16.

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

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Tuesday, March 17

1YA, AUCKLAND (900 KILOCYCLES)—TUESDAY, MARCH 17.

- 3.0 : Selected recordings.
 3.15 : Talk—Mrs. Les Crane, "Health of Mind and Body in Relation to Diet."
 Further selected recordings.
 5.0 : Children's session, conducted by "Uncle Dave."
 6.0 : Dinner music session:
 London Symphony Orchestra, "Czar Sultan" Suite (Rimsky-Korsakov)
 International Concert Orchestra, "Waltz Dream" (Strauss).
 De Groot and His Orchestra, "Louise" Selection (Charpentier).
 New Light Symphony Orchestra, "Peer Gynt Suite" (Grieg): (1) Ingrid's Lament, (2) Arabian Dance; "Prelude in G Minor" (Rachmaninoff); "Peer Gynt Suite" (Grieg): (1) Return of Peer Gynt, (2) Solveig's Song; "Prelude in C Sharp Minor" (Rachmaninoff).
 De Groot and His Orchestra, "Samson and Delilah" (Saint-Saens).
 Philadelphia Symphony Orchestra, "Danse Orientale" (Glazounov).
 International Concert Orchestra, "Sari" (Kalman).
 Philadelphia Symphony Orchestra, "March of the Caucasian Chief."
 7.0 : News and market reports.
 7.40 : Talk—Mr. Rod Talbot, "Motoring."
 8.0 : Chimes, March—The Orchestral Octet, under direction of Mr. Harold Baxter, "Freedom" (Lotter); "Hibernian Suite" (Roeckel): (a) "Love Song"; (b) "Lament"; (c) "Jig."
 8.14 : Boy soprano—Master Desmond Casey, (a) "Off in the Stilly Night" (Moore), (b) "Mother Machree" (Oleott Ball).
 8.21 : Irish humour—Mr. J. F. Montague, (a) "Irish Patriotism" (arr. Montague), (b) "Father Phil's Subscription" (Lover).
 8.31 : Selection—Orchestral Octet, "The Shamrock" (Myddleton); morceau, "Gaelic Dream Song" (Foulds); waltz, "Fairy Kisses" (Johnson).
 8.45 : Contralto—Miss Martha Williamson, (a) "Hills of Donegal" (Sander-son), (b) "Dear Little Shamrock" (Jackson).
 8.52 : Orchestral Octet, "Irish Patrol" (Puerner); overture, "Bohemian Girl."
 9.0 : Evening weather forecast and announcements.
 9.2 : Boy soprano—Master Desmond Casey, "Killarney" (Balfe).
 9.6 : Elocution—Mr. J. F. Montague, "The Book with the Yellowed Pages."
 9.14 : Orchestral Octet, "Three Old Irish Airs" (arr. Cedric Sharpe): (a) "Cradle Song," (b) "Gentle Maiden," (c) "Love Song."
 9.24 : Contralto—Miss Martha Williamson, "Dreaming of Home" (Besley).
 9.28 : Programme of dance music:
 Foxtrots—Cova Cavaliers, "Right or Wrong, I'm Still in Love With You" (Gillespie).
 New Yorkers, "Go Get 'Em Caroline" (Cramare).
 Cova Cavaliers, "Have a Little Faith in Me" (Lewis).
 New Yorkers, "Love" (Goulding).
 9.42 : Waltz—Al Hopkins' Buckle-Busters, "Marosovia Waltz" (Belcher).
 Foxtrots—New Yorkers, "Ev'rything's Rosy 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" (Menzi).
 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" (Smoley).
 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."
 George Posnack and Orchestra, "Whippoorwill" (De Voll).
 10.36 : Waltz—Night 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."
 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 His Orchestra, "Love Me in My Dreams" (Lillich).
 The New Yorkers Orchestra, "Ro-ro-rolling Along" (Moll).
 11.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—TUESDAY, MARCH 17.

- 12.0 : Results of the Wellington Racing Club's meeting, interspersed with selected gramophone recordings.
 5.0 : Children's session, conducted by "Uncle Toby" and "Jumbo."
 6.0 : Dinner music session.
 The London Orchestra, "Valse Memories" (arr'd. Somers).
 Organ—Jesse Crawford, "La Borrachita" (Fernandez Esperon).
 Chicago Symphony Orchestra, (a) "Serenade" (Volkman), (b) "Flight of the Bumble Bee" (Rimsky-Korsakoff).
 Piccadilly Orchestra, "The Waltz Dream" (Strauss).
 Marimba Band, "Morales Lopez" (Bolanos).
 Royal Opera Orchestra, "Prelude 'The Huntress'" (from "Sylvia Ballet") (Delibes).
 Band of H.M. Coldstream Guards, "The Geisha" (Jones).

Marek Weber and His Orchestra, "Menuett No. 1" (Paderewski).
 Organ—Jesse Crawford, "I Loved You Then As I Love You Now."
 Salon Orchestra, "Alona Sunset Land" (Kawelo).
 Symphony Orchestra, "La Vida Breve" (De Falla).
 Marek Weber's Orchestra, "Coeur Brise" (Gillet).
 Salon Orchestra, "Chanson Boheme" (Baldi).
 Marimba Band, "Aguas Dormides" (Bolanos).
 Band of H.M. Coldstream Guards, "The Belle of New York" (Kerker).

- 7.0 : News session, market reports and sports results.
 7.40 : Lecture by a representative of the Agricultural Department, "For the Man on the Land."
 8.0 : Chimes.
 Relay from the Town Hall of an Irish Concert to Commemorate the Birth of St. Patrick. Assisted by the 2YA Orchestra.
 10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—TUESDAY, MARCH 17.

SILENT DAY.

4YA, DUNEDIN (650 KILOCYCLES)—TUESDAY, MARCH 17.

- 3.0 : Selected recordings.
 5.0 : Children's Hour, conducted by "Big Brother Bill" and "Wendy."
 6.0 : Dinner music session.
 7.0 : Herman Finck and His Orchestra, "Waldfestliche Memories."
 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, "Goliwog's Cake Walk" (Debussy).
 New Concert Orchestra, "Vienna Maidens" (Ziehrer).
 Bournemouth Municipal Orchestra, "Crown Diamonds" Overture.
 7.0 : News session.
 7.40 : Talk—Mr. R. W. Coupland, "Tourist Resorts."
 8.0 : Chimes.
 Relay from Gore, of the comedy-drama "My Irish Rose," by Benhara.
 Produced under the direction of Mrs. Molly O'Sullivan, F.T.C.I.

Wednesday, March 18

1YA, AUCKLAND (900 KILOCYCLES)—WEDNESDAY, MARCH 18.

- 3.0 : Selected recordings.
 3.15 : Literary selection, and further selected recordings.
 5.0 : Children's session, conducted by "Uncle Reg."
 6.0 : Dinner session.
 The Paul Godwin Orchestra, "Pot-pourri of German Folk Songs" (arr. Hannemann); "The Girl of the Black Forest" (Jessell).
 Mandoline and Lute Orchestra, "Minuet in G" (Beethoven).
 Paul Godwin Orchestra, "Suite Orientale" (Popy): (1) Les Bajaderes; (2) Au Bord du Gange; (3) Les Almes; (4) Patrouille.
 The State Opera Orchestra, Berlin, "La Muette De Portici" (Auber).
 Mandoline and Lute Orchestra, "Norwegian Dance" (Grieg).
 The Opera Orchestra, Berlin, "Hungarian March in O Minor."
 Paul Godwin Dance Orchestra, "From Ear to Ear" (Morena).
 7.0 : News and market reports.
 7.40 : Talk—Mr. H. Driver, "Book Review."
 8.0 : Chimes.
 Overture—The Monte Carlo Orchestra, under direction of Mr. F. K. Cunningham, "If I Were King" (Adams); foxtrot, "Harmonica Harry" (Baxter).
 8.12 : 'Cello—Beatrice Harrison, "Harlequinade" (Popper).
 8.16 : Part songs—The Auckland Tramway Male Choir, under the direction of Mr. Duncan Black, (a) "O'er the Downs" (Pearsall); (b) "Angelus" (from "Maritana") (Wallace); (c) "John Peel."
 8.25 : Organ—Terence Casey, "Keys of Heaven" novelty variations.
 8.29 : Selection—The Monte Carlo Orchestra, "The Geisha" (Jones).
 8.41 : Mr A. B. Chappell, M.A., "Topical Talk."
 8.56 : Part song—Auckland Tramway Male Choir, "Comrades' Song of Hope" (Geibel).
 9.0 : Evening weather forecast and announcements.
 9.2 : Bass—Mr. Duncan Black, "My Lonely Caravan" (Coates).
 Bass—Mr. Duncan Black and chorus, "Nancy Lee" (Adams).
 9.8 : Soprano—Edith Day, "The Desert Song—French Marching Song."
 9.12 : Operatic selection—The Monte Carlo Orchestra, "La Traviata."
 9.24 : Xylophone—Rudy Starita, "The Woman in the Shoe" (Brown).
 9.28 : Bass—Mr. Duncan Black, "I Heard You Go By" (Wood).
 Vocal—Auckland Tramway Male Choir, "Drink To Me Only" (Mellish).
 9.34 : 'Cello—Beatrice Harrison, "The Broken Melody" (Van Biene).
 9.38 : Foxtrot—The Monte Carlo Orchestra, "I Love You So Much" (Ruby).
 Waltz—"When the Organ Played at Twilight."
 9.44 : Part song—The Auckland Tramway Male Choir, "Summer Night."
 Vocal Quartet—"Pretty Sally" (arr. D. Black).

Chorus—The Auckland Tramway Male Choir, "Soldiers' Chorus" (from "Faust") (Gounod).

9.53: Violin—Fritz Kreisler, "Humoresque" (Dvorak).

9.57: Selection—The Monte Carlo Orchestra, "The Girl Friend" (Rodgers).

10.5: God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—WEDNESDAY, MARCH 18.

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: The Polydor String Orchestra, "La Muette de Portici" Overture.

Paul Godwin Orchestra, "Talkative" (Ellenberg): "Les Patineurs."

Jean Gilbert's Scala Orchestra, "Strolling Through Jean Gilbert's Hits" (Gilbert).

Paul Godwin's Orchestra, "Sizilietta" (Von Blon); "Cajolery."

Efim Schachmeister's Jazz Symphonians, "Dubinuschka" (Schirrmann).

Paul Godwin Orchestra, "Dolly's Dancing" (Rhode); "Siciliano."

Paul Godwin's Jazz Symphonians, "Hullo 1930" (Borchert).

7.0: News session, market reports and sports results.

8.0: Chimes.

Specially recorded overseas programme.

Dr. Eugene Ormandy and His Salon Orchestra.

The International Singers.

The Ambassadors of Melody Land.

Abroad with the Lockharts.

International Talk—Dr. Guy H. Scholefield, O.B.E.

Hy-Wide and Handsome.

International dance programme.

God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—WEDNESDAY, MARCH 18.

3.0: Gramophone recital.

4.25: Sports results.

5.0: Children's Hour, conducted by "Uncle John."

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 Concert 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" (Joh. Strauss).

7.0: News session.

7.30: Addington stock market reports.

8.0: Chimes.

Overture—Jack Hylton's Orchestra, "The Selfish Giant" (Coates).

8.9: Tenor—Mr. H. Blakeley, (a) "The Land Across the Sea" (Devaugne Barnard), (b) "Molly Brown" (Lover).

8.14: Saxophone and piano—Mr. Lyndon Christie and Miss Clive Winston, "Casino Medley" (arrgd. Christie and Winston).

8.18: Male quartet—Professor Felix Schmidt Quartet, (a) "Guten Abend, Gute Nacht" (Wiegenlied); (b) "Spinn Spinn" (Jungst).

8.24: Overture—Studio Octet (Harold Beck, Conductor) "Plymouth Hoe."

8.32: Contralto—Mrs. F. Nelson Kerr, "The Gleaner's Slumber Song."

8.36: Instrumental—Studio Octet, (a) "Masquerade" (Byförd); (b) "Plazicato" (O'Donnell); (c) "Ole South" (Zamecnik).

8.44: Sketch—The Mascots, "Swamped" (Carlton and Manley).

9.5: Weather forecast and station notices.

9.7: Orchestral—Studio Octet, Musical Comedy Selection, "Maid of the East" (Neale).

9.13: Tenor—Mr. H. Blakeley, (a) "In Old Madrid" (Trottere); (b) "Valse Song Aurora" (Oliver).

9.25: Scottish comedian—Will Fyffe, "Daft Sandy" (Fyffe).

9.29: Saxophone and piano—Mr. Lyndon Christie and Miss Clive Winston, "Souvenir" (Drdla).

9.35: Contralto—Mrs. F. N. Kerr, (a) "Sleep and the Roses" (Tate); (b) "Killarney" (Balfe).

9.41: Studio octet, "Around the Corner" (Kassel).

9.45: Zither and piano—George Freunderfer, (a) "Isar Waves" (Freunderfer); (b) "The Small Pagoda" (Benatzky).

9.55: Studio octet, "Tom Jones Dances" (German).

10.0: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—WEDNESDAY, MARCH 18.

3.0: Selected recordings.

3.15: Talk—"Household Conveniences." Under auspices of Home Science Extension Service of Otago University.

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

6.0: Dinner music session.

Albert W. Ketelbey's Concert Orchestra, "Cockney Suite" (Ketelbey): (1) A State Procession (Buckingham Palace); (2) The Cockney Lover (Lambeth Walk); (3) At the Palais de Dance (Anywhere); (4) Elegy (Thoughts on Passing the Cenotaph); (5) Bank Holiday ('Appy Amstead) (Ketelbey).

Band of H.M. Grenadier Guards, "Radio Quick March" (Pecking).

Jack Payne and the B.B.C. Dance Orchestra, "Say It With Songs Selection" (de Sylva).

J. H. Squire's Celeste Octet, "Collette Waltz" (Fraser-Simson).

Albert W. Ketelbey's Concert Orchestra, "Jungle Drums-Patrol."

Organ—Emil Velazco, "Estrellita."

Debroy Somers Band, "Hungarian Medley" (arr. Somers).

J. H. Squire's Celeste Octet, "Memories of Devon" (Evans).

Albert W. Ketelbey's Concert Orchestra, "By the Blue Hawaiian Waters" (Ketelbey).

Organ—Emil Velazco, "La Golondrina."

Band of H.M. Grenadier Guards, "Fighting Strength" (Jordan).

7.0: News session.

7.15: Talk—Mr. D. Hercus, under auspices of 4YA Primary Productions Committee, "Iodine Deficiency."

8.0: Chimes.

Overture—Band of H.M. Coldstream Guards, "Les Cloches de Cornéville" (Planquette).

8.9: Baritone—Mr. R. W. Fox, (a) "The Rebel" (Wallace); (b) "The Gentle Maiden" (Somervell); (c) "The Scavenger" (Russell).

8.18: Instrumental trio—"Second Movement from Trio" (Tschalkowsky).

8.32: Soprano—Miss Muriel Eagar, (a) "The Dorothy Perkins Rose" (Carew); (b) "Second Minuet" (Besly); (c) "The Cuckoo Clock."

8.41: Selection—Instrumental Trio, "Serenade" (Barmotin).

8.48: Tenor—Mr. E. W. Robbins, (a) "Friend o' Mine" (Sanderson); (b) "Un Peu D'Amour" (Silesu); (c) "Come to My Heart" (English).

8.57: Selection—Band of H.M. Coldstream Guards, "Raymond Overture."

9.1: Weather report and station notices.

9.3: Contralto—Miss G. Burt, (a) "The Last Hour" (Kramer); (b) "Sapphic Ode" (Brahms); (c) "Drift Down" (Ronald).

9.12: Instrumental Trio, (a) "Valse Triste" (Sibelius); (b) "Serenade" (Arensky); (c) Waltz from "The Serenade" (Tschalkowsky).

9.21: Bass—Mr. W. B. Lambert, (a) "Lord Randall" (Scott); (b) "The Carpet" (Sanderson); (c) "Fortune Hunter" (Willeby).

9.30: Dance session.

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- Waltzes—Regent Club Orchestra, "Dancing With the Tears in My Eyes" (Dubin, Burke).
 Castlewood Marimba Band, "My Heart Belongs to the Girl Who Belongs to Somebody Else" (Sherman).
10.12: Foxtrots—Hal Kemp and His Orchestra, "Give Yourself a Pat on the Back" (Butler).
 Tom Gerin and His Orchestra, "Absence Makes the Heart Grow Fonder" (Lewis).
 Bob Haring and His Orchestra, "I Still Remember."
 Tom Clines and His Music, "Wasn't It Nice" (Young).
 Colonial Club Orchestra, "Stein Song" (Colcord).
 Waltz—Castlewood Marimba Band, "Down the River of Golden Dreams" (Klennner).
10.30: Foxtrots—Meyer Davis' Hotel Astor Orchestra, "Nobody Cares if I'm Blue" (Clarke).
 Hal Kemp and His Orchestra, "If I Had a Girl Like You."
 Meyer Davis' Hotel Astor Orchestra, "Ro, Ro, Rollin' Along" (Moll).
10.39: Vocal duet—Al and Pete, "That's Why I'm Jealous of You" (Rose).
10.42: Foxtrots—Tom Clines and His Music, "You Darlin'" (Woods).
 Jack Denny and His Mount Royal Hotel Orchestra, "Dream Avenue" (Tobias).
 Tom Clines and His Music, "You For Me" (Jason); "Be Careful with Those Eyes" (Woods).
10.54: Waltzes—Castlewood Marimba Band, "My Reveries" (White).
 Regent Club Orchestra, "Because There's a Change in You."
11.0: God save the King.

3YA, NEW PLYMOUTH (1230 KILOCYCLES)—WEDNESDAY MARCH 18.

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

Thursday, March 19

1YA, AUCKLAND (900 KILOCYCLES)—THURSDAY, MARCH 19.

- 8.0: Selected recordings.
8.15: Talk—"Recipes." Prepared by the Home Science Extension Department of Otago University.
9.0: Children's session, conducted by "Peter Pan."
9.0: Dinner music session.
 Finck's Orchestra, "Gaiety Echoes" (Caryll-Monckton).
 Sandler's Orchestra, "Las Lagerteranas" (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" (Lieurance).
 Sandler's Orchestra, "Raphaello" (Guerrero and Foulkes).
 Dinicu and His Orchestra, "Adoration Tango" (Bianco).
 Regal Cinema Orchestra, "Broadway Selection" (Gottler).
 Violin—Lipschultz, "Estrellita" (Ludlow).
 Romani and Italian Orchestra, "Old Comrades March" (Teike).
 Berlin State Orchestra, "Die Fledermaus" (Strauss).
 Nullo Romani's Orchestra, "Canto al Inverno."
 Russian Novelty Orchestra, "Tesoro Mio" (Becucci).
7.0: News and market reports.
7.40: Talk—Mr. J. P. O'Connor, under the auspices of the New Zealand Manufacturers' Association, "Biscuits."
8.0: Chimes.
 March—Orchestral Octet, under direction of Mr. Harold Baxter, "Freedom" (Blankenburg); Suite, "Tyrolienne" (Stefano). (a) "In the Forest"; (b) "At the Inn"; (c) "Wooden Shoe Dance."
8.10: Contralto—Miss Patti Schnackenberg, (a) "Awake, My Heart, to Gladness" (Densmore); (b) "The Early Dawn" (Brahe).
8.16: Novelty piano—Mr. D. Armishaw, (a) "Meditation" (Sims); (b) "Lady Fingers" (Glogan).
8.22: Tenor—Mr. William Coleman, (a) "Come into the Garden, Maud" (Balfé); (b) "Sally in Our Alley" (Carey).
8.30: Selection—Orchestral Octet, "Fancy Free" (Barratt); Waltz, "Inamorata" (Marchetti); Characteristic, "Pearl of Persia" (Smith).
8.43: Contralto—Miss Patti Schnackenberg, (a) "Happy Song" (del Riego); (b) "The Market" (Carew).
8.50: Ballet suite—Orchestral Octet, "La Source" (Delibes). (a) "Scarf Dance"; (b) "Scene d'Amour"; (c) "Variation"; (d) "Dance Circassienne."
9.0: Evening weather forecast and announcements.
9.2: Novelty—The Asquiths, "Twenty Minute Drawing-room Entertainment."
9.22: Novelty piano—Mr. D. Armishaw, (a) "Longing For You" (arr. Armishaw); (b) "Improvisation" (Sims).
9.28: Tenor—Mr. William Coleman, "Blanca" (Mattel).
9.32: Suite—Orchestral Octet, "Four Fancies" (Somerville).
9.42: Gramophone lecture-recital—A. Commentator, "Latest Recordings."
10.12: God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—THURSDAY, MARCH 19.

- 8.0: Chimes. Selected gramophone recordings.
8.15: Lecture—Miss I. F. Meadows, "Recipes." Arranged by the Home Science Extension Department of the 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.
 Royal Italian Band, "Marcia Reale" (Gabetti).
 Court Symphony Orchestra, "In Venice" (Sellars).
 Organ—Stanley MacDonald, "Was it a Dream?" (Coslow).
 Royal Italian Band, "Garibaldi's Hymn" (Olivieri).
 Columbia Symphony Orchestra, "Idilio" (Lack).
 Ketelbey's Concert Orchestra, "Sanctuary of the Heart" (Ketelbey).
 Cello—W. H. Squire, "Melody in F" (Popper).
 New Queen's Hall Orchestra, (a) "Un Sonnet d'Amour"; (b) "La Tarantelle" (from "Petite Suite de Concert") (Coleridge-Taylor).
 W. H. Squire's Celeste Octet, "Mignon": (1) Introduction and Romance, (2) Polonaise (Thomas).
 Cello—W. H. Squire, "Silver Threads Among the Gold" (Danke).
 Columbia Symphony Orchestra, "Spring Song" (Mendelssohn).
 H.M. Grenadier Guards, "Turkish Patrol" (Michaelis).
 Organ—Stanley MacDonald, "Nicolette" (Batten).
 Jacques Jacobs Ensemble, "Weiner Blut" (Strauss).
 H.M. Grenadier Guards Band, "Smithy in the Woods" (Michaelis).
7.0: News session, market reports and sports results.
8.0: Chimes. Special presentation of orchestral concert by the Commercial Travellers' and Warehousemen's Orchestra. "A Night With Ketelbey." Introductory comments.
8.4: Overture—The Orchestra, "Musical Jig-Saw" (Ketelbey); selection, "Gallantry" (Ketelbey).
8.23: Soprano—Miss K. McIvor, (a) "Down in the Forest" (Ronald); (b) "An Island Sheiling Song" (Kennedy-Fraser).
8.30: Selection—The Orchestra, "In a Chinese Temple Garden" (Ketelbey).
 South Sea melody—"Blue Hawaiian Waters" (Ketelbey).
8.53: Orchestra and chorus—Debroy Somers' Band, "War Marching Songs."
9.1: Weather report and station notices.
9.3: Selections—The Orchestra, (a) "Wedgewood Blue"; (b) "In a Persian Market" (Ketelbey).
9.22: Baritone—Mr. A. I. Murray, (a) "Farewell to Summer" (Johnson); (b) "To-morrow" (Keel).
9.28: Selections—Orchestra, (a) "Bells Across the Meadow"; (b) "The Sacred Hour"; (c) "In a Monastery Garden" (Ketelbey).
9.50: Male choir—Ural Cossacks, (a) "Hej Hej" (Traditional); (b) "Signal March" (Kalatlin).
9.54: Descriptive selection—The Orchestra, "The Clock and the Dresden Figures" (Ketelbey); march, "The Gypsy Caravan" (Oscheit).
10.5: God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—THURSDAY, MARCH 19.

- 8.0: Gramophone recital.
8.15: Lecture—"Recipes." Arranged by the Home Science Extension Service, Otago University.
4.25: Sports results.
5.0: Children's hour, conducted by "Ladybird" and "Uncle Frank."
6.0: Dinner music session.
 Marek Weber and His Orchestra, "Cavalleria Rusticana" Selection.
 Vienna Philharmonic Orchestra, "Hungarian Dance, No. 3" (Brahms).
 Trio—Fritz and Hugo Kreisler and Michael Rauchausen, "Marche Miniature Viennois" (Kreisler).
 Berlin Philharmonic Orchestra, "Tannhauser" March (Wagner).
 De Groot and His Orchestra, "I Love You" (Grieg).
 Berlin Philharmonic Orchestra, "Hungarian March—The Damnation of Faust" (Berlioz).
 Trio—Fitz and Hugo Kreisler and Michael Rauchausen, "Syncopation."
 Berlin State Orchestra, "Oberon" Overture (Weber).
 Vienna Philharmonic Orchestra, "Hungarian Dance, No. 1" (Brahms).
 Band of H.M. Coldstream Guards, "Suite Française" (Foulds).
 De Groot and His Orchestra, "Romance" (Rubenstein).
 Marek Weber and His Orchestra, "Lehariana" (Geiger).
7.0: News session.
8.0: Chimes. Overture—La Scala Orchestra, "The Secret of Susanna."
8.5: Tenor—Mr. Russell Sumner, "Duna" (McGill).
 Quartet—Melodious Quartet, "On Himalay" (Bantock).
8.11: Selection—Studio Octet, "Carmen" (Bizet).
8.16: Soprano and contralto—Melodia Duo, (a) "In Summer Woods" (Ireland); (b) "Asleep in the Moon" (Rowley).
8.22: Violin—Professor R. C. Zimmermann with Studio Octet, (a) "Romance in G" (Beethoven); (b) "Hejri Kati" (Hubay).
8.33: Soprano—Miss Frances Hamerton and Studio Octet, (a) "Una Voca" (from "Barbiere di Siviglia") (Rossini); (b) "Open Thy Blue Eyes" (Massenet); (c) "Spring's Awakening" (Sanderson).
8.42: Tenor—Mr. Russell Sumner and chorus, "Under the Moon" (Messenger).
 Mezzo-contralto—Miss Millicent Jennings, "Bois Epais" (Lully).
 Bass—Mr. T. D. Williams, "The Laird o' Cockpen" (Scottish).
8.52: Instrumental—Studio Octet, (a) "Old English Dance Tunes" (arr. Carse); (b) "Golden Light" (Bizet).
9.2: Weather forecast and station notices.
9.4: Studio Octet (Harold Beck, Conductor), (a) Overture, "If I Were King" (Adam); (b) "Holiday Dance" (Rubenstein).
9.14: Tenor—Mr. Russell Sumner, "I Hear a Thrush at Eve" (Cadman).
 Mezzo-contralto and chorus—Miss Millicent Jennings and Quartet, "Under the Deodar" (from "The Country Girl") (Monckton).

- 9.19: Violin—Professor R. C. Zimmerman and Studio Octet, (a) "Legends" (Wienlawski); (b) "Liebesfreud" (Kreisler).
 9.28: Tenor and bass—Melody Duo, "Sink, Red Sun" (Del Riego).
 Melodious Quartet, "Good-night" (Scott Gatty).
 9.32: Dance music.
 Foxtrots—The Rhythmic Eight, "I'm Doing What I'm Doing For Love."
 The High Hatters, "Hoosier Hop" (Dreyer-Macdonald).
 Jack Hylton and His Orchestra, "Button Up Your Overcoat."
 Nat Shilkret and His Orchestra, "Chant of the Jungle."
 Jack Hylton and His Orchestra, "My Lucky Star" (de Sylva).
 9.47: Vocal duet—The Duncan Sisters, "I'm Following You" (Dreyer).
 Foxtrots—The High Hatters, "Look for the Silver Lining."
 Rudy Vallee and His Connecticut Yankees, "You're Just Another Memory" (Coots).
 The High Hatters, "Wild Rose" (Grey).
 Waring's Pennsylvanians, "Navy Blues" (Turk).
 Leo Reisman and His Orchestra, "Happy Days are Here Again" (Yellen).
 10.5: Waltz—George Olsen and His Music, "Romance" (Leslie).
 Foxtrots—Rudy Vallee and His Connecticut Yankees, "I Love You, Believe Me, I Love You" (Cowan).
 Nat Shilkret and His Orchestra, "Bigger and Better than Ever" (Friend).
 Vocal—Daniel Haynes and Dixie Jubilee Singers, "Waiting at the End of the Road" (Berlin).
 10.17: Foxtrots—George Olsen and His Music, "After a Million Dreams."
 New Mayfair Orchestra, "There's Room in My Heart."
 Nat Shilkret and His Orchestra, "That Wonderful Something" (Goodwin).
 New Mayfair Dance Orchestra, "I'll Be Getting Along."
 The Rhythmic Eight, "I'm Feathering a Nest" (Yellen).
 10.32: Waltz—Rudy Vallee and His Connecticut Yankees, "If You Were the Only Girl in the World" (Grey).
 Foxtrots—The High Hatters, "I'm Following You" (Dreyer).
 Jack Hylton and His Orchestra, "The Banjo" (Porter).
 Vocal duet—The Duncan Sisters, "Hoosier Hop" (Dreyer).
 10.44: Foxtrots—Jackie Taylor's Orchestra, "A Night of Happiness."
 Jack Hylton and His Orchestra, "Turn on the Heat."
 Jackie Taylor's Orchestra, "Sitting by the Window."
 Jack Hylton and His Orchestra, "If I Had a Talking Picture of You" (de Sylva).
 George Olsen and His Music, "South Sea Rose" (Gilbert).
 Leo Reisman and His Orchestra, "Lucky Me, Lovable You."
 11.2: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—THURSDAY, MARCH 19.

SILENT DAY.

Friday, March 20

IYA, AUCKLAND (900 KILOCYCLES)—FRIDAY, MARCH 20.

- 3.0: Selected recordings.
 3.15: Literary selection and further selected recordings.
 5.0: Children's session, conducted by "Nod" and "Aunt Jean."
 6.0: Dinner music session.
 Great Symphony Orchestra, "A Rendezvous With Lehar" (arr. Hruby).
 Marek Weber and His Adlon Orchestra, "Lettre a Armand."
 Paul Godwin Orchestra, "Serenata" (Clement); "A Polo Match."
 Efm Schachmeister Orchestra, "Gipsy's Farewell" (trdtl.).
 Philharmonic Orchestra, Berlin, "Tannhauser Grand March."
 Marek Weber and His Adlon Orchestra, "Dreams" (Wagner).
 Paul Godwin Orchestra, "Types Tziganes" (Clement); "Marionette's Wedding Glide" (Rathke); "Sidelights Medley" (Morena).
 Efm Schachmeister Orchestra, "White Acacia" (trdtl.).
 Philharmonic orchestra, "Prelude to Act 3 'Lohengrin'" (Wagner).
 7.0: News and market reports.
 8.0: Chimes.
 Overture—Association des Concerts Lamoureux, "Petite Suite."
 8.15: Baritone—Mr. Claude H. Suisted, "Red Devon by the Sea" (Johnston).
 8.19: Novelty piano and vocal—The Snappy Three, (a) "The Midway Rhythm" (Jalowicz); (b) "He's My Secret Passion" (Young).
 8.29: Scotch foxtrot—Reg. Morgan's Orchestra, "Hoot Mon" (Sherman).
 Saxophone duet—Messrs. C. and V. Hoffman, "La Gelondrina."
 March—Reg. Morgan's Orchestra, "On the Quarter Deck" (Alford).
 8.40: Mezzo-soprano—Miss Joyce Seth-Smith, (a) "Obstination" (Fontenailles); (b) "When Love is Kind" (Moore); (c) "Silent Noon."
 8.51: Violin—Mr. Gar. Fowler, "Hungarian Dances" (Brahms).
 Reg. Morgan's Orchestra, "Berceuse" (Cundy).
 9.1: Evening weather forecast and announcements.
 9.3: Baritone—Mr. Claude H. Suisted, (a) "I'll Sing Thee Songs of Araby" (Clay); (b) "Can't Yo' Heah Me Callin'" (Caro Roma).
 9.10: Suite—Reg. Morgan's Orchestra, "Americana" (Thurban).
 9.22: Chorus—Sheffield Orphans Male Voice Choir, (a) "The Lincolnshire Poacher" (arrgd. Chambers); (b) "There is a Tavern in the Town."
 9.28: Accordeon—Guido Deiro, (a) "La Spanola"; (b) "I Pompiieri."
 9.34: Novelty piano and vocal—The Snappy Three, "Three Latest Hits."
 9.44: Organ—G. T. Pattman, "In a Monastery Garden" (Ketelbey).

- 9.48: Dance numbers—Reg. Morgan's Orchestra, (a) "Dixiana" (Tierney); (b) "Song o' My Heart" (Hanly); (c) "Rubinesque" (Katzmann); (d) "Ragamuffin Romeo" (Wayne).
 10.0: God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—FRIDAY, MARCH 20.

- 3.0: Chimes. Selected gramophone recording.
 3.30 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.
 Royal Opera Orchestra, "Sylvia Ballet—Pizzicato and Procession of Bacchus" (Delibes).
 New Light Symphony Orchestra, "Scene de Ballet Marionettes."
 Royal Opera Orchestra, "The Sleeping Beauty" Panorama.
 National Symphony Orchestra, "Irish Rhapsody" (Herbert).
 Trio—Fritz and Hugo Kreisler, Michael Rauchs, "Sanctissima."
 National Symphony Orchestra, "Orpheus in Hades" Overture.
 Royal Opera Orchestra, "Shepherd Fennel's Dance."
 Zonophone Salon Orchestra, "Narcissus" (Nevin).
 National Military Band, "Lohengrin" Prelude (Wagner).
 New Light Symphony Orchestra, "Persiflage" (Francis).
 Trio—Fritz and Hugo Kreisler, Michael Rauchs, "Arlesienne Intermezzo" (Bizet, arr. Kreisler).
 La Scala Orchestra, "The Secret of Susanna" Overture.
 7.0: News session, market reports and sports results.
 7.40: Lecture—Mr. E. S. Harston, "At Work at the Headquarters of the League of Nations."
 8.0: Chimes.
 Note.—This programme is subject to interruption to permit of a relay of a Sound Film Feature from the Majestic Theatre.
 Overture—2YA Orchestra (Conductor, Signor A. P. Truda), "Jolly Fellows" (Suppe).
 Descriptive—"Busy Bee" (Bendix).
 8.15: Mrs. A. P. Truda with Orchestra, (a) "Indian River Song" (Woodforde-Finden); (b) "Waiala Poi" (Hill).
 Tenor—Mr. Denis Sheard with Orchestra, (a) "I Hear You Calling Me" (Marshall); (b) "When I Go Home" (Tanner).
 8.30: Novelty—Messrs. Billy Hart and Lad Laywood, (a) "Just a Little Closer" (Meyer); (b) "Highway to Heaven" (Burke); (c) "Go Home and Tell Your Mother" (McHugh); (d) "Latest Popular Hit."
 8.45: Saxophone—Mr. A. H. F. Wright and Orchestra, "Saxophobia."
 Selection—Orchestra, "Tales of Hoffman" (Offenbach) (introducing Vocal Duet).
 9.0: Weather report and station notices.
 9.2: Soprano—Mrs. A. P. Truda, (a) "Jhelum Boat Song" (Woodforde-Finden); (b) "Wake Up" (Phillips).
 Tenor—Mr. Denis Sheard and Orchestral Accompaniment, (a) "Macushla" (Macmurrough); (b) "Dreams of Long Ago" (Caruso).
 9.15: Selection—Orchestra, "Dorothy" (arr. Poughr); Valse Medley, "I Keep on Saying Good-night" (Brewer); Foxtrot, "My Ideal."
 9.30: Programme of Dance Music.
 One-step—Jack Hylton and His Orchestra, "Moscow" (Evans).
 Foxtrots—"My Wife is on a Diet" (Tobias).
 The High Hatters, "The Web of Love" (Cowan).
 Charles Dornberger and His Orchestra, "Campus Capers" (Greenwood).
 Johnny Hamps Kentucky Serenaders, "Sunny Side Up."
 The High Hatters, "I'm in Love With You" (Cowan).
 9.48: Waltzes—The Troubadours, "Alice Blue Gown" (McCarthy).
 Nat Shilkret and His Orchestra, "Dream Lover" (Grey).
 10.3: Foxtrots—Nat Shilkret and His Orchestra, "Broadway Baby Dolls" (Bryan); "You Wouldn't Fool Me, Would You?"
 Rudy Vallee and His Connecticut Yankees, "A Little Kiss Each Morning" (Woods).
 Henry Busse and His Orchestra, "After the Clouds Roll By."
 10.15: Waltzes—Nat Shilkret and Orchestra, "Until the End" (Fisher).
 Jack Hylton and His Orchestra, "Tondeleyo" (Gay).
 Foxtrots—Leo Reisman and His Orchestra, "My Sweeter Than Sweet."
 Nat Shilkret and His Orchestra, "Wishing and Waiting for Love" (Clarke).
 10.30: Jack Hylton and His Orchestra, "Jollity Farm" (Sarony).
 Foxtrots—The High Hatters, "Aren't We All" (de Sylva).
 Jack Hylton and His Orchestra, "On Her Doorstep Last Night" (Hargreaves).
 The High Hatters, "You've Got Me Picking Petals off of Daisies" (de Sylva).
 10.45: Waltz—The Troubadours, "Beautiful Lady" (McLennan).
 Foxtrots—The High Hatters, "Nobody's Using It Now" (Grey).
 Johnny Johnson and His Orchestra, "Just You, Just Me."
 Waltz—Nat Shilkret and Orchestra, "Love Me" (Lenoir).
 10.57: Foxtrots—Jack Hylton and His Orchestra, "Yours Sincerely."
 The High Hatters, "My Love Parade" (Grey-Schertzinger).
 Ted Weems and His Orchestra, "Sophomore Prom."
 Johnny Johnson and His Statler Pennsylvanians, "You're Responsible" (Clare).
 Ted Weems and His Orchestra, "I Don't Want Your Kisses."
 11.0: God save the King.

3YA, CHRISTCHURCH (380 KILOCYCLES)—FRIDAY, MARCH 20.

- 8.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour, conducted by "Chuckie."
 6.0 : Dinner music session.
 Paul Godwin's Orchestra, "The Jolly Robbers" Overture (Suppe); "Stephanie Gavotte" (Czibulka); "Feldblumen" (Wesaling); "Suite Ballet" (Popy): (1) Entrée Mazurka; (2) Pizzicatti; (3) Valse Lente; (4) Largo; (5) Final Galop. "Avant de Mourir" (Bou-langer); "Moonlight" (Massenet); "Coppelia Ballet Fantasy." State Opera Orchestra, Berlin, "Othello Ballet" (Verdi); "La Dame Blanche" (Boieldieu); "Turkish March" (Mozart).
 Paul Godwin Quintet, (a) "Popular Song"; (b) "Tale" (Komzak).
 7.0 : News session.
 7.30 : Dialogue talk—Messrs D. Cossgrave and W. Melbourne, "Radio Service."
 8.0 : Chimes.
 Selection—Regal Cinema Orchestra, "Show of Shows."
 8.8 : Baritone—Mr. A. G. Thompson, (a) "Your Looking Glass" (Woolmer); (b) "The Market Cart" (Day).
 8.12 : Cello—Mr. Harold Beck, "Schumerlied" (Schumann).
 8.15 : Contralto—Miss Nellie Lowe, (a) "The Lilac Cotton Gown" (Hill); (b) "Husheen" (Needham).
 8.21 : Piano novelty items—Miss Maisie Ottey, (a) "Prairie Blues" (Ellis); (b) "Make it Snappy" (de Rienzo).
 8.26 : Humour—Mr. George Titchener, (a) "It's Lovely to be in Love" (Mayne); (b) "Leave Her Alone with Them" (Osborne).
 8.34 : Instrumental—Broadcasting Trio, (a) "Fairy Frolic" (Quilter); (b) "Idylle" (Labitsky); (c) "Hungarian Dance, No. 4" (Brahms).
 8.44 : Mezzo-soprano—Mrs. H. Turnbull, (a) "The Slave Song" (Del Riego); (b) "Over the Wall of My Garden" (Charles).
 8.48 : Clarinet—Mr. M. E. Withers, "Spring Song" (Mendelssohn).
 8.52 : Contralto and baritone—Dulcet Duo, "Won't You Buy?"
 8.55 : Accordeon—Gellin and Borgstrom, (a) "Blaze Away March" (Halzmann); (b) "Gladiator's Farewell" (Blankenburg).
 9.1 : Weather report and station announcements.
 9.3 : Super Cinema Orchestra, "In the Sudan" (Sebek).
 9.7 : Contralto—Miss Nellie Lowe, "The Glory of the Sea" (Sanderson).
 9.11 : Cello—Mr. Harold Beck, "Gavotte" (Popper).
 9.14 : Baritone—Mr. A. G. Thompson, (a) "Thinking of Mary" (Kellie); (b) "Over the Desert" (Bennett).
 9.19 : Piano novelties—Miss Maisie Ottey, (a) "Finger Prints" (Jentes); (b) "Humorestless" (Mills).
 9.24 : Humour—Mr. George Titchener, "Bed, Bed, Beautiful Bed."
 9.28 : Instrumental—Broadcasting Trio, (a) "Salut d'Amour" (Elgar); (b) "Dance Bohemienne" (Donajowski).
 9.38 : Mezzo-soprano—Mrs. H. Turnbull, (a) "May Day Morn" (Slater); (b) "The Kerry Dance" (Molloy).
 9.43 : Clarinet—Mr. M. E. Withers, "Les Alsachiennes" (Le Thiere).
 9.49 : Contralto and baritone—Dulcet Duo, "Gray Days" (Johnson).
 9.51 : Band—H.M. Coldstream Guards, "Les Cloches de Corneville."
 10.0 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—FRIDAY, MARCH 20.

- 8.0 : Selected recordings.
 5.0 : Children's hour, conducted by "Aunt Sheila."
 6.0 : Dinner music session.
 Paul Godwin Orchestra, "Polish Temper" (Nedbal).
 Paul Godwin Trio, "For You" (Czibulka); "Melodie" (Denza).
 Paul Godwin Orchestra, "Kismet" (Yamada).
 Efm Schachmeister Orchestra, "Dark Eyes" (Schachmeister).
 Paul Godwin Orchestra, "Hearts and Diamonds."
 Paul Godwin Quartet, "Serenata" (Bece); "Adoration."
 Polydor Orchestra, "Berlin as it Laughs and Weeps" (Conradi).
 Paul Godwin Orchestra, "Love in Idleness" (Machbeth).
 Efm Schachmeister Orchestra, "Kasbek" (Schachmeister).
 Paul Godwin Orchestra, "Short but Delicious" (Schreiner).
 7.0 : News session.
 8.0 : Chimes. Overture—Band of H.M. Coldstream Guards, "Florodora."
 8.9 : Contralto—Mrs. E. Stone, (a) "Killarney" (Falconer), (b) "Love's Old Sweet Song" (Molloy).
 8.15 : Popular melodies—Kenz Orpheans, (a) "Crying for the Carolines," (b) "Have a Little Faith in Me" (Warren).
 8.22 : Dialect—Miss Winifred M. Martyn, (a) "Rory O'More" (Lover), (b) "Assisting a Poetess" (Anon.).
 8.28 : Waltz—Kenz Orpheans, "One More Waltz" (McHugh); popular melody, "Ro-ro-rolling Along" (Mencher).
 8.35 : Bass—Mr. R. B. Macdonald, "The Sword of Ferrara" (Bullard).
 8.38 : Organ—Leslie James, "Medley of Old Songs"; Reginald Foort, "The Sacred Hour" (Ketelbey).
 8.44 : Soprano—Miss May Brook, "Song My Mother Sang" (Grimshaw).
 8.47 : Popular melodies—Kenz Orpheans, (a) "Sing a Song to the Stars" (Meyer), (b) "I Love You So Much" (Ruby).
 8.54 : Tenor—Mr. W. H. Satterthwaite, (a) "Trooper Johnny Ludlow" (Temple), (b) "Believe Me, If All Those Endearing Young Charms"
 9.0 : Weather report and station notices.
 9.2 : Selection—National Symphony Orchestra, "The Evolution of Dixie."
 9.10 : Contralto—Mrs. E. Stone, "Your Eyes Have Told Me So" (Hardy).
 9.13 : Popular melodies—Kenz Orpheans, (a) "Sing, You Sinners" (Harling), (b) "Looking at You" (Berlin).

- 9.20 : Tenor—Mr. W. H. Satterthwaite, "A Farewell" (Liddle).
 9.23 : Accordeon—J. Fiers, "Temptation Rag" (Lodge).
 9.26 : Dialect—Miss Winifred M. Martyn, "An Inquisitive Customer" (Anon.).
 9.30 : Popular melodies—Kenz Orpheans, (a) "My Baby Just Cares" (Donaldson), (b) "Bye, Bye, Blues" (Gray).
 9.37 : Soprano—Miss May Brook, (a) "The Ash Grove" (traditional), (b) "Irish Lullaby" (Needham).
 9.43 : Piano—Mrs. C. Drake, "An English Waltz" (Scott).
 9.47 : Bass—Mr. R. B. Macdonald, (a) "Blue Dragoons" (Russell), (b) "Poor Old Bosun" (Longstaffe).
 9.53 : Popular melody—Kenz Orpheans, "Go Home and Tell Your Mother."
 9.57 : Selection—Band of H.M. Coldstream Guards, "Morning, Noon, and Night" (Suppe).
 10.1 : God save the King.

Saturday, March 21**1YA, AUCKLAND (900 KILOCYCLES)—SATURDAY, MARCH 21.**

- 8.0 : Selected recordings.
 3.15 : Literary selection by the Announcer.
 5.0 : Children's session, conducted by "Cinderella."
 6.0 : Dinner music session:
 Boston Symphony Orchestra, "Frühlingstimmen" (Johann Strauss).
 Organ—Jesse Crawford, "Serenade" (Romborg).
 National Military Band, "Ben Hur" (Byng).
 A. and P. Gipsies, (a) "White Acacia," (b) "Petite Causerie" (Stone).
 Vienna Philharmonic Orchestra, "Dorfschwalben" (Strauss).
 International Novelty Quartet, "Teddy Bears' Picnic" (Bratton).
 Jack Hylton and His Orchestra, "Steppin' Out" (Vauchant).
 New Mayfair Orchestra, "Wake Up and Dream" (Porter).
 Organ—Jesse Crawford, "Indian Love Call" (Friml).
 International Novelty Orchestra, (a) "To Die Dreaming," (b) "Four Little Farms."
 A. and P. Gipsies, "Herbertiana" (arr. Stone).
 Jack Hylton and His Orchestra, "Old-Time Songs."
 International Novelty Quartet, "The Skaters" (Waldteufel).
 Jack Hylton and His Orchestra, "Lonesome Little Doll."
 7.0 : News and market reports.
 8.0 : Chimes. Relay from the Auckland Town Hall of a concert by the Auckland Municipal Band, under the conductorship of Mr. George Buckley, assisted by the following artists:—Miss Phyllis Gribbin, contralto; Mr. Ralph Eskrigge, tenor; Mr. Hal C. McLennan, flautist; Mr. Fred Bowes, cornetist; Mr. Leo Whittaker, accompanist:—
 The Band—The National Anthem; march, "The Vedette" (Alford); overture, "Pique Dame" (Suppe).
 Tenor—Mr. R. Eskrigge, "E Lucevan le Stelle" (Foster).
 Selection—Band, "Two Excerpts from the Pathetic Symphony": No. 1, Andante from First Movement; No. 2, March from Third Movement.
 Contralto—Miss P. Gribbin, "Like to the Damask Rose" (Elgar).
 Characteristic piece—Band, "The Mill in the Black Forest" (Ellenberg); selection, "Rienzi" (Wagner); waltz, "Stories of the Forest of Vienna" (Strauss).
 Flute—Mr. H. McLennan, "Lucia Fantasia" (Kohler).
 Tenor—Mr. R. Eskrigge, "Thank God for a Garden" (Del Riego).
 Suite—Band, "Suite de Ballet" (Delibes); "Coppelia."
 Cornet—Mr. F. Bowes, "Emmett's Lullaby" (Short).
 Contralto—Miss P. Gribbin, "Moorings" (Sanderson).
 Intermezzo—Band, "Flirtation" (Steck); march, "Crusader."
 10.0 : Programme of dance music from the studio:
 Foxtrots—Alfredo and His Band, "Now I'm in Love" (Shapiro); "Singin' in the Bath" (Magidson); "Am I Blue" (Akst).
 Waltz—Harry Hudson's Melody Men, "Sleepy Valley" (Hanley).
 10.12 : Foxtrots—Alfredo and His Band, "My Love Parade" (Grey); "Smiling Irish Eyes" (Ruby).
 Tango—Marcu and His Orchestra, "Do You Still Love Me?"
 10.24 : Vocal—G. H. Elliott, "Plain Chocolate" (Lutzen).
 One-step—Harry Hudson's Melody Men, "Tell Me, Mother" (Yvain).
 Foxtrots—Harry Hudson's Melody Men, "Happy Days are Here Again" (Yellen); "O, Ya, Ya!"
 Waltz—Harry Hudson's Melody Men, "Marie" (Berlin).
 10.36 : Foxtrots—The Plaza Band, "Oute Little Flat."
 Harry Hudson's Melody Men, "Lucky Me, Lovable You"
 Vocal—G. H. Elliott, "Sentimental Luke" (Lutzen).
 10.45 : Tango—Motoi and His Orchestra, "In the Twilight."
 Foxtrots—Harry Hudson's Melody Men, "Mickey Mouse" (Carlton); "Building a Nest for Mary" (Rose); "Cuckoo in the Clock."
 Waltz—Alfredo and His Band, "Let Me Have My Dreams" (Clarke).
 11.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SATURDAY, MARCH 21.

- 8.0 : 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:
 Selection—Kaufman's Orchestra, "The Gipsy Baron" (Strauss).
 Waltz—La Vittoria Orchestra, "Wedding of the Winds" (Hall).

- Polydor String Orchestra, "Italiana in Algeria" (Rossini).
 Piccadilly Orchestra, "If Only I Had You" (Davies); "Lolita" (Ferrete); "Charmaine" (Rapee).
 Philharmonic Orchestra, Berlin, "Songs of Love" Waltz" (Strauss).
 Selection—New Mayfair Orchestra, "This Year of Grace" (Coward).
 Waring's Orchestra, "Ah! Sweet Mystery of Life" (Herbert).
 Polydor String Orchestra, "Les Dragons des Villars" (Maillart).
 Victor Concert Orchestra, "Minuet in G" (Paderewski); "Amaryllis."
 Piccadilly Orchestra, "Bird Songs at Eventide" (Coates).
 Waltz—International Concert Orchestra, "Blue Danube" (Strauss).
 7.0 : News session, market reports and sports results.
 7.40 : Talk—Dr. I. L. G. Sutherland, "Education on the Air."
 8.0 : Chimes. Relay from the Town Hall of concert by the Wellington Apollo Singers. Conductor, Mr. H. Temple White.
 The Singers, (a) "Hymn to Apollo" (from "Ulysse"—Gounod), (b) "Summer Night" (Velt). Quartet: B. H. Mayall, A. E. Coe, T. Watson, and D. Hall.
 Piano—Mr. Ernest Jenner, "L'Isle Joyeuse" (Debussy).
 The Singers, (a) "The Anvil" (Adolphe Adam), (b) "Tobacco."
 Violin—Miss Ava Symons, "First and Second Movements from Sonata in G Minor" (Tartini).
 The Singers—(a) "Requiem" (Homer—H. Temple White), (b) "Pillgrims' Chorus" from "Tannhauser" (Wagner).
 From the Studio:
 Weather report and station notices.
 Piano—Four pianos, (a) "Faust" Waltz (Gounod-Liszt), (b) "Dreams of Hawaii" (Mittmann—Gelbtrunk).
 From the Town Hall:
 The Singers, (a) "Sailors' Chorus" from "The Flying Dutchman" (Wagner), (b) "Now is the Month of Maying" (Old English madrigal) (Morley).
 Piano—Mr. Ernest Jenner, "Two Studies, Op. 46, Nos. 6 to 8" (York Bowen).
 The Singers, "Hungarian March" (Laurent de Rille).
 Violin—Miss Ava Symons, (a) "Canto Amoroso" (Sammartini-Elman), (b) "Variations on a Theme by Corelli" (Kreisler).
 The Singers—(a) "Sylvia" (Speaks), (b) "The Hunter in His Career."
 From the Studio:
 10.0 : Dance music programme:
 Foxtrots—Jesse Stafford and His Palace Hotel Orchestra, "Sophomore Prom" (Klages).
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "Reach Out for a Rainbow" (Conrad).
 Irving Mills and His Hotsy Totsy Gang, "My Little Honey and Me" (Hackforth).
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "Parade of the Blues" (Conrad).
 10.12 : Vocal—David McAlpin, "Paddy McGinty's Goat" (Weston).
 Foxtrots—Herbert Gordon and His Hotel Ten Eyck Whispering Orchestra, "I Could Do It For You" (Conrad).
 Den Russo and His Oriole Orchestra, "Wouldn't It Be Wonderful" (Clarke).
 Herbert Gordon and His Hotel Ten Eyck Whispering Orchestra, "Hard To Get" (Meyer).
 10.24 : Waltz—Carter's Orchestra, "Missouri Moon" (Parish Lodge).
 Eddy Shaw's Hawaiians, "Sweetheart of the Tropical Sea" (Wren).
 Foxtrots—Hal Kemp and His Orchestra, "H'lo Baby" (Magidson).
 Red Nicholls and His Strike up the Band Orchestra, "Strike Up the Band" (Gershwin).
 Vocal—David McAlpin, "The Garden Where The Praties Grow."
 Foxtrots—Hal Kemp and His Orchestra, "A Little Kiss Each Morning" (Woods).
 Red Nicholls and His 'Strike up the Band' Orchestra, "Soon" (Gershwin).
 Waltz—Eddy Shaw's Hawaiians, "Under the South Sea Moon."
 10.48 : Carter's Orchestra, "Daddy's Lullaby" (De Vall).
 Foxtrots—Bob Haring and His Orchestra, "Love Made a Gypsy Out Of Me" (Phillips).
 Hal Kemp and His Orchestra, "I Love You, Believe Me I Love You" (Cowan).
 Bob Haring's Orchestra, "Georgia Pines" (Trent).
 11.0 : Sporting summary.
 11.10 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SATURDAY, MARCH 21.

- 3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's Hour, conducted by "Aunt Pat," "Sunny Jim" and "Jack Frost."
 6.0 : Dinner Music Session.
 Royal Opera Orchestra, "Praeludium" (Jarnefeldt).
 Waltz—Royal Opera Orchestra, "Eugin Onegin" (Tschaikowsky).
 Balalaika Orchestra, "Shining Moon" (Russian Folk Song).
 Vienna Philharmonic Orchestra, "Morning, Noon and Night in Vienna."
 Paul Whiteman's Orchestra, "Suite of Serenades" (Herbert): (1) Spanish; (2) Chinese; (3) Cuban; (4) Oriental.
 Philadelphia Symphony Orchestra, "Tales from the Vienna Woods."
 Berlin State Opera Orchestra, "German Dances" (Mozart).
 Royal Opera Orchestra, "Berceuse" (Jarnefeldt).
 San Francisco Symphony Orchestra: (a) "Serenade" (Volkman); (b) "Flight of the Bumble Bee" (Rimsky-Korsakov).

Chicago Symphony Orchestra: (a) "Valse Triste" (Sibelius); (b) "Funeral March of a Marionette" (Gounod).
 San Francisco Symphony Orchestra, "Marche Militaire" (Schubert).

- 7.0 : News Session.
 7.30 : Sports results.
 8.0 : Chimes—Overture—Jack Hylton's Orchestra, "Old Musical Comedy Gems."
 8.8 : Bass—Mr. Leslie N. Fleming: (a) "Gipsy John" (Clay); (b) "At Dawning" (Cadman).
 8.14 : Accordeon—Mr. W. W. Sumner: (a) "Waltz—Mellow Moon"; (b) "There's a Rainbow Round my Shoulder"; (c) "E Pari Ra" (Arr. Sumner).
 8.19 : Cabaret songs at the piano with banjolele—The Rose and Thistle Duo: (a) "Little White Lies" (Donaldson); (b) "A Girl Friend of a Boy Friend of Mine" (Donaldson).
 8.25 : Hawaiian Instrumental Quartette—Hawaiian Harmony Four: (a) "One, Two, Three, Four Waltz" (Allan); (b) "Rose of Honolulu" (Armstrong).
 8.34 : Tenor—Mr. E. R. Pitman: (a) "Marguerite" (White); (b) "Firstly, My Dear Brethren" (Hages).
 8.40 : Piano—Miss Aileen Warren, "Venetienne" (Godard).
 8.44 : Humour in song and story—Mr. Jock Lockhart: (a) "Introducing"—When Young Whittington Heard Those Bow Bells Chime" (Rutherford); (b) "That's Why I Love Her" (Weston Lee); (c) "Thump! Thump!" (Simmons).
 8.56 : Instrumental—Christchurch Broadcasting Trio: (a) "Capriccio" (Reiseger); (b) "Water Lilies" (Hope); (c) "Bolero" (Spanish Dance) (Moskowski).
 9.6 : Weather Report and Station Notices.
 9.8 : Band—H.M. Grenadier Guards, "Sylvia Ballet" (Delibes, arr. Kappey): (1) Valse Lente; (2) Pizzicato; (3) Barcarolle; (4) March.
 9.16 : Bass—Mr. Leslie N. Fleming, "La Paloma" (Yradier).
 9.20 : Accordeon—Mr. W. W. Sumner, Waltz—"Mexicali Rose". March—"Bridget O'Flynn". Waltz—"Sleepy Valley" (all arr. Sumner).
 9.26 : Cabaret Songs at the piano with banjolele—The Rose and Thistle Duo: (a) "Just a Little Closer" (Meyer); (b) "Hello! Swanee, Hello!"
 9.32 : Hawaiian Harmony Four: (a) "I Hear the Ukuleles Calling Me Home" (Scott); (b) "Aloha Oe" (Berger).
 9.41 : Tenor—Mr. E. R. Pitman, "Jogging Along the Highway" (Samuel).
 9.45 : Piano—Miss Aileen Warren, "Juba" (Negro Dance) (Dett).
 9.48 : Vocal Novelty—Juan Llossas and South American Orchestra: (a) "Intip Raimi" (Paredes); (b) "Cuando Quieras Llorar" (Paredes).
 9.54 : Instrumental—Broadcasting Trio: (a) "Tarantella" (Hiller); (b) "A La Passepie" (Williams); (c) "Valse" (Gounod).
 10.4 : Dance Music.
 Foxtrots—Arcadians' Dance Orchestra, "Dreamy Honolulu" (Gumble).
 New Mayfair Dance Orchestra, "The Doll's House" (Butler).
 Arcadians' Dance Orchestra, "San Sebastian" (Levy).
 10.13 : Waltz—Alfredo's Band, "I Love You, I Hate You."
 Foxtrots—George Olsen and His Music, "The Song of the Dawn".
 The Blue Jays, "Sing You Sinners" (Coslow).
 10.22 : Vocal Novelty—Walter Miller, "The Clatter of the Clogs" (Flynn).
 10.25 : Foxtrots—Harry Hudson's Melody Men, "The Woman in the Shoe."
 Alfredo's Band, "Watching My Dreams Go By" (Dubin).
 Harry Hudson's Melody Men, "The Harlequinade."
 10.34 : Waltzes—New Mayfair Dance Orchestra, "Eleanor" (Hanley).
 George Olsen and His Music, "It Happened in Monterey".
 Foxtrots—The Blue Jays, "Why?" (Coslow).
 Alfredo and His Band, "Puttin' on the Ritz" (Berlin).
 10.46 : Vocal Novelty—Walter Miller, "Harmonica Harry" (Phil Baxter).
 Tango—Radio Melody Boys, "Here in My Heart" (Fields).
 10.52 : Foxtrots—Leo Reisman and His Orchestra, "Happy Feet" (Yellen).
 Radio Melody Boys, "Exactly Like You" (Fields).
 Leo Reisman and His Orchestra, "I Like to Do Things For You" (Yellen).
 Tom Gerun and His Orchestra, "Dream Lover" (Grey).
 11.4 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SATURDAY, MARCH 21.

- 2.30 : Description of New Zealand eight-oar rowing championship and other events.
 5.0 : Children's hour, conducted by "Aunt Anita" and "Big Brother Bill."
 6.0 : Dinner music session.
 New Symphony Orchestra, "Toy Symphony" (Romberg).
 Concert Orchestra, "Minuet" (Boccherini).
 International Novelty Orchestra, "Lazy Pete" (Kersten).
 Zonophone Salon Orchestra, "Old Rustic Bridge" (Skelly).
 International Novelty Orchestra, "Eva" Waltzes (Lehar).
 Organ—Sidney Gustard, "Cuckoo" (Jonasson).
 International Novelty Quartet, "Over the Waves" (Rosas).
 Paul Godwin Quintet, "Minnet" (Bolzoni).
 International Novelty Orchestra, "Carmen Sylva" (Ivanovici).
 Zonophone Salon Orchestra, "Killarney" (Balfé).
 International Novelty Quartet, "See Me Dance the Polka."
 Paul Godwin Quintet, "Love After the Ball" (Czibulka).
 Concert Orchestra, "Sous Bois" (Staub).
 Organ—Sandy Macpherson, "I Promise" (Hirsch-Wilhite).
 National Symphony Orchestra, "Zampa" Overture (Herold).
 7.0 : News session.
 8.0 : Chimes. Relay of vaudeville programme from 3YA, Christchurch.

- 10.0 : Dance session.**
 Foxtrots—Jack Payne and His B.B.C. Dance Orchestra, "The Punch and Judy Show" (Black).
 O'Leary's Irish Minstrels, "The Pigeon on the Gate."
 Jack Payne and His B.B.C. Dance Orchestra, "Crazy Pirouette" (Frisk).
 Waltz—O'Leary's Irish Minstrels, "My Wild Irish Rose."
10.12: Foxtrots—Ray Starita and His Ambassadors Band, "My Dream Memory" (Clare).
 Jan Garber and His Orchestra, "When a Woman Loves a Man" (Rainger).
 Vocal—Len Maurice, "A Little Kiss Each Morning" (Woods).
10.21: Foxtrots—The Four Bright Sparks, "Hard To Get" (Meyer).
 Ben Selvin and His Orchestra, "How Am I to Know?"
 Guy Lombardo and His Royal Canadians, "Singin' in the Bathtub" (Magidson).
10.30: Waltz—Will Osborne and His Orchestra, "There Will Never Be Another Mary" (Ager).
 Foxtrots—Guy Lombardo and His Royal Canadians, "A Little Kiss Each Morning" (Woods); "Under a Texas Moon."
10.39: Vocal—Len Maurice, "Gay Love" (Clare).
 Waltzes—Paul Whiteman and His Orchestra, "It Happened in Monterey" (Yellen).
 Moana Orchestra, "My Hawaiian Isles" (Noble).
10.48: Foxtrots—The Four Bright Sparks, "The Kerb Step" (Knox).
 Paul Whiteman and His Orchestra, "Song of the Dawn."
 Moana Orchestra, "Dreamy Hula Town" (Collins).
 Ted Lewis and His Band, "Lady Luck" (Perkins).
11.0 : God save the King.

Sunday, March 22

1YA, AUCKLAND (900 KILOCYCLES)—SUNDAY, MARCH 22.

- 3.0 : Selected recordings.**
3.15: Literary selection by the Announcer.
6.0 : Children's song service, conducted by "Uncle Bert."
6.55: Relay of divine service from the Beresford Street Congregational Church. Preacher, The Rev. A. V. Whiting. Choirmaster, Mr. William Gemmell. Organist, Mr. Arthur Cherry.
8.30: Selection—National Symphony Orchestra, "Orpheus in the Underworld" Soprano—Miss Reta W. MacCullay, (a) "Lullaby" (Brahms); (b) "Dewy Violets" (Scarlatti); (c) "It is Only a Tiny Garden."
 Instrumental—The Moore Sisters, Trio, "Preislied" (Wagner); Cello, "Orientale" (Cesar Cui); Trio, "Ave Maria" (Gounod).
 Evening weather forecast and announcements.
 Piano—Mr. Cyril Towsey, "Lyric Pieces Op. 48" (Grieg); (a) "Butterflies," (b) "Lonely Wanderer," (c) "Little Birds," (d) "Poem Erotik," (e) "To the Spring."
 Selection—Royal Opera Orchestra, "1812 Overture" (Tchaikowsky).
 Bass-baritone—Mr. Albert Gibbons Taylor, (a) "The Lime Tree" (Schubert); (b) "O Salutaris Hostia" (Weiss); (c) "The Man of Sorrows" (Adams).
 Instrumental trios—The Moore Sisters, (a) "Romance" (Tchaikowsky); (b) "Menuetto" (Borresen); (c) "Waltz" (Sinding).
 Choral—Don Cossacks Choir, (a) "Evening Bells" (arr. Jaroff); (b) "Serenade" (Abt).
 Selection—Band of H.M. Grenadier Guards, "Martial Moments."
 God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, MARCH 22.

- 3.0 to 4.30: Selected gramophone recordings.**
6.0 : Children's session, conducted by "Uncle George," assisted by the Children's Choir from the Maranui Methodist Church.
7.0 : Relay of evening service from St. Paul's Pro-Cathedral, Mulgrave Street, Wellington. Preacher, Canon Percival James. Organist and Choirmaster, Mr. Robert Parker.
8.15 (approx.): Studio concert. Overture—Salon Orchestra (Conductor, Mr. M. T. Dixon), "Cavalleria Rusticana" (Mascagni).
8.28: Mezzo-soprano—Madame Emily Briggs, with violin obligato, "Serenade"
8.27: Cello with organ—Hans Bottermund, (a) "Evening Song" (Schumann); (b) "Thou Art Repose" (Schubert).
8.35: Baritone—Mr. S. Evelyn Rodger, with orchestral accompaniment, (a) "The Road that Leads to You" (Geehl); (b) "Uncle Rome."
8.41: Selection—Salon Orchestra, "Liebeslied" (Paderewski); waltz, "Talisman" (Zimmermann).
8.49: Tenor—Mr. Arthur C. Clark, with orchestral accompaniment, (a) "Song of Luring"; (b) "Faery Song" (both numbers from "The Immortal Hour") (Rugland Boughton).
8.54: Violin—Mr. W. Haydock and Salon Orchestra, "Andante de la Symphonie Espagnole" (Lalo).
9.2 : Weather report and station notices.
9.4 : Band—H.M. Grenadier Guards, "Merrie England" (German).
9.12: Vocal duet—Madame Emily Briggs and Mr. S. Evelyn Rodger, "What Have I To Do With Thee?" (from "Elijah") (Mendelssohn).
9.17: Ballet music—Salon Orchestra, "Coppelia Ballet" (Delibes).
9.25: Tenor—Mr. Arthur C. Clark, "Nymphs and Shepherds" (Purcell).
9.29: Piano—Mr. Gordon Short, "Two Viennese Waltzes" (Godowsky).

- 9.36: Mezzo-soprano—**Madame Emily Briggs, with orchestral accompaniment, (a) "Hindoo Song" (Bemberg); (b) "In Summer Time in Bredon" (Graham-Peel).
9.43: Choir—Tomanerchor Leipzig, (a) "Es Ist Ein Reis Entsprungen" (Pratorius); (b) "Stille Nacht, Leilige Nacht" (Gruber).
9.51: Selection—Salon Orchestra, "Maid of the Mountains" (Fraser-Simson).
10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, MARCH 22.

- 3.0 : Gramophone recital.**
5.30: Children's Song Service by children of the Methodist Sunday Schools.
6.15: Chimes from studio.
6.30: Relay of evening service from East Belt Methodist Church, Fitzgerald Avenue. Preacher: Rev. W. H. Greenslade. Organist: Mr. A. M. Owen. Choir Conductor: Mr. J. Chaplin.
7.45 (approx.): Musical recordings from studio.
8.0 (approx.): Relay of Studio programme from 4YA, Dunedin.
10.0: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, MARCH 22.

- 3.0 : Selected recordings.**
5.30: Children's Song Service, conducted by "Big Brother Bill."
6.15: Instrumental recordings.
6.30: Relay of evening church service from Church of Christ, St. Andrews Street. Preacher: Pastor W. D. More. Choirmaster: Mr. W. H. Mackenzie.
7.45: Selected recordings.
8.15: Overture—Salon Orchestra, under the direction of Mr. A. H. Pettitt, "Life's Laughter" (Rust); Viennese Air, "Old Vienna" (Drdla); March, "Nussdorf" (Lorens).
8.26: Tenor—Mr. Ernest Drake, (a) "Annabelle Lee" (Leslie), (b) "June Music" (Trent); (c) "The Questioner" (Schubert).
8.36: Selection—Salon Orchestra, "Masquerade" (Byford); 1. "Diabolo Dance"; (2) "Confession"; (3) "Minuetina"; (4) "Dawn of Hope."
8.51: Choral—Erk's Male Chorus, "The Linden Tree" (Schubert-Stange).
8.55: Soprano—Miss Molly Vickers, (a) "The Song of Thanksgiving"; (b) "The Lord Is My Light" (Allisen); (c) "The Prayer Perfect."
9.4 : Weather report and station notices.
9.6 : Humorous Interlude—Salon Orchestra, "The Cat and the Mouse" (Engleman); Valse Triste, "Ashes of Roses" (Arnold).
9.16: Baritone—Mr. William Ruffell, (a) "Thou'rt Passing Hence" (Sullivan); (b) "Les Rameaux" (Faure); (c) "When I Survey."
9.27: Selections—Salon Orchestra, (a) "H.M.S. Pinafore" (Sullivan); (b) "Fete De Lisette" (Byford).
9.39: Choral—Erk's Male Chorus, "The Gondolier" (Schubert).
9.43: Contralto—Mrs. Nellie G. Shrimpton, (a) "Alleluia" (Morris); (b) "Robin Adair" (Burns); (c) "Salaam" (Lang).
9.52: Selection—Victor Symphony Orchestra, "Dance of the Hours."
10.0 : God save the King.

5YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, MARCH 22.

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

In a Monastery Garden Programme Features

(Continued from page 3.)

one suggested he would like to do it as a "waltz," but as I could not imagine monks waltzing in a monastery garden, I said, "No, thank you," and departed without the expected advance "on account of royalty."

The next publisher suggested that he would like to do it if I would cut out the "Kyrie" part, which he was sure would ruin any chances of popularity the piece might have. To omit this section seemed to me to savour of "Hamlet" without the Prince of Denmark, so I regrettably again said "No, thank you," and again departed empty-handed.

Then, after a while the present publisher of "In a Monastery Garden" got in touch with me, and as he did not suggest putting in a cake-walk instead of the "Kyrie" we came to terms and the piece was at long last published in the form I had written it. My friend's verdict, in due course, was thoroughly verified and the piece became one of the best-hated (or best loved—as you will)—and "best sellers," and I passed from the doubtful position of a "promising musician" to that of a "successful composer!"

(Continued from page 19.)

In the evening 2YA will relay from the Concert Chamber of the Town Hall a concert to be given by the Wellington Apollo Singers under Mr. H. Temple-White. The major portion of the programme will be vocal, and includes a number of choruses and quartet items. Miss Ava Symons, violinist, will be heard in solos: "1st and 2nd Movements of Sonata in G Minor," by Tartini, "Canto Amoroso" by Sammartini-Elman, and "Variations on a Theme by Corelli" by Kreisler. Mr. Ernest Jenner, A.R.A.M. (pianist) will play "Two Studies" Op. 46, Nos. 6 and 8 by York Bowen. From 10 till 11 p.m. dance music will be broadcast. The session will conclude with the sporting summary at 11 p.m.

From 3YA

A NEW Hawaiian instrumental quartet consisting of three steel guitars and a banjo-uke will contribute to the variety programme this evening. Also on the programme will be Mr. Jock Lockhart (Scottish humorist), the Rose and Thistle Duo in cabaret songs at the piano with banjo-uke, and Miss Aileen Warren (pianista).

Short-wave Notes

Short Waves. From Morocco.

THE Radio Maroc broadcast programmes are relayed to the Rabot shortwave transmitter. This station re-broadcasts them on Wednesdays, Fridays, and Sundays, between 12.30 a.m. and 1.30 a.m., on 24 metres, and on Sundays and Mondays between 8.30 a.m. and 9.30 a.m., New Zealand standard time, on 48 metres.

All announcements are made in French, the call being "Ici Radio Maroc, station de l'office Cherigien." As an interval signal a metronome can be heard. The transmissions close down with the playing of "La Marseillaise."

JIAA, Japan.

THE shortwave station JIAA is located at Kemikawao-Cho, Chiba-Ken, Japan, and belongs to the Department of Communications. The wavelengths used are 38.07 metres and 19.036 metres. Directional aerials are used, directed to Europe and America. The aerial power is 5 kilowatts. The station frequently tests with KBL, California, and sometimes with VK2ME, Sydney. Reports are asked for regarding reception of JIAA, which should be sent to the Kemikawa Radio Sending Station at the above address.

Short-wave Stations Heard During Week Ending March 7

RV15, Kharbarovsk, Siberia, 70 metres, at good speaker strength on two valves, usually plenty of static. Most Sunday nights has musical programme; occasionally the accordion is heard. Recently heard what was evidently military or physical drill at school, orders issued and band playing, then different speakers, after each the familiar two lines of the anthem.

F3QCD, Saigon, Indo-China, 49 metres, comes on from 11 to 11.30 p.m. with test records, then chimes and strikes one and announces. They have an excellent orchestra; later he announces in English and French, then has the Chinese programme. Speaker

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strength on two valves, usually comes in above noise level.

W9XF has been off the air on several nights and **W8XAL** is irregular. Sometimes the latter has been on until 11 p.m.

7LO, Nairobi, about 49.50 metres, at 6 a.m., is R6. Closes at 7 a.m.

W2KAF, 31.48 metres, on Sunday afternoon was sending messages to American expedition in Venezuela at 4.30 p.m.

WIAZ, Springfield, Mass., 31.35 metres, was approximately R5; better volume 12.30 a.m.

G5SW, Chelmsford, 25.53 metres, at 12.30 to 1 a.m., received at R8; very steady, fades at times on dinner music sessions; mornings about R6 subject to rapid fades, but readability fair.

DHC, Germany, 26.2 metres, after 11 p.m. on music about R3 (just above beam stations).

FTN, Paris, and FTZ, Rabat, 23 and 24 metres, approximately on phones after 9.30 p.m.; irregular good volume.

W8XK, Pittsburgh, 25.5 metres, has been received up to 10.20 a.m. at about R4 on Stock Exchange reports, followed by children's sessions.

KIXR (KZRM), Manila: Can find no trace of him now, but heard a station near there Friday, 9.50 p.m.

PK3AN, Sourabaya, 50 metres, received at 12 p.m.; most nights R7.

VK3ME, Melbourne, 31.55 metres, 10 to 11.30 p.m. Saturdays; excellent strength; fades of 5 to 6 seconds duration.

3ZC, Christchurch, 46.23 metres, 7 to 8 p.m., Fridays; slow fades, volume good.

On 43 and 44 metres are two very strong waves most evenings. These are:—

W00, New York, and GBS, England, trans-Atlantic stations on telephony.

A local listener tells me he heard a station up to 10 a.m. Friday on 36.3 metres announcing "Polenza."

80 metres amateur band. Considerable activity here; **ZL2AW** and **2AX** now remarkably clear. A five-way schedule was worked between **2AW, 2BE, 2FF, 2FC, and 1BQ.** Many of these amateur stations are worth listening to.

I notice people are tuning around harmonics, and thinking they are stations. The principal ones are approximately: 40 metres, **RV15**; 45 metres, **2BL, 8YA,** also **ZL** amateurs; 60 metres, **2UE, Sydney.** On 80 metres is an American station at nights but only faint music is heard.

N.Z. Short-wave Club

MR. A. B. McDONAGH, secretary, New Zealand Short-wave Club, writes: Already the club is becoming representative of the short-wave listeners and experimenters, members from Auckland to the Bluff rolling in.

A glance through the letters shows that the members are of all classes, and gives one the impression that there is no such thing as class distinction in the fraternity of "the brotherhood of the air." Many names we are familiar with per medium of the "Record's" DX columns appear; in fact, the N.Z.S.W.C. is an actual DX club.

A suggestion from **NZ15W, Hawera,** for slow morse for the benefit of country listeners is being given effect to and herein it is most likely that the "Hams" will assist their future members. So far our morse schedule is as follows:—

Fridays, 6.45 to 7.30 p.m., **Johnson's Wireless School, Wellington,** on 80 metres, speed 10 to 12 words per minute.

Sundays, 7 to 7.30 p.m., **ZL2BA, Lower Hutt, 80 metres,** and at irregular times until schedule is arranged.

3ZC, Christchurch, wishes the club every success and will greatly appreciate reports from members. It is probable that they will extend their schedule later, and we hope that **3ZC,** our own New Zealand short-wave station, will receive every encouragement.

The club enamel badges will be ready in a few days, and it is hoped to supply these at about 2/6. This

The official badge of the New Zealand Short-Wave Club.



quote is below our expectations for a hand-made badge. QSL cards will probably work out at about 2/6 per 100. These will have the club's badge thereon.

Several principal stations have been notified that members will be sending official reports and every endeavour will be made to bring the club's existence under the notice of overseas stations.

The next meeting will be held in the Y.M.C.A., Willis Street, Wellington, on Wednesday, March 19, 1931, at 7.30 p.m., when members and intending members are invited to attend. A lecture will be given on "How to Fill

in QSL Cards" and will be followed by a demonstration with an oscillator.

Members and intending members are asked not to hesitate about writing in on short-wave matters or offering suggestions. We are a society composed of listeners for the mutual benefit of listeners. The headquarters are in Wellington for convenience, but the club is a New Zealand movement pure and simple. To assist us with new members and to further the good work both locally and in the districts we hope to have club representatives scattered throughout the country.

Communications and inquiries may be addressed to the Secretary, New Zealand Short-wave Club, 274 Cuba Street, Wellington.

Identifying S.W. Stations

Some Helpful Hints

THE latest issue to hand of the magazine published by the International Short-wave Club contains a valuable article on the identification of short-wave stations. This we reproduce below.

"Identifying shortwave broadcast stations is a task, due to stations being irregular and experimental in nature

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and to the fact that many different languages may be heard. Reception is world wide, and it is quite natural to expect stations to broadcast and announce in their native languages. To identify every station heard, a listener must first become quite familiar with shortwave tuning.

"The first requirement is an accurate list of shortwave stations, free from false and discontinued stations. Following this is a calibrated receiver, or at least an idea as to where certain wave-lengths fall on the dials. Then by simple comparison of the wave-length and the scheduled stations in the list and the time of reception, a great many stations may be properly and easily fixed.

"However, the handicap of different languages still presents a problem. By becoming familiar with certain phrases and radio terms used in radio one may, perhaps, learn what language is being used. Five languages are in most common use, namely, English, German, French, Spanish, and Dutch. We will dismiss English, as it is easily understood by our readers.

"The opening German announcement is generally "Actung, Actung," meaning "Attention." Other easily learned words are "Kurswellensender" (short-wave station) and "Rundfunksender" (broadcaster). The French almost always announce 'Hilo, Hilo, ici'—which means, 'Hello, Hello, this is—'. Other words are 'Radiotelephonique' (radio telephone station), and 'Emission' (broadcast). Spanish stations are accustomed to opening an announcement as 'La Estacion' (the station) and common words, easily understood, are 'Transmisores' (transmitter). 'Telefonia' (telephone), 'Senor' and 'Senorita' (Mr. and Miss). Dutch stations are often heard saying 'Dames and Herrn' (ladies and gentlemen).

"Telephone stations are oftentimes identified by the cities or stations which they call. For example, Holland stations will call 'Hello, Bandoeng,' when working one of the Javanese stations. FTN in France, calls LSG Buenos Aires, Hilo, Hilo, Buenos Aires ici Paree.' Other identifications are, HRB—Cuckoo call three times before announcing. F31OD—Striking of gong and calls, 'Hello, here is Siagon.' PCJ—Ticking of clock between selections. Also uses English. Rabat—60 beats on a metronome per minute. LSG—Calls, 'Hilo, Paree, ici Monte Grande.' English phones—Uses chopper modulation cutting up voice. KAI XR—Announces 'KZRM broadcasting from atop of Manila Hotel.' Javanese phones—Calls 'Hello, Kootwijk hier is Bandoeng.' Zeesen—announces 'Here is der Kurzwellensender at Koenigswursterhausen.' KIO announces 'Coco-Head calling.' I2RO—Lady announcer says 'Raddio Romana Tripoli.' El Prado—Announces 'Estacion El Prado, Riobamba, Ecuador.' HS1PJ—Six notes on a piano or musical instrument. American shortwave stations may be identified by the stations which they relay."

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A Musical Pilgrimage Education on the Air A Popular 3YA Artist

(Continued from front page.)

impossible to attend in person. Would you, if you wanted very much to attend a particular "talkie," stay at home and listen-in? I think not.

Another new idea which is saving much time and money is the broadcasting of new operas to determine their possible future success. In the old days enormous expense was entailed in the rehearsal and production of an opera which subsequently might prove a failure. Even Puccini's gem of operas, "Madame Butterfly," was at first indifferently received.

Now, however, the complete score is broadcast several times, and people learn to appreciate the music before attending the initial performance. In this way every chance for success is afforded the opening production.

Every effort, too, is made to help young and unknown composers whose works, excellent though they might be,



SIGNOR LUCIEN CESARONI.

language for want of a little publicity. And what an excellent medium radio is for satisfying their needs. . . .

CURIOUSLY enough, Milan shares one broadcasting station with Turin, a town about 80 miles distant and just across the French border. Each town is connected by a land line to the station, and the programme time is divided between the two. While in Milan I visited the broadcasting station there, and spent some time in chatting to the conductor of the studio orchestra. One idea in which I was very interested was the regular exchange every few weeks of his orchestra with the one in Milan. The conductors of each, however, remain behind. Thus each combination has the benefit of playing under two conductors, each with his own pet ideas of the interpretation of music. Also the players themselves much appreciate the holiday thus afforded them.

My wanderings were now nearing an end. Leaving Turin, I was whirled by rail across France to Paris, thus completing the round trip. By air to London, where I spent a few weeks, and then after a tour which will always be among my most pleasant memories, I boarded a liner homeward bound for New Zealand.

Series of Broadcast Lectures

THE following schedule of lectures and discussions has been prepared by the W.E.A. for broadcasting from Station 1YA, Auckland, and 2YA, Wellington:—

1YA.

- March 24, 1931: "Introductory."
- April 7: "Democracy—Do We Want It and Can We Have It?"
- April 21: "The Problem of Unemployment."
- May 5: "Civilisation in America."
- May 19: "Art in Everyday Life."
- June 2: "The Rationalisation of Industry."
- June 16: "Crime and Criminal."
- June 30: "The Problem of Money and Prices."
- July 14: "The New Russia."
- July 28: "Modern Views on Evolution."
- August 11: "The Free Trade Question."
- August 25: "Post-war Germany."

2YA.

- March 21: "Education of the Air," by Dr. I. L. G. Sutherland, Director, Workers' Educational Association.
- April 4: "Matter and the Universe" (Professor P. W. Robertson, Professor of Chemistry, Victoria University College).
- April 18: "Leaving Children Alone" (Professor W. H. Gould, Professor of Education, Victoria University College).
- May 2: "Two Australians Discuss the State of Their Country" (Mr. J. R. Elliott, B.A., and Dr. I. A. Henning, Lecturers, Victoria University College).
- May 16: "A Martyr of International Peace" (Mr. H. G. Miller, M.A., Librarian, Victoria University College).
- May 30: "An Aspect of Social Institutions" (Professor T. A. Hunter, Professor of Philosophy, Victoria University College).

MR. LESLIE STEWART, whose repertoire covers a range of songs from the latest popular airs and sentimental ballads to operatic and classical numbers, is a well-known performer at 3YA. He has made a careful study of microphone technique and is always a very acceptable performer. His voice is a light baritone which



LESLIE FLEMING

—Steffano Webb, photo.

broadcasts well. Mr. Stewart comes from Dunedin and received his first vocal training under Mr. John Leech, the well-known tutor.

Besides his radio engagements, Mr. Stewart is well known on the concert platform and frequently sings for the picture theatres. He has also toured New Zealand on the Fuller circuit, his splendid voice and his versatility as an entertainer making him a very popular artist in a vaudeville entertainment.

Kite Transmitters

For Direction-finding Tests

KITES carrying short-wave transmitters and weighing little more than 1lb. are used in direction-finding tests now being conducted by the Department of Scientific and Industrial Research at the Slough experimental station in the South of England.

The transmitters each carry a number of dry cells and a valve, together with an aerial of about 100ft. Ranges up to half a mile are obtained, the kites being flown at heights up to 500ft. Radio bearings are taken on the kites from a ground station, extraordinarily accurate results being obtained.



DR. GEO. DE CLIVE-LOWE.

A well-known writer, who has written a play, "The Price," which will be produced at 1YA on March 18.

ONE of the best methods of reducing very bad local interference from electric machinery, etc., is to use a frame aerial, but unfortunately owing to the loss of pick-up an extra R.F. stage will have to be used in order to get approximately equivalent strength.

"Joan of Arc" at IYA**Striking and Artistic Performance**

MUCH appreciative correspondence has reached the Broadcasting Co. concerning the play "Joan of Arc," produced recently at IYA, an extract from one letter reading:—"I want to tell you how very much the play 'Joan of Arc' was appreciated last night. I have been fortunate enough to listen-in for some years in London and on the Continent, and I can safely say this was the very best I have ever heard over the air."

"Thanks to Mr. Montague and his party, 'Joan,' especially in the last episode, was wonderful, and thanks also to all at the station, who helped to make such a success possible."

Verification from Czecho-Slovakia

WE have had requests for further details of the commercial receiver used by Mr. Peters, of Pahlia-tua, who recently received a verification from a Czecho-Slovakian station. Mr. Peters advises that his receiver is an eight-valve a.c. Crosley Showbox.

Useful Tips

FIFTY turns of fine wire wound on a 2-inch cardboard tube makes quite a useful radio frequency choke for short-wave work.

ALTHOUGH other valves are occasionally to blame, it is generally the last or output valve that causes distortion.

ADD-A-PHONE Short-Wave DEMONSTRATION

By courtesy of Messrs. C. and A. Odlin, Ltd., who have kindly loaned us their combination Atwater Kent Electric Receiver, we are enabled to demonstrate the Efficiency and Simplicity of the

—ADD-A-PHONE— SHORT-WAVE RECEIVER.

Intending purchasers are cordially invited to these demonstrations.

TRADE NOTICE

The large number of enquiries we are now receiving from owners of electric sets all over New Zealand necessitates our having to appoint agents for handling the Add-a-Phone, and applications are now invited from Radio Dealers interested in this line.

This instrument is NOT an adapter and can be worked independent of any set.

Mack's Radio Service

76-77 Kent Terrace, Wellington.
Phone 23-448

Tom Brown's School-days

(Continued from page 7.)

and one panel of the door was broken. Tom and East managed to run out, and soon the whole lower school had learned of the escapade. The pledge not to fag for the fifth was taken by nearly all the younger boys. Their adviser was Diggs, a clever boy, nearly at the top of the fifth himself. He stood by them all through, and seldom have small boys had more need of a friend.

Flashman and his associates set about bringing the boys to their senses and the whole house was filled with chasings, seiges and lickings.

In Tom and East's study matters came to a head when Flashman came in and started bullying. Diggs, who was present, advised the two boys to "Go in at Flasman," as it was the

earned the character of sulky, unwilling fags.

At the end of the term the doctor wants to see them. He is not angry, only grave. He explains that rules are made for the good of the school and must and shall be obeyed. He should be sorry if they had to leave, and wishes them to think very seriously in the holidays over what he had said.—"Good night."

The turn of the Tide.

THE turning point of our hero's school career had now come, and the manner of it was as follows.

Tom, East and another boy rushed into the matron's room on the first day of the new term. The matron sent all but Tom away, and then broke the news that the Doctor's wife, Mrs. Arnold, wanted Tom to share his study with a new boy. He was to be kind to him and see that he wasn't bullied. In the far corner of the room was a slight pale boy who seemed ready to sink through the floor.

"Poor little fellow, his father's dead, and his mamma almost broke her heart at parting with him. She said one of his sisters might die of decline if—"

"Well, well," burst in Tom, "I suppose I must give up East," and quite good naturedly he took the boy off to his study.

"Mrs. Arnold would like you both to tea," finished the matron as the boys disappeared.

Here was an announcement for Tom, for this was one of the greatest honours of the school. He, the scapegrace, being asked to tea as if he were of some importance. His cup was filled when Dr. Arnold, with a warm shake of the hand, seemingly oblivious of all the scrapes Tom had been getting into, said:

"Ah, Brown, you here! I hope you have left all well at home. And this is the little fellow who is to share your study? Well, he doesn't look as well as we should like to see him. You must take him for long walks and show him the beautiful country we have about here."

Back in the now comfortably furnished study, for Arthur's mother had made it very cosy, Tom gave some advice. "And don't ever talk of your mother or your sisters," he concluded.

To which, Arthur, ready to cry, only answered: "But mayn't I talk about them to you?"

"Oh, yes, but not to the other boys."

He thought of his own first night when he led Arthur up to the big dormitory. He was terribly shy, poor boy, and for a while dared not take his clothes off. This task at last finished, he looked round nervously, and then, without hesitation, dropped on his knees.

Tom was unlacing his boots at the time and had his back to the boy, but at the sudden hush, looked up in wonder. Then two or three boys laughed, and one big, brutal fellow picked up a slipper and shied it at the kneeling boy. The next moment the boot Tom had just taken off flew straight at the head of the bully.

"If any other fellow wants the other boot," said Tom, stepping out on the

floor, "he knows how to get it." But at this moment a sixth-former came in, and Tom and the rest rushed into bed and finished unrobbing there.

Sleep seemed to have deserted the pillow of poor Tom. The thought of his broken promise to his mother came over him, and that night he made a resolution. It was the groping of the new and real Tom.

Next morning, in face of the whole room, he knelt and found the words: "God be merciful to me a sinner." He repeated them over and over and then rose, humbled and ready to face the whole school. It was not needed; two other boys had followed suit. Before Tom and Arthur had left the school-house there was no room in which it had not become the custom.

Tom Brown's Last Match.

THE curtain now rises on the last act of our little drama. Eight years have passed, and it is the end of the summer term at Rugby. The boys, except a few enthusiasts and the eleven, have been scattered to the four winds. The return match between Marylebone and Rugby is being played in the school grounds. Apart from the rest is a group of three. First a clergyman, looking rather old and worn. Beside him, in flannels, wearing the captain's belt, is a strapping figure, with tanned face and laughing eye.

It is Tom Brown, spending his last day at School. At their feet sits Arthur.

He goes to the wicket to play; his face is rather pale, but his figure is well knit and active, and all his old timidity has disappeared.

"I'm rather surprised to see Arthur in the eleven," says the master.

"Well, I'm not sure he ought to be," answered Tom, "but I couldn't help putting him in. It will do him so much good, and you can't think what I owe him."

The master smiled. "Nothing has given me greater pleasure," he said, "than your friendship for him. It has been the making of you both."

"Of me at any rate," answered Tom. "It was the luckiest chance that sent him to Rugby and made him my chum."

"There was neither luck nor chance," said the master, and he recalled the time when the Doctor had lectured him. The Doctor had been in great distress about Tom and East, and wanted something to keep them out of mischief.

"So the Doctor looked out the best of the new boys and separated you and East in the hope that when you had somebody else to lean on, you'd be steadier yourself and get manliness and thoughtfulness. He has watched the experiment ever since with great satisfaction."

Up to this time Tom had never fully given into or understood the Doctor. He had learned to respect him and to think of him as a very great man. But it was new to him to find that beside teaching the sixth and governing and guiding the whole school, editing classics and writing histories, the great headmaster had found time to watch over the career of him, Tom Brown.

The match was over. Tom said good-bye to his tutor and marched down to the schoolhouse.

Next morning he was in the train and away for London, for he was no longer a school boy.

**JOYCE SETH-SMITH.**

A very pleasing mezzo-soprano, who will be heard on March 20 from Auckland.

—S. P. Andrew, photo.

only way they would rid themselves of the bully.

The fifth former was a big fellow of seventeen, but the younger boys, although hardly up to his shoulder, were much more fit and wiry. Diggs promised to see fair play.

For a while the boys got the worst of the bargain, but Diggs stopped the fight temporarily, declaring that the end of the round had come. In the second round Flashman became furious and flurried. All three went down in a heap, Flashman striking his head on a form. The fight was over, Flashman's skull was not injured, however, as the boys had at first thought, but whatever harm a spiteful tongue can do the defeated bully took great care should be done. Some of the dirt stuck, and Tom and East lived as Ishmaelites. The upper school avoided them, so they became dilatory in their obligations to their own school fellows, and then to the masters. They

ALL roads led to Petone on the occasion of the recent regatta. Many thrilling events were staged, it being essentially a man's day, but mere woman may be permitted to express delight of many feminine partisans, who from car and lorry, beach and vantage-point, breathlessly followed the fate of their particular protagonists—Patricia in geranium-red waving wildly to "Star" colours, Chloe in verdigris-green frock and beret cheering for Wairau, and all the other merry maidens shouting encouragement to those who captured their suffrages. We camped on the beach, ate sandwiches between events, clenched hands excitedly as our colours shot forward to victory or followed sleuth-like in wake of winner. Something there is about a boat-race that strikes irresistible response in hearts of sisters and cousins and aunts; the aloof air of those about to try their prowess, their purposeful stride, their pinkness of perfection. Finally, swift cleaving of the water by slender boats propelled by splendid young athletes, all out for supreme moment of victory, but doing their sporting darndest whether they win or whether they lose.

CONCERNING "The Newest Art," an English paper, commenting on the Seven and Five Society's exhibition, speaks of Miss Frances Hodgkins, the famous artist of New Zealand birth. The criticism reads thus: Nobody desirous of keeping in touch with the very latest art movements can afford to miss this show. Originally founded by seven painters and five sculptors, the society now numbers among its members some of the most independent and advanced artists in our midst. Miss Frances Hodgkins, a most capable and gifted artist, has invented a new kind of still life which has an effect something like a mantelpiece suspended in space and surrounded by landscape. "Berries and Laurel" is the title of one of these paintings, which still more appropriately might have been called "Pink Vases and Green Trees." Miss Hodgkins has a power of draughtsmanship and a charm of colour which make all her work interesting, but one is hardly prepared to say yet whether this novelty of subject is or is not an additional attraction.

LIFE is so full of a number of things for Mr. Beverley Nichols, youthful of ideas as he is, supreme in youthful audacity, that we are perhaps not surprised when he writes with intuitive knowledge of feminine psychology when discoursing recently on success and failure. Thus speaks Mr. Nichols with

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gentleness and insight: "If you are an oldish woman, wheeling somebody else's baby in a perambulator through the park, holding somebody else's little boy by the hand—if you are always rather tired; if you have only a very tiny balance at the savings bank, and sometimes in your stuffy room that looks out on to a back yard, you clutch your fingers tightly together and wonder what is going to be the end of all this proud, painful striving—you cannot persuade yourself that you are a success. Of all the children who have passed through your hands, hardly one remembers you. . . . Never a child of your own. . . . Never a man to love you."

WITH equally frank and sympathetic comprehension he proceeds: ". . . But we're all in the same boat. We know ourselves to be failures in our heart of hearts, because we are haunted by the ghosts of might-have-been, by the wraiths of children unborn, or love unfulfilled, of battles won in the brain only, of suns that never rose for us. Browning wrote it all in three immortal lines:

"All I could never be,
All men ignored in me,
This I was worth to God, whose wheel the pitcher shaped."

That Mr. Nichols, Georgian of Georgians, should thus quote with reverence and admiration Robert Browning, the Victorian poet, proves that the engaging young iconoclast, whether he admit or no, is on the side of the angels.

"IT is not Time's writing, but the character of what Time has written, that spoils the faces of most women." Thus wrote an acute observer of her own sex, and who can fail to appreciate the accuracy of that discernment when remembering the tell-tale wrinkles of malice, cupidity, and intolerance etched upon the faces the owners of which have passed the middle years of life. The great Gallic novelist, Balzac, whose genius as an exponent of female vice and virtue is unsurpassable, passionately absorbed as he was in the study of faces that were to him "tablets whereon the life-will had placed its sign-manual," cared to peruse human physiognomy only when approaching the forties. Most women set disproportionate value upon what the French term *beaute de diable*, the lure of which, in the nature of things, must necessarily be evanescent; while strong spiritual and mental affinity persists in face of difficulty, disaster, and death. Why should feminine cour-

age wilt before the onrush of the years? In all things there are compensations. There is one beauty of the sun, another of the moon; one of the body, another of the soul, and the latter is apparent through frail earthly envelope only when the young years have passed into the limbo. So, in spite of Schopenhauer and his unpleasant philosophy, life for us all may be a good and gracious thing after, as well as before, the fatal forties.

ANENT perennially intriguing topic of the perpetuation of feminine loveliness, in Mr. Alec Waugh's latest novel, thus reflects a mature beauty, who has been painted by Sargent, and by dint of modern miraculous devices still retains the svelte contour and charm of youth. "She often wondered

THERE is all the difference in the world between departure from recognised rules by one who has learned to obey them, and neglect of them through want of training, want of skill, or want of understanding. Before you can be eccentric you must know where the circle is.

—Ellen Terry.

whether it was worth the trouble; asked herself whether women had not got more out of life sixty years ago, when they let themselves grow old at thirty. She remembered her grandmother at fifty, with knitting, white bonnet, black shawl, and spectacles. She had not wasted her time in beauty parlours; she had not spent half an hour every morning lying on her back waving her legs above her head. She had time to indulge impersonal interests that ousted immature self-absorption, and was serene and in harmony with her setting. Nor was she out of touch with youth, for there were few afternoons when there was not some young man telling her of his dreams, his loves, his troubles." Which goes to prove that indefatigable pursuit of loveliness in the last analysis, proves itself a game hardly worth the candle.

AWRITER in a contemporary suggests the following as the model bathroom. The right size—many bathrooms are far too large—done in one of the new glass-like compositions of a warm and cheerful tone; with a pedestalled wash-basin of ample proportions; and above it a sunk-in medicine chest, flush with the wall, with a metal-framed mirror and a lower recess to hold all the toilet accessories;

a built-in glazed porcelain bath, quickly filled and emptied, fitted into the walls, not more than a foot above the floor so that one can step into it majestically, and enclosed to a height of six feet with a plate-glass nickel screen and door which will enable showers and splashing to heart's content. Certainly it sounds attractive. Particularly stepping, instead of climbing into the daily tub.

THE things most deeply felt are not always easy to put into words. The impassioned lover is more apt to be incoherent than eloquent. "You are the dearest thing in the world, and I love you, love you," carry as much conviction as the old-time letters in the best literary style. And probably the village girl who gets a stiff note ending with many crosses is as pleased with it as some of the recipients of famous love letters which have become public property. In connection with the latter a painful thought obtrudes. Did some of those whose letters are famous write with an eye on posterity, or, at least, were they well aware of the distinction of their style?—"Pandora" in the "Sunday Times."

"WHAT Must a Young Girl Know Before Marriage?" From the book which I will supply to order, the young girl will learn, not those things which every young girl is told before marriage, but what the young girl of today will find it indispensable to know. For reasons easily to be understood, it is not possible to sell such a book over the counter, but on receipt of the price the book will be sent, discreetly packed, to any address." Thus an astute Budapest bookseller advertised an old cookery book he had inherited from his father. With every post orders rolled in from both sexes and all ages, and saved his business from bankruptcy. The purchasers of the book, however, were not satisfied, and several attempted unsuccessful actions for fraud! What an expert was lost to the advertising business in this second-hand bookseller!

THREE blind girls were among the successful candidates in the Oxford and Cambridge Joint Board School certificate examination. They gained a "credit" in every subject. The question papers were in Braille, and the answers, except in mathematics, were typed. The girls, all aged 17, hope to go on to a university.

SEEING how lovely modern fabrics are, it is not surprising that modern women are reviving patchwork. This is the latest needlework craze for winter evenings, although the Queen is among those who remain faithful to Georgian tapestry work. Women this winter have been taking classes in patchwork, and are collecting scraps from their friends. These they cut out with the aid of a special instrument.

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By "John O'Dreams"

The Mystery of the Moa

(By C. O. and E. Palmer.)

THE making of verse is a somewhat rare accomplishment in New Zealand. So that it was with a feeling of pleasurable anticipation I opened and read "The Mystery of the Moa," lately written and published in collaboration by Charles Oscar Palmer and Elsie Palmer. An interesting and poetic contribution to the literature of this Dominion, this little book of verse, written in the pauses of a strenuous life, shows acute consciousness of the beauty of our own and the Maori language, coupled with love and appreciation of ancient legends now in danger of falling into limbo of the forgotten. The story of the search for the Moa is recounted in dignified and arresting lines, Maori lore and legend are effectively used with decorative effect, and the poem moves on in fitting metre to its finale describing the last rites in honour of the vanished Moa. A unique publication, characteristic of our land and its origins, and instinct with poetic thought expressed with lucidity, originality and charm; the whole capturing something of the poetic quality inherent in the Maori race.

APPARENTLY the war book is still with us. Remarque, author of "All Quiet on the Western Front," which raised such a furore of criticism and dissension, has written a kind of sequel or continuation of that terrible book. His latest work tells the tale of the sometimes difficult and disastrous return of the soldier to civilised life. One wonders if the vividness of this author's narrative will retain its gripping power when shorn of the horrible details and circumstances of war which crowd his earlier novel.

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OUR FORTNIGHTLY BOOK REVIEW

DIARY OF A PROVINCIAL LADY

(By E. M. Delafield)

MISS DELAFIELD is one of the most brilliant of the younger English novelists, and already has half a score of stimulating novels to her credit, despite the fact that she is still in the twenties. Penetrating characterisation and mordant wit are apparent in her work, and a somewhat cruel irony occasionally is uppermost. Abhorrent of humbug and social sham, Miss Delafield dissects with sharp-edged scalpel the follies and frailties of humanity, leaving it bereft of the smallest shred of smug self-satisfaction.

The "Diary" under review made its first appearance in the pages of that excellent and courageous publication, "Time and Tide," the series of articles now being collected in book form, and there is no doubt that it makes edifying and mirth-provoking reading. Purporting to be written by a lady of the provinces, discreet, gentle, well-bred, doing out the duty but finding it dull; her reflections and chronicle of everyday doings of her immediate circle are written with a pretty wit and an exploitation of human vagaries showing acute observation and appreciation of the irony of life.

With inimitable point and pungency, the social snob is satirised, the dullard, the humorless spinster who subsists on a diet of nuts, old Mrs. Blenkinsop, wrapped in shawls, who protests in and out of season that, though she is only a Useless Old Woman, her motto is: Look Out and Not In; Look Up and Not Down; Lend a Hand!

Various current events are touched upon with judgment and taste, and mention made en passant of modern books and plays. For instance: "Rose takes me to see St. John Ervine's play, and am much amused. Overhear one lady in stalls ask another: 'Why don't you write a play, dear?' 'Well,' said

the friend, 'it's difficult, what with one thing and another, to find time.' Am staggered. Could I write a play myself. Could we all write plays, if only we had the time?"

Again the acute comment: "Is not a common hate one of the strongest links in human nature? Answer, most regrettably, in the affirmative."

Concerning a distinguished novelist: "She says she can only write between twelve at night and four in the morning, and not always then. When she cannot write, she plays the organ. Should much like to ask whether she is married—but get no opportunity of saying that or anything else.

"She tells me about her sales. She tells me about her last book. She tells me about her new one. She says there are many people to whom she must speak, and pursues well-known poet—who does not, however, allow her to catch up with him. Can understand this."

The description of the Garden Fete has the true touch. Those who, in the arduous task of organising an entertainment for a good cause, have borne the burden and heat of the day, will sympathise with exasperation felt by warm and flustered committee on the arrival of the social butterfly, clad in sapphire blue and pearls, with an escort of fashionable creatures, male and female, apparently dressed for Ascot; who, after indiscriminate and patronising criticism, and the purchase of a ninepenny lavender bag, drive off again in a Rolls-Royce.

Robert, that kind but discouraging man of the house, is typical, and Robin and Vicki are full of charm, as is the Provincial Lady herself. We should like to know her.

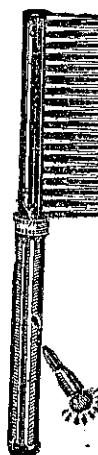
The illustrations by Mr. Arthur Watts are fascinating, and in line with the author's creations, a somewhat rare achievement. The clever presentations of Cook, Mademoiselle, the maddening Cousin Maud, the Rector and the rest, will go far toward augmenting the success which inevitably awaits this witty satire on men and manners.

MISS DOROTHY PARKER, in "Laments for the Living," has written a depressing, but a singularly arresting book. She etches a portrait in a few lines; a tragedy in a page or so; describes an everyday conversation on a telephone, and shows the heartbreak that lies under the rapid conversation. There is terrible realism in her studies, the stark nudity of truth. Who will readily forget the man Durant, elderly, concealed, smug seducer, odious and true to type? And every one of her studies is as cruelly exact, as mercilessly truthful.

UNDER the title "It Had Happened Otherwise," an entertaining series of glimpses into imaginary history is to be published by Longmans next month. Eleven authors have contributed to it, including Mr. Churchill, Mr. Belloc, Mr. Guedella, Emil Ludwig, and Mr. Maurois. The sort of thing it is illustrated by Mr. H. A. L. Fisher's picture of the world as it might have been if Napoleon had escaped to America. M. Maurois's biography of "Disraeli" is well known, Herr Ludwig's literary achievement needs no bush, and the writers of our own nationality are well represented in this publication, which should be of a unique and fascinating character.

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Radio Round the World

THE tendency toward higher power for European broadcasting stations is once more revealed in the plans recently drawn up for the erection of a new 100 k.w. station at Budapest.

WITH the extension of the trans-Atlantic Telephone Service to all parts of Canada and Mexico on January 1, Europe was brought into telephonic touch with the whole continent of North America, including Cuba.

A GRAND campaign against man-made static has been launched in Czechoslovakia with the circularising of five hundred thousand owners of electrical apparatus. The trouble caused to listeners by power interference is fully described, as well as the methods by which this may be avoided.

AN exhibition car devoted entirely to wireless is included in a special electrical demonstration train run by the Orleans Railway Company. The train is taken to remote districts on the railway system and is proving highly successful in spreading the gospel of electricity among the peasant community.

FRENCH broadcasting prospects appear to be taking a turn for the better, for the Parliamentary Financial Committee of that country has voted substantial credits for the operation of future broadcasting services. The committee recommends the borrowing of a sum of 65 million francs for the completion of a national broadcasting system.

THE village of Hythe, near Southampton, owns the first public radio clock in the country. Standing in the village square, the clock is connected to a wireless receiver, and is periodically synchronised with Big Ben. A loudspeaker is incorporated in the clock so that villagers can hear the chimes from Westminster as well as the six "dots" from Greenwich.

ANY existing notions that the new Vatican City wireless station is to be devoted solely to religious uses will be dispelled by the news that elaborate arrangements are in hand for research work in connection with wireless echoes. Although the station is equipped with Marconi duplex telephony gear capable of world-wide communication, the transmission periods will be infrequent, thus permitting Father Gianfranceschi, the station director, to collaborate with the Pontifical Academy of Science in the investigation of many radio phenomena now perplexing radio scientists. In addition to the subject of radio echoes, the experimenters will probe into the questions of fading, atmospheric and the influence of the sun on electro-magnetic waves.

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The beginning of the 1931 season saw the Rochester plant working 24 hours per day at peak capacity. Casting around for further manufacturing facilities, Colonial purchased the huge plant of King Quality Products, Inc., at Buffalo, N.Y., fitting it up as one of the most modern manufacturing plants in the country—from 10,000 sq. ft. to 362,000 sq. ft. in two years, an amazing record even for America. With these tremendously increased manufacturing facilities, the transition of Colonial Radio is complete. From high-priced radios available only to the millionaire class, Colonial has, by carefully graduated expansion, reduced its manufacturing costs to the point where it is now no higher in price than any standard radio; yet still retaining that complete individuality, that amazing performance, that perfect quality of construction which have won for it its unassailable prestige.



Dr. Fulton Cutting
Chairman of the Board of
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With this great radio at such an amazingly reasonable price, is it any wonder that the tremendous Colonial plants are operating on 24-hour production at peak capacity, when practically every other manufacturer can operate on 70 per cent. time only?

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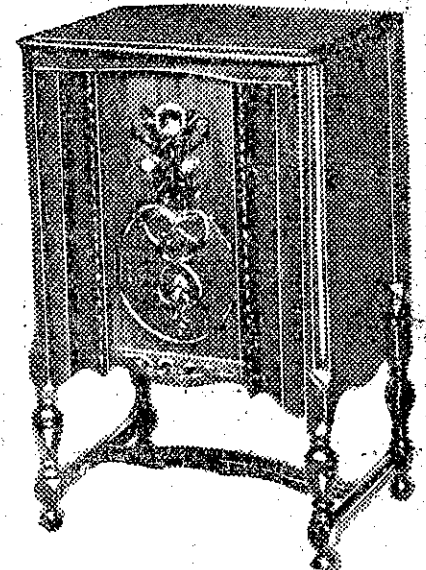
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