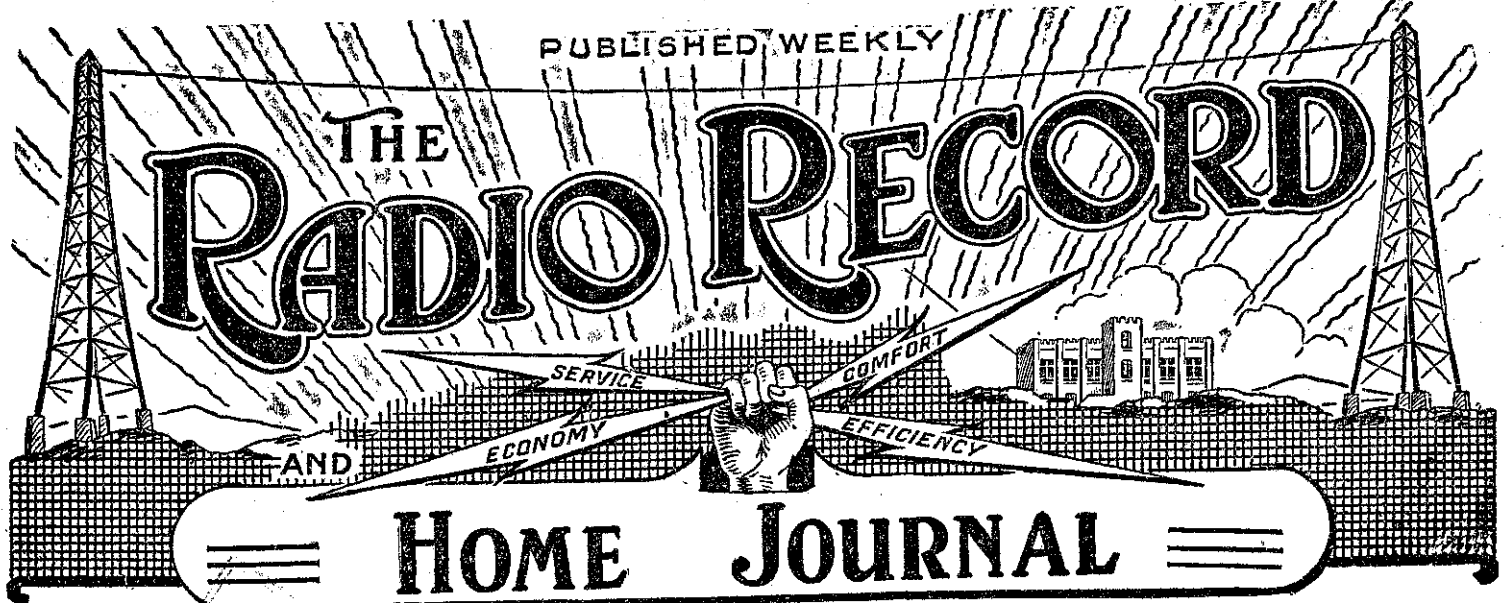


PUBLISHED WEEKLY

THE RADIO RECORD



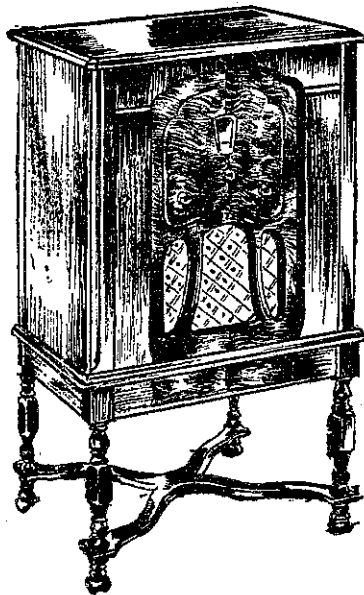
AND
HOME JOURNAL

Vol. V., No. 26.

WELLINGTON, FRIDAY, JANUARY 8, 1932.

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A MINISTERIAL decree recently published in Belgium prohibits all private Belgian stations to make use of advertising in their broadcasts. This has caused a certain amount of perturbation among the private stations, three of which combined to make a simultaneous broadcast protesting against this decision.

FRANCE has a law compelling all owners of radio sets to declare them and pay the equivalent of twelve cents in taxes, but it is more honoured in the breach than in the observance. Recently an owner who had not paid this tax was fined four cents for his dereliction.

THE Columbia Broadcasting System announced recently that the "American School of the Air" would begin its third season of educational broadcasts on November 9. Over a network of sixty stations, from the Atlantic to the Pacific, history, geography and travel talks will be given, in addition to musical appreciations, poetry and dramatic interpretations of folk songs. Other subjects dealt with will be commercial art and writing as a career. Ten talks will be given by officials of Government departments on farming, foreign trade, and the opportunities offered to technically-trained persons by the Bureau of Standards and the Army and Navy.



IN a recently published book entitled "L'Ami du Peuple," by Michael Ferry, is an engaging analysis of English characteristics. According to the author, the British listener "hardly ever listens to foreign stations, but settles down on one of his own without touching his condensers." It appears that "the Englishmen do not like the comic and other ditties so dear to the French heart. When an accordion plays he cries, 'Oh, shocking!' He adores serious and grave, patriotic, warlike songs. A revenue or a sketch fills him with inexpressible joy, but he remains impassive before his loudspeaker while overflowing inside himself with endless laughter. Neither a lord nor a Liverpool docker would tolerate conversation during a reception."

MOTORISTS with radios attached to their cars must announce this fact to Customs officers when going into Canada, and must also pay a fee of one dollar, which is the license fee required for all radios in that country.

UNDER the direction of Mr. C. W. Horn, general engineer of the National Broadcasting Company, the aerial for a television station has been erected on the top of the Empire State Building, 1000 feet above New York. Many tests were made on the top of other buildings, but the tower of the Empire State Building, which is the highest construction in the world, was found to be the best point for a station operating on short wavelengths. The station will be on the eighty-sixth floor of the building, where a 5 k.w. transmitter, scanning apparatus, and studio will be installed.

THE place television will occupy in the radio spectrum has long been troubling broadcasting authorities both in Europe and America. Although as yet nothing has been definitely decided on, experiments now being conducted in America indicate that visual broadcasting will probably be established in the high-frequency band between 43,000 and 80,000 kilocycles. At present there are twenty television experimental stations operating throughout that country, and most of these are experimenting on both high frequencies and those just above the present broadcasting band.

WHEN the presence of ores is suspected beneath a piece of land, the usual procedure is to install expensive drilling apparatus, sink shafts, obtain specimens taken at different levels and await the geologist's reports. Nowadays, mining engineers use radio to assist in the search for lodes. When a transmitter or oscillator is operated on the ground any lodes beneath the surface will have current induced in them. This will create a magnetic field which can be detected by special receiving apparatus. In this way all ore deposits occupying an area of at least 50 superficial yards and at a depth of not more than 200 feet can be accurately located. Zinc ore, however, owing to its not containing sufficient sulphide to render it conductive to high frequency currents, cannot be located by this means. It is the only ore which will not react to induced currents.



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Good quality communication paper, specially worded and ruled for the use of members. 1/6 for a minimum of two dozen sheets, and 8d. a dozen for six dozen or more. Paper for non-members without the Club Badge is available at the same price.

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We now have ready a quantity of beautifully embossed D.X. envelopes. The Club colours are used, and an effect of prestige will be added to all communications placed in these envelopes. Price: 3/6 per hundred, post free.

LOG CHART

We have, printed on good, durable paper, a practical Log Chart that enables you to follow on your control dials the exact position at which a station should come in. These are selling like hot cakes at 4d. each, plus 1d. postage.

RADIO TIME TABLE

We still have a few Radio Time Tables left. They are printed on strong paper that stands folding, and enumerate all the leading New Zealand, Australian and American stations, including a number of short-wavers. Frequency, wave-length and power are given of each station, also the call and location. The reasonable price is 4d. each, plus 1d. postage.

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The New Zealand

Radio Record

P.O. BOX. 1032, WELLINGTON.

NEW DX NOTEPAPER.

Our DX notepaper has been completely re-designed, and in its new and improved form, is certain to be even more acceptable to dxers than the older type. More space has been allowed for particulars such as weather conditions, while on completion the form may be folded up, gummed with a dx sticker, and dispatched without the added expense of envelopes. The price remains the same, 1/6 per 2-doz. lots (min. order) post free, 4/- per 6-doz. lots post free. Send your report on our DX notepaper, and make sure of a reply.

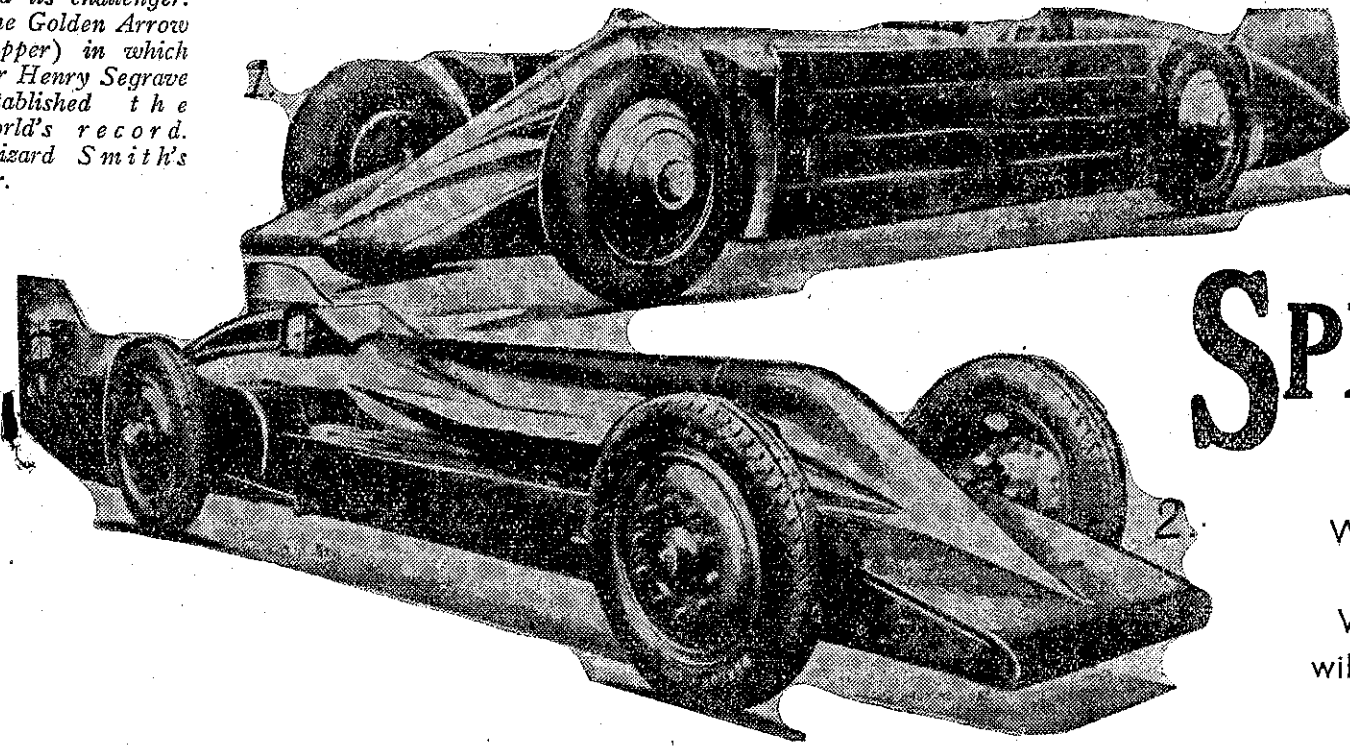
IF there were eight more broadcasting stations in the United States, that country would have half the transmitters in the world. America has 612, while the other countries have 620. The United States has a population of 122,000,000, while the remainder of the earth has 1,906,000,000 inhabitants.

RADIO played a very prominent part during the political proceedings in the recent general election in Great Britain, and thus once more proved, as it did here, its utility, not only as a source of entertainment, but as a factor that can actually play a significant part in influencing affairs of State. As in the previous election in 1929, the B.B.C. again placed their microphones at the disposal of party leaders, whose speeches were broadcast throughout the length and breadth of the country. As in the recent New Zealand elections, the actual election results were broadcast as they came to hand, several of the high-power British stations staying on the air till well after midnight. "Loudspeaker campaigning" by means of public address vans was also very popular among candidates.

MUCH attention is at present being paid by Continental authorities to the problem of power interference with radio reception. The P. and T. authorities in Austria recently organised a systematic search for causes of interference, and issued an appeal to radio listeners to allow inspectors instant access to their apparatus for examination whenever desired. In Holland a Commission of Inquiry has been formed with the object of considering means of preventing interference, and legislation will shortly be brought down to that end. In England special vans have been fitted up to locate oscillating receivers and other forms of interference. One listener who took the matter into his own hands and put into operation a large induction coil in an effort to silence other interference was recently heavily fined. In this instance the cure proved to be worse than the disease.

PLANS for the construction of seven new broadcasting stations to which the service being furnished by the fifteen existing stations of the Japan Central Broadcasting Corporation have recently been approved by the Japanese Department of Communications. The present radio system is run under Government monopoly, with censorship of programmes by the Department of Communications. Owners of radio sets, of whom there are nearly 800,000, pay a license fee of one yen (about 2/-) per month for the listening privilege. Advertising is barred. The radio manufacturing industry in Japan consists mostly of the assembly of sets from imported parts. Valves also are largely imported, although there are several valve manufacturers operating, the largest of them being an American subsidiary. There are at least 100 makes of radio sets, including American, British, German, and Dutch makes, assembled and sold in Japan.

The car that holds the coveted record and its challenger. The Golden Arrow (upper) in which Sir Henry Segrave established the world's record. Wizard Smith's car.



SPEED

Wizard Smith's attempt on World Record will be broadcast

EARLY this month, on the Ninety-Mile Beach, North Auckland, Wizard Smith will attempt to lower the world's land speed record, now held by the late Sir Henry Segrave—an event unique in New Zealand history. It is not surprising then, that despite difficulties, arrangements have been made by the Broadcasting Board to broadcast a commentary direct from the beach.

The broadcasting of an event like this is not easy to arrange. It is not as though there is to be one attempt—one in which a red flag is dropped, the speeding car rushes over the marked mile, and the record is broken or remains. If such were the case broadcasting would be simplified and all that would be necessary would be a brief commentary on the conditions, the crowd, the preliminaries, the start, the finish and the result. But records are not broken like that. The motorist merely makes trials and each trial is recorded automatically by

beach and will maintain contact with 1YA. The actual situation of the transmitting gear is Hukatere Hill, directly overlooking the scene of the attempts. The district engineer, Mr. E. C. Gage, who will supervise the broadcast, has already visited the beach, and will return there just prior to the commencement of the attempts, which will commence this week.

THE arrangements are that, should the record be broken on any trial, broadcasting headquarters in Wellington are immediately notified—probably by using the radio circuit. Arrangements will be promptly made for landlines, and at 9 p.m. or any other more suitable time the four stations will be linked by landline, and Mr. Hutter's description of the successful attempt will be relayed and broadcast. It is quite likely that Wizard Smith will speak.

As part of the policy of the Board, permission will be granted any "B" station making application, to rebroadcast the YA stations. We understand, at the time of going to press, that 1ZR, 2ZW and 2ZX have been granted permission.

Due to the fact that the event is of world-wide importance, arrangements have been made, not only by the international press to have representatives on the scene, but the Sydney station 2UW will also rebroadcast the result. A member of its staff, Mr. James Donnelly, who is announcer and publicity agent for that station, arrived in Auckland last week. Mr. Donnelly, who has been visiting the Rotorua district, has now proceeded to the beach.

It must be conceded that the circumstances are difficult, but even under these, the Broadcasting Board has made all possible arrangements to ensure that listeners shall know the result without loss of time, and shall share as much of the thrills of the event as radio can convey.



The late Sir Henry Segrave, holder of the world's land speed record.

an elaborate device that, at the Ninety-Mile Beach, requires ten miles of specially selected and laid telegraph wire. He notes the condition of his car on each run, adjustments are made, and he tries again. At the completion of each run he does not know whether he has broken the record or not, and so he goes to the trials prepared for a long job—so do the officials.

A RUNNING broadcast of the trials would be wearisome, consisting as it would of brief descriptions of each trip, which to the onlooker are all the same, and the times taken by each.

Other arrangements have to be made. Gordon Hutter, the well known 1YA sports announcer, is already at the beach, and will remain there until the trials are concluded. With him are operators, who have a portable radio transmitter which will broadcast direct from the



Wizard Smith, who will attempt to establish a record on the Ninety-Mile Beach.

"THERE were many remarkable features in the election which is now over, apart from the confusion of issues and of parties. The most remarkable, I think, was the change it indicated in the mechanism of elections. It was a pretty general experience that public meetings figured much less prominently than usual in the struggle," writes Mr. A. G. Gardiner, in the "Star" (London).

"It was not merely that they were fewer in number. That was notoriously the case," Mr. Gardiner goes on to say, "and may be explained in some measure by the circumstances of the election and the bewildering cross-currents that afflicted the party machines."

"But more significant than the infrequency of the meetings, especially in the country constituencies, was the small attention that the platform attracted in the campaign and the striking decline in the personal intercourse between the candidate and the electorate. In many constituencies canvassing was hardly attempted, and I remember no occasion when there was such marked economy in the distribution of election literature."

"Those features, no doubt, are partly explainable by the vast increase in the electorates, which makes personal contact with the voter difficult, if not impossible. But they are mainly due to another fact. Broadcasting has, in this election, established itself as the chief instrument of electoral controversy—more powerful than the platform or the Press, more penetrating than the canvasser, more personal than the direct contact of candidate and voter."

"If meetings have been fewer and less important, it is because they have largely lost their function. The voter no longer needs to leave his fireside and go out into the night to have his share in the great controversy."

"He can have his evening meal in peace, whet his appetite for the fray with a little preparatory music from the B.B.C. orchestra, and then, with his feet on the fender, and with his pipe in his mouth, and surrounded by the family circle, he can have the argument presented to him in his own sitting-room, not by the stumbling oratory of the local candidate, interrupted by the irrelevance and disorder of a public meeting, but by the Hectors and Achilles of the fight, speaking to him quietly and personally, without interruption and without the mob emotion

of a crowd to distract the mind and cloud the issue."

"This is a momentous change. It is a change which has come to stay and which must increasingly influence the temper of controversy. I think it will influence it for the better. It is an appeal to the individual reason rather than to the crowd emotion. It substitutes argument for rhetoric, and authoritative statement for the irresponsible assertion of the platform."

"The Honourable Mr. Slumkey or Mr. Pott may commit himself to any nonsense on the platform of the village schoolroom at Walloper Well with perfect security. He will not be reported and is in no danger of contradiction. 'If you are making a statement in print,' said a famous mob orator to a young candidate for Parliament when they were leaving a meeting together, 'you must be careful of your facts; but on the platform, my boy, you must let the millions fly.' That represents much of the political controversy of the past."

"But if Mr. MacDonald or Mr. Baldwin or Mr. Henderson commits himself to a declaration on the wireless there is no escape from it. It is not merely that he has a responsibility which the local candidate has not; it is that he is heard by millions of the instructed as well as the uninstructed, not in the heated atmosphere of a meeting but in the cool and judicial atmosphere of the parlour."

"In coming thus into direct relation with the individual voter, the political leader not only subordinates the candidate but incurs a new and heavy responsibility. He may quite conceivably turn the scales of an election for or against a given issue by a good speech or a bad. I do not think it can be doubted that the course of the recent election has been more influenced by the broadcast addresses than by any other fact. This means that henceforth the politician who wishes to influence elections must study a technique of oratory entirely different from that of the past."

"The wireless is a great leveller. It knows no distinction of persons, and is the most ruthless enemy of the

spell-binder. It strips him of all the stock-in-trade of his craft—the mob emotion of a great meeting, the sense of the hero advancing into the arena, the arts of gesture, the gifts of personal appearance and dramatic bearing, the clapping and the singing; the feeling of battle. He is a voice—nothing but a voice."

"A lonely voice without fanfaronades to announce it or impress you with its importance and celebrity. If you like it you listen; if you don't like it you flick a gadget and reduce



AILEEN WARREN,
a pianist well-known to 3YA listeners, who will be heard in several numbers on January 14.

it to silence. It does not address your emotions. It addresses your mind. If it fails to do that its failure is absolute. Rhetoric and declamation are equally fatal. They fall still-born from the impersonal mouth of the loudspeaker."

"All the affectations and insincerities of matter and manner, the portentous drop of the voice, the dramatic pause, the thrilling query, the awesome whisper—all drop stone dead before that little party in the parlour. Nothing 'gets across' except the qualities of clear statement and plain, unadorned sincerity of utterance. Humour must be sparingly used, and, even so, must be of the true vintage. Mere anecdote is a bore and facetiousness an offence."

"The merest shade of condescension is aggravated, and vulgarity is thrice vulgar. During the past election we have had an extraordinary experience of what constitutes effective and ineffective speech on the wireless. I shall not say who in my judgment passed the ordeal best, though I am quite clear on that point. But it was the man who was at once most direct, unaffected and obviously sincere. It is no bad omen for politics that the

Radio in the British Elections

Advantages of the Microphone

chief instrument of political controversy in the future has so acute an ear for the truth or falsity of those who employ it."

Empire Broadcasting

Construction of New Station

THE new Empire broadcasting station which the British Broadcasting Corporation is erecting at Daventry will comprise two transmitters, each capable of working on a number of wavelengths. Thus the various parts of the Empire will be reached at times suitable for local reception.

It is expected that the station will be available for use in a year's time.

In a recent article in the "Radio Record" it was stated that the new high-power radio station for broadcasting throughout the Empire will cost about £42,000, while the annual maintenance charge will be about £23,000. The British Broadcasting Corporation has announced that it will itself bear the whole of the expense. The question of expense has hitherto been the cause of the delay.

The scheme was discussed at the last Imperial Conference, and there have been negotiations with the Dominions and colonies since. The British Broadcasting Corporation, it is understood, now takes the view that it is more than ever essential at present in the interests of trade and sentiment that Empire broadcasting should be placed on an adequate basis, and that at this moment British listeners will not object to bearing the cost.

The station will have four short wavelengths in order to reach the various parts of the Empire, and it will be very powerful. The programmes will be sent out during the whole 24 hours of the day. Their nature has not been decided upon, but they will be largely of entertainment interest. Even with this limitation it is recognised that the proposed station will have a distinct value for British trade from an indirect advertising point of view. But there may be direct trade propaganda.

The British Broadcasting Corporation is, of course, strongly opposed to this in Great Britain, but it takes the view that trade propaganda abroad in the general interests of the community is on a different footing, and it would be willing to include general British trade propaganda in Empire transmissions.

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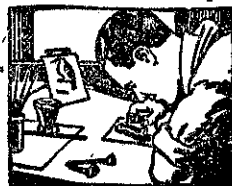
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WELLINGTON

Day and Night Service



Cough?
NO!
Pulmonas
PASTILLES are INVALUABLE



Following the Old Year into the West

by IVAN M. LEVY

with Shortwave Notes

by F. W. Sellens

TO pursue the fleeting year across land and sea and hear the glad welcoming of the new-born year in cities near and far was my task on New Year's Eve. No agency other than radio could have rendered this achievement possible. And as the hour of midnight drew near I thought of the great minds which had given this gift of the gods to mankind—Faraday, Kertz, Marconi, Fleming and De Forest came foremost to my mind.

In the latitude of Wellington the old year was speeding past on its final course round the world at something like 10 miles a minute. Shakespeare's "inaudible and noiseless foot of time" was winging toward me from out of the darkness of the Pacific, flying on double wings, as Seneca would say. From 2YA, Wellington, the most powerful of all broadcast stations in this quarter of the globe, came the relay of the Watchnight Service from St. Andrew's Church. The well-modulated, resonant voice of the Rev. W. Bullock caught my interest, and his words bore a message which must have gone to many a heart. And I lingered a while, for I thought as Paine did in his day, "These are the times that try men's souls."

But there were other matters afoot, and I tuned my radio to 4YA, Dunedin. A relay from the Exchange Buildings, Dunedin, filled the air with the noisy clamour of the crowd in the street below. Songs, cheers, exclamations all blended uproariously. The speeding New Year was close at hand.

I next picked up 1YA, Auckland, where a familiar voice was describing the scene in the streets as viewed from Ferry Building. The youth of Auckland was enjoying itself to the utmost. As on previous occasions, the crowd was lifting the rear part of passing motor-cars bringing the cars to a standstill as the driving wheels, revolving futilely, were unable to make contact with the ground. The fun was fast and furious. Happy laughter came in whirlwind gusts.

Thence to 3YA, Christchurch, where loud detonations punctuated the running description of the scene in Cathedral Square, being relayed from the United Service Hotel. It is strange how each city adopts some outstanding characteristic in its New Year celebrations. At Christchurch there was an almost continuous discharge of fireworks, bombs or "bangers," as on the occasion of the previous welcome to the New Year. Strains of music, vocal and instrumental, provided a background to the general uproar.

I glanced at my watch—one minute to go. The New Year was only 10 miles to the eastward, and I switched across to 2YA, Wellington.

Here, indeed, was tumultuous enthusiasm. The sound caused through the

beating on empty petrol tins took a prominent place in the continuous din. There was a rapid crescendo of uproar as the deep-throated chimes of the Wellington G.P.O. announced the last few seconds of the expiring 1931. As the crashing tolling of the midnight hour overwhelmed the tumultuous welcoming of 1932, the waterfront provided a new note of exultation. The big ocean liner Cumberland at the King's Wharf roared her greeting to 1932. The American cargo liner Golden Cross, at the Taranaki Street Wharf, added her deep-pitched whistle to the general hubbub. The Government lighthouse steamer Matai, berthed at the Ferry Wharf, then made the welkin ring with her screaming and wailing siren.

CHORUSES were just audible amid the clamour. Then back to the studio went 2YA, and a happy group sang "Auld Lang Syne." The other "YA" stations were re-visited and the noisy celebrations could still be heard. 4YA went back to the studio and provided several enjoyable vocalisations until 12.38 a.m. It was the last of the YA stations to close down.

Away across the Tasman Sea sped the Old Year with the New Year right on its heels. Over the gale-whipped billows they flew, for a strong north-westerly had set in across that waste. Two hours difference in time separated Sydney and Wellington, so to while away the intervening time I turned to each of the Australian stations in turn, to snatch a song here, a dance item there, and perhaps an orchestral selection elsewhere.

And so I went the rounds until the clock indicated the proximity of 2 a.m., New Zealand time, and midnight eastern Australian time. Station 2BL, Sydney, had long since closed down for the night, while its big brother, 2FC, Sydney, was relaying dance items by a band at a cabaret. The happy chatter of the dancers was plainly audible. From 4QG, Bris-

(Concluded on page 27.)



At Honolulu, 22½ hours behind New Zealand, the last broadcast in 1931 was heard.

The New Year - Bell

*And this be the vocation fit,
For which the founder fashioned it;
High, high above earth's life, earth's labour,
E'en to the heaven's blue vault to soar.
To hover as the thunder's neighbour,
The very firmament explore.*

*To be a voice as from above
Like yonder stars so bright and clear,
That praise their Maker as they move,
And usher in the circling year.*

*Tun'd be its metal mouth alone
To things eternal and sublime.
And as the swift wing'd hours speed on
May it record the flight of time!*

—Schiller.

The New Zealand Radio Record

—AND—

Home Journal

(Incorporating the "Canterbury Radio Journal.")

P.O. BOX. 1032, WELLINGTON.

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

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

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

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

WELLINGTON, FRIDAY, JANUARY 8, 1932.

BROADCASTING CHANGES HANDS.

AT midnight on New Year's Eve the control of broadcasting passed from the hands of the Radio Broadcasting Company of N.Z. to the newly-constituted Broadcasting Board. The changeover was marked only by a few brief announcements and a statement by the Broadcasting Company. In their farewell speech to listeners the company briefly traced the growth of broadcasting in the country from the time when there were 3000 listeners till the present, when there are 70,000. Many difficulties have beset their path, and they were not able to please everyone, but it must be acknowledged that it was due only to their pioneering work that broadcasting in New Zealand has reached the high standard it now maintains. Misunderstandings there have been, and much criticism has been levelled against the company, but they nevertheless leave behind them a large number—by far the majority—who are satisfied with their efforts. The company faced many difficulties, financial and otherwise, but that is all by the way. The service is now the property of the people, and the Board are merely the trustees; the extent to which they can improve the service rests to a large extent upon every person who is in any way connected with radio.

Tribute was paid the company by the Hon. A. Hamilton in a brief speech made prior to the taking over of the service. The Minister expressed his belief in broadcasting by saying that the possibilities, both from the educational and social point of view, are almost unlimited. It is with this realisation that the Board have taken control, and listeners can confidently look forward to a general broadening of the service in the future.

Tribute was also paid the general manager of the Broadcasting Company, Mr. A. R. Harris, by the station director of 2YA. It is mainly his foresight and energy, combined with the enthusiasm and ability of his staff, that have been responsible for the present state of New Zealand broadcasting. It is gratifying in this respect to see that the Board have seen fit to take over with only a few minor exceptions the whole of the staff of the company. By doing this the continuity of the service is assured during the time the Board are engaged on the pressing matters concerning the actual changeover.

OFFICIAL statements were broadcast immediately after the midnight chimes. The Board in a New Year message again paid tribute to the company, making mention of the fact that in a very few years broadcasting had been elevated to a comprehensive service run on very satisfactory lines. They were trustees of the people, and as

such will carry on where the company left off, and will seek ways and means of extending and improving the service.

THE Board has no easy task, but it is characteristic of sound business methods that they do not attempt to make any changes until they have had time to investigate the service. It seems that to run such a service the first essential of the controlling body is to be able to place reliance in others—specialists in their special lines. The next essential is that the personnel be men with experience in finance and business methods—that is essential for any organisation. The next is to possess the elasticity to explore and learn the essentials of the new task they are faced with. It is men of this description who were appointed to the British Broadcasting Corporation and who made of it such a brilliant success. They were not experts in broadcasting matters, but they employed experts. These were sound methods, and in essaying to follow in the footsteps of Great Britain the Board should be accorded every support. They have been chosen because of their ability as business men, and have shown it in assuming office but a few days before the old regime came to a conclusion and carrying on without disruption. Under the circumstances chaos could have reigned, but everything goes on smoothly.

ONLY gradually will the policy points be settled and the changes made, and it is far too soon yet to look for other than a few minor alterations. Points which listeners will await with interest is the policy with regard to "B" stations, for it is likely that the service will unified, transmission hours and programme standards, including a possible re-shuffling of musical organisations. It must be borne in mind, however, that the Radio Board is not the B.B.C. and has only a very limited income, which it must make go a long way. The only way the service can succeed is by co-operation of all interested in broadcasting and an extension of the license numbers.

A Broadcast That Wasn't

Arrival of Floating Dock

AN incident that is not without its humorous side occurred when the floating dock arrived in Wellington harbour last week. Although the probable date of the arrival was known some weeks ahead, it came as a surprise when it was learned the day previously that it would arrive in the harbour the next day. Seeing the possibility of a "stunt," arrangements were hastily made for 2YA to broadcast the actual arrival of the dock. The engineers hastily constructed a 5-watt transmitter that was to broadcast from the "Natone," and this was to be picked up and relayed by 2YA.

All went well and the transmitter, the announcer, and the operator duly shipped abroad and the ship left for the Heads. On round the point the huge dock was sighted and the announcer gave the sign to the operator that he was ready to broadcast. Then commenced a long description of the scene, the huge dock which, jutting abruptly out of the water resembled a cast of old, the hundreds of small fry, outboards, launches, dinghies and skiffs that scurried round the monster, the zooming planes which came so low that one could have shot a pebble into the fuselage, and the thousands of people who lined the shores and hills to witness the unique event. For two and a half hours the supposed broadcast continued, during which time Mr. H. D. Bennett, of the Harbour Board, addressed the microphone.

When it was all over and the announcer came ashore, the rest of 2YA wanted to know what had happened,

Voluminous Correspondence

EVER since it was announced that broadcasting would be placed under a board, correspondence has been received from all over New Zealand and elsewhere. Even before there was a board correspondence was sent in, and all this has accumulated, so that one of the first tasks of the General Manager has been to deal with this pile. Every letter is receiving attention, although it is impossible to deal with some of the questions raised owing to there being a lack of completed plans.

It is hoped that correspondents will realise this position, if they do not receive in reply to their letter exactly what they were expecting.

Personal

MR. T. W. RICKARD, together with Mrs. Rickard, left for America on the Maunganui last week. Mr. Rickard, who is the manager for C. and A. Odlin (Atwater-Kent Radio), proposes to investigate the radio trade in America, and will be abroad for approximately six months.

for, as listeners know, nothing went over the air. The operator on the hill heard nothing, yet the operator on the boat averred that the broadcast went out all right. Now the question of the hour is "Where did the broadcast go?"

Those of us who heard the now famous fire broadcast from 2YA, and have realised the ability of the announcer to rise to a special occasion, are very disappointed that the broadcast was missing.

Control of Broadcasting

Board Takes Over

New Year Statement



MARKED only by a few brief announcements, the control of radio broadcasting in New Zealand changed from the Broadcasting Company to the Radio Board. Just before midnight on New Year's Eve, the familiar announcement, "This is Station —YA, operated by the Radio Broadcasting Company of New Zealand, Limited," was heard for the last time. It has been replaced by a simpler call—merely the station's call letters—except when opening and closing for the day, when the city is given.

From all stations, more or less impromptu concerts were tendered by the artists to the Broadcasting Company.

At 2YA a particularly bright and attractive programme was presented under the direction of Syd. Allwright (of the Melodie Four), and Victor Lloyd, the well-known dramatist. Until 11 p.m. the party entertained at the microphone, at which hour the station went over to the Watchnight service at the St. Andrew's Presbyterian Church. Among those participating in the evening's entertainment were well-known 2YA artists, including the Lyric Trio, Mildred Kenny's Guitar Band, Frank Bryant, Will McKeon, Margot Russell, A. P. Truda, Owen Pritchard, Victor and Elsie Lloyd, R. S. Allwright and Mrs. Allwright, Gordon Short, Wally Marshall, Jeanette Briggs, Ngaire Coster, Mrs. Amy Woodward, and Joyce Woodward, Billy Hart, Len. Ashton, the Etude Quartet, Mrs. Holloway, Clement May, Nohi Tahiti, and the members of 2YA Orchestra.

At 11 o'clock all present—artists, members of advisory committees, and staff, some ninety in all—were the



MR. W.M. MCKELLAR,
a director of the Radio Broadcasting Company.

guests of the company at supper, Mr. J. Ball presiding in the unavoidable absence of the general manager, Mr. A. R. Harris. A very pleasant hour was spent, during which a number of appropriate toasts were enthusiastically honoured. The principal toasts, "The Artists," "The Organisers of the Complimentary Concert," and "The Broad-

This statement, which marked the official change-over from Company to Board, was read by the announcer at each of the YA stations immediately after the midnight chimes on December 31:—

"I have now to remind listeners that from midnight, just passed, the broadcasting service in New Zealand will be controlled by the New Zealand Broadcasting Board recently appointed. At the direction of the members of the board, I have firstly to extend to everyone the board's very best wishes for a prosperous New Year.

"In taking over the service, the board feels that its first duty must be to congratulate the Radio Broadcasting Company of New Zealand, Limited, on the efficient organisation it has established in a few short years. When it is considered that the company started with about 4000 licenses and finished with 70,000, there is no doubt that the service rendered must have been satisfactory. It now rests with the board, as trustees for the listeners—for that is how the members of the board regard themselves—to carry on where the company left off, and to seek ways and means of extending and improving the service.

"Listeners will appreciate the fact that the members of the board have had insufficient time to examine thoroughly all matters pertaining to the broadcasting service, but I am to say that they fully appreciate their responsibilities and will do their utmost to build up a service which will redound to the credit of the Dominion.

"Once again, on behalf of the New Zealand Broadcasting Board, I wish all listeners a happy and prosperous New Year."

casting Company," were proposed respectively by Messrs. Ernest Palliser, the chairman, and Mr. Ernest Dawson.

Growth of the Service.

ON behalf of the directors of the Broadcasting Company, the station director, Mr. J. Ball, read an official statement.

"The time has arrived when the Broadcasting Company has to say adieu to its very many friends scattered throughout New Zealand and further afield," Mr. Ball said.

"We are, therefore, taking this convenient opportunity of addressing a few words to our listeners on behalf of the Radio Broadcasting Company. It is not at any time a happy duty to say farewell, and this is particularly so in the realm of broadcasting.

Catering For All Tastes.

"**I**N broadcasting there is such an intimate touch between those responsible for the service and those who receive it that the occasion of this parting is tinged with a great deal of regret, not only on the side of the directors of the company, but also on the part of listeners, if one may judge from the amount of correspondence recently received, for our listeners have always taken an almost personal interest in the welfare of the service, a feeling which the directors have keenly realised and reciprocated.

"The YA stations may have disappointed some of you at times because, not knowing what mood you would be in on a particular night, the programme organisers, some weeks previously, had arranged an entertainment of a certain kind and you had preferred a concert of a different type. You did not know the troubles and difficulties the programme organisers had had in arranging that programme, and you did

not think of how many other listeners approved of it although you did not.

"All such little misunderstandings are by the way. They are inseparable from any service to the public, where there are so many likes and dislikes. On occasions, listeners have written in to say that a certain programme was the worst ever broadcast—and by the very same mail other listeners have described it as the best yet. They have declared that programmes of that type should be given every evening.

Growth of the System.

"**T**HE Broadcasting Company has now reached the end of the charter granted it by the Government and it has pleasure in handing on the torch which was entrusted to it six and a half years ago. That the torch burns brightly is shown by the number of licensed radio listeners now compared with six and a half years ago. There are 70,000 now; there were about 3000 then.

"Broadcasting was very new in 1925, and the company had no beaten track to follow, not even a blazed trail, but it has done its best to carry out the trust reposed in it. It has steadily organised and developed its service until it has attained its present standard."

Providing Entertainment.

"**T**HE company believes it has investigated every avenue likely to provide entertainment," stated Mr. Ball. "The most had been made of New Zealand talent, both European and Maori. Long-distance relays have been largely availed of. By this means the talent of country towns has been added to that of the cities. Not content with local artists and with gramophone recordings, the company went far afield in search of its entertainment features in New Zealand, and broadcasting is

It endeavoured to secure recordings of items broadcast in Britain. Unsuccessful there, it turned to America, where a new industry, that of making special recordings solely for broadcast purposes, was beginning. Unfortunately, again, the supply of recordings suitable for a New Zealand audience is very restricted. However, it is in this direction—the securing of recorded broadcast features from overseas, preferably Britain—that the future of broadcasting in New Zealand lies. It is not possible for the available local talent, combined with an admixture of commercial recordings, to provide listeners, week in and week out, with concert programmes of which they will not grow tired. The Broadcasting Company recognised this years ago, and has been making continuous efforts to find a way of securing additional attractions and adding variety to the evening's entertainments.

The Local Talent.

"**T**HE accumulated talent of New Zealand—distributed through the towns from the North Cape to Bluff—is less than the number of artists available to the broadcasting stations in one Australian city. While some of our New Zealand artists are excellent, it is not to be expected that in any one of our four chief cities where a YA station is centred there is an aggregation of talent rivaling that of a large Australian city.

"It has been a principle of the Broadcasting Company that local talent should be encouraged, and, more than is generally realised, broadcasting has rendered a wonderful service to music. The ambition of many a young musician has been whetted by the prospect



MR. W.M. GOODFELLOW,
chairman of directors of the Radio Broadcasting Company.

of engagements to perform on the air, and many a musician has kept in practice solely because of the engagements which the YA stations have regularly offered. The Broadcasting Company is now the greatest musical organisation in New Zealand, and broadcasting is

practically the only market which is available to musical talent.

"Some of you have, perhaps, compared renditions by local artists with gramophone records and you have said, 'Why do not programmes consist entirely of recordings?' There is no one more alive than the Radio Broadcasting Company to the merits of recordings. An electrical reproduction is now well-nigh perfect from a technical point of view, and the item recorded is probably the best of a dozen efforts made by the artist under ideal conditions. To make comparison with the local artist's performance is rather unfair to the local artist.

Restriction on Records.

BUT it has not been possible for us to provide a service consisting solely of recorded items—even if we had desired to do so. The regulations under which we have operated have restricted to 25 per cent. the amount of recorded items in our evening concert programmes. In any case, as we have said, the Broadcasting Company has given what encouragement it could to local talent, and we think that on the general average the New Zealand artists have served you well and compared more than favourably with those heard overseas. One thing is certain: had the Broadcasting Company not patronised local industry the protests would have far exceeded those received for having done so.

"The Broadcasting Company has thought it right that encouragement should be given to music, and it has used its best efforts to foster it, not only by offering engagements to singers and players who could pass the audition tests, but by subsidising musical societies. In this connection, in each of the four centres a sum of £250 has been placed annually at the disposal of a committee consisting of representatives of the various musical and dramatic societies in the city, and that sum has been apportioned out to the societies in such sums as the committee thought fit.

Advisory Committees.

WHEN referring to the musical and dramatic committees, it may be stated for the benefit of those of our listeners who may not be aware of the extent to which the Broadcasting Company's service has been organised, that the YA stations have had the advice of advisory committees, there being a number in each city dealing with separate branches of broadcasting. These committees have numbered 14, consisting of 114 different members, and have comprised musical and dramatic, children's, primary productions, and church committees. Throughout New Zealand a number of official listeners have regularly reported on the standard of programmes and the quality of reception.

"A broadcasting service encompasses a wide variety of features, apart from the regular concert entertainment. Sessions are regularly devoted to the children, to religious services, to dinner music, and in informative talks to housewives, to farmers, and to people generally; there are sessions given over to news and to sport. In all of these the Broadcasting Company has given of its best.

"If there is one section of broadcasting more than another which appeals to listeners it is the broadcasting of topical happenings. In this direction the YA stations have devoted a



—Spencer Digby, photo.

Ava Symons—Violinist

Artist of Outstanding Ability

ACCOMPANYING is an artistic portrait by Spencer Digby of the unusually gifted violinist, Ava Symons, of whose playing a recent critic stated: "It would be difficult to find in this country an equal to Ava Symons as a violinist. Possessing superb tone and the most facile technique, she plays with a refinement and authority that command admiration."

She is a New Zealander and showed exceptional talent during her early studies with Max Hoppe, when she was successful at competitions in Napier and Auckland in 1911—in this year she also gained orchestral experience, being the youngest member of the orchestra of the Sheffield Choir, which toured New Zealand under Drs. Coward and Harris.

To pursue her studies, she journeyed to England and entered the Royal Academy, studying there under the well-known violinist and exponent of the Auer School, Spencer Dyke. Owing to the war and unforeseen circumstances, in 1914 Miss Symons returned to New Zealand, and since has made several successful tours throughout the Dominion.

In 1919 Miss Symons went to England again, and in London was fortunate enough to receive tuition from the famous French violiniste, Mdlle. Rene Chemet. It was this great artist who was responsible for Miss Symons securing the beautiful "Grand Nicola

Amati" violin which she possesses. Since her return to the Dominion, Miss Symons has been heard at many concerts and has given recitals throughout New Zealand with Joseph Hislop, Frank Hutchens, and the Symons-Ellwood-Short Trio. Her instruction has been gleaned from such notable musicians as Toscha Seidel, Daniel Melsa, William Reed, Renee Chemet, and Alberto Poltronieri, of the Milan Conservatorium. Listeners of 2YA must feel intimate with her work, as she has been heard from this station since its inception.

Miss Symons's playing is characterised by sound methods, and her simple, unaffected style, fine technical capacity, natural artistry and charming personality make her appearance a pleasure and an education.

Performing from 2YA on Sunday, January 10, Miss Symons will be heard in the following:—

(a) Schon Rosmarin—an original, dainty composition of Kreisler's.

(b) The Foggy Dew—an appealing Irish melody.

(c) Sicilienne and Rigaudon—a graceful Sicilienne and spirited rigaudon.

Her second group will include:—

(a) "Nobody Knows the Trouble I've Seen"—a negro spiritual.

(b) Obeliss—a brilliant mazurka.

(c) Serenade Espagole—a rhythmic Spanish serenade.

trans-Tasman flight. It will be remembered that a few hours after flying the Tasman, Guy Menzies, though located in a small town on the West Coast, was speaking to 3YA listeners.

"Rebroadcasts of overseas stations have frequently been carried out with more or less success, dependent upon

atmospheric conditions. As listeners will have noticed in recent cable news a regular Empire short-wave service is to begin on Monday next, and no doubt in the future rebroadcasts will be a feature of the YA schedules."

"The Broadcasting Company is proud of its achievements, and is grateful to the many listeners who have so generously expressed appreciation of the service given. The company has at all times endeavoured to maintain a high standard, and it has taken meticulous care that what is broadcast should not offend the susceptibilities of anyone, nor be unfit to be heard by any members of the family. No one has realised better than the directors of the company the widespread and far-reaching power of broadcasting. It is the mightiest power for good in the world to-day.

"I desire, before concluding, to express our sincere appreciation of the co-operation of the many talented artists and the various musical and kindred organisations who have contributed to our broadcast programmes, and especially do I desire to convey our grateful thanks to the ladies and gentlemen who have done such splendid work in connection with our children's sessions, the honorary lecturers who have given so freely of their time and knowledge, the members of our honorary advisory committees, our honorary official listeners in all parts of the Dominion, our loyal, zealous, and efficient staff, and, indeed, all who have been in any way associated with the service.

"With a full realisation of the potentialities of radio, the directors of the Broadcasting Company have every confidence that in the personnel of the Broadcasting Board the future control of the New Zealand service has been placed in safe keeping. In handing over to the board the New Zealand broadcasting service, the directors of the Radio Broadcasting Company extend to the members of the board their good will and best wishes for their future success. To the board and to all listeners they wish a very happy New Year."

A Tribute to the Staff.

MR. BALL then, in a neat speech, eulogised the artists and the staff.

Unlimited Possibilities.

A STATEMENT was made from each station on behalf of the Postmaster-General, Hon. A. Hamilton, and the Broadcasting Board.

"For about six years broadcasting in New Zealand has been owned and controlled by the Radio Broadcasting Company," stated the Minister, "and I should like to express appreciation to the company for its successful pioneering of the service. When the company agreed to establish stations some years ago this most recent development of science was then in its infancy. To-day broadcasting is an important part of our social and educational life.

"A clause in the agreement, under which the company operated, gave the Government the right to take over the stations at the end of 1931. This the Government by legislation last session decided to do. The price to be paid is being settled by arbitration. The Post and Telegraph Department has taken the stations over from the company, and, when the transaction is completed, will hand them over to the board,

(Concluded on page 28.)

OLIVER CROMWELL

to be broadcast from 2YA

On Tuesday, January 12, the famous historical drama, "Oliver Cromwell," by John Drinkwater, one of the greatest contemporary poets and dramatists, will be presented from 2YA by Victor Lloyd and his company. Those who listen will hear history as it was made.

"OLIVER CROMWELL," a play in eight scenes, is one of the most ambitious productions yet performed over the air in New Zealand. Because of the difficulty of effectively portraying the numerous and varied scenes, the play is rarely performed on the stage. When produced before the microphone, however, this difficulty of course does not exist—the listener's imagination supplying the appropriate setting, and supplying it perhaps more effectively than could be done on the stage.

"Oliver Cromwell" is not only very entertaining from the dramatic point of view, but it is also highly educative, because it dramatises a turning-point in the history not only of England, but of the whole world. It marked the beginning of democracy.

In the play, Oliver Cromwell is revealed not as the uneducated country bumpkin many people think he was, but as a close friend of some of the greatest poets and dramatists England has ever known—Shakespeare, Milton, Herrick.

Special attention is being paid to the provision of incidental music characteristic of the period of the play, and for this purpose recordings of selections played on the spinet, flute, and other musical instruments of the Stuart period have been secured.

The scene opens in Cromwell's house in Ely, about the year 1639. Cromwell's mother, an old lady of about eighty years, and his wife Elizabeth are heard discussing Oliver. The former is rather condemnatory of his championing of the people against the unjust rule of the King, but his wife defends him. In this she is upheld by her daughter Bridget, who spiritedly maintains that her father's militant attitude, especially with regard to the unjust seizure of the commons by the aristocracy, is more than justified.

Her grandmother, however, with the caution of old age, counsels silence. "I want them to be brave in peace—that's the way you think at eighty," she remarks, referring to her son and his closest friends, John Hampden and Henry Ireton. Nevertheless, she realises that perhaps her age has made her too cautious—"not that what Oliver's brain is better than mine. But we have to sit still and watch." And she does so, consoling herself with reading and criticising the efforts of the poets of the day.

Shortly after, Hampden and Ireton arrive and, soon after them, Cromwell himself. A discussion on the proposed seizure of the commons ensues, and they all reiterate their intention of protesting strongly against such an injustice.

Two of the Lord of Bedford's agents appear, and ask for admission. They tell Cromwell that it is rumoured he will oppose the proclamation to be made the

following day. On receiving his assurance that he will, they endeavour to persuade him otherwise, but are met with an unyielding refusal. "I know that these rights are the people's, above any earl or king whatsoever. The King is to defend our rights, not to destroy them."

The next scene, laid in the House of Commons, Westminster, is acknowledged as one of the finest historical play scenes ever conceived.

It is past midnight, and the House is lighted with candles. Cromwell, Hampden, and Ireton are among those sitting. A discussion on the Remonstrance, which objects to the over-ruling of the rights of the people, is in progress, and becomes very heated. Several members protest that the upholding of the Remonstrance would be tantamount to the passing of a vote of no confidence in the King, but Hampden, anxious to avoid as much trouble as possible, denies this. Cromwell, however, in a stirring speech, avers that it is so, and that the King was responsible for all the injustice under which the people were suffering. "And this land is bruised, I tell you, by such infamies. . . . The King is part of the State, but we have a King who has sought to put the State to his private use. . . . I say it again, this that is now to be put to you is a vote of want of confidence in the King. I would it were so more expressly," and Cromwell sits amid an angry tumult.

Dramatis Personae

Mrs. Cromwell, Olive's mother. . . . Elsie Lloyd
Elizabeth Cromwell, his wife. . . . Susie Painter
Bridget Cromwell, his daughter Marjorie Murray

John Hampden E. R. Render
Henry Ireton H. A. Painter
Oliver Cromwell Victor Lloyd
Amos Tanner L. D. Webster
King Charles I L. A. Couchman
Neal, secretary to Charles Owen Pritchard



Oliver Cromwell.

AMID great excitement the question is put to the House, and the "Yeas" have it by a narrow margin. On the further question whether or no the Declaration shall be printed and distributed throughout the land, the tumult becomes such that the Speaker leaves the House, and the session breaks up in disorder. . . . *

Cromwell's house once more—a year later. Mrs. Cromwell is sitting by the fire, and Bridget (*Concluded on page 8.*)

Oliver Cromwell

(Continued from page 7.)

enters, opening a letter. It is from her father, and she reads it aloud. In it Cromwell tells of the battle of Edgehill, which was not decisive, and states his intention of returning home to recruit more men.

Soon after he enters with Ireton, who is wounded in the arm. The mayor, who had been sent for, arrives and to him Cromwell appeals for help to assemble an army.

The next scene reveals General Fairfax in his tent with his officers, holding a council of war. It is dawn of the day of the battle of Naseby, on which Charles has staked his all.

There is some misgiving at the absence of Cromwell, who with his veteran "Ironsides" would be sorely needed in the field as an example to the remainder of the troops, who were mostly inexperienced in battle.

In the distance a dust-cloud is seen, and excitement grows, breaking into cheers and exclamations of relief as it resolves into a band of horsemen, led by Cromwell.

It is night. The action has ended, with victory to Cromwell. Ireton is severely wounded, and Cromwell, himself battered and with a slight head wound, stands by the couch.

On being assured his friend will recover, he leaves to dictate a letter to the Speaker of the House of Commons, advising him of the victory.

Outside his Puritan troops are heard singing the 117th Psalm: "O praise the Lord, all ye nations; praise Him all ye people."

The next scene reveals a room in Hampton Court, where Charles First, now a prisoner with the army, is lodged.

Charles and his secretary, Neal, are plotting to form a secret alliance with Scotland, and to bring about their own deliverance by the invasion of a Scottish army. Charles dictates a statement setting forth his terms, guaranteeing among other things Presbyterian control of England for three years and suppression of all Independents.

Neal has just assured the King that Cromwell will not call on them that evening, when the door opens, and the Protector enters with Ireton. Neal has just time to conceal the seditious document under a folio case before he retires.

Cromwell offers Charles his throne back, assuring him of his fullest support. "Do but give us our guarantees, and you will mount a securer throne, I think, than any king has yet held in England." Charles asks for time to consider, and Cromwell agrees.

They then fall to discussing painters and painting. Charles hands Cromwell a Van Dyck drawing for his criticism and, to support it, Cromwell picks up the folio case. In replacing it, his eye falls on the fateful document, and Charles's iniquity is revealed.

Cromwell's house in London, on the morning of January 30, 1649—the date of Charles the First's execution.

From a near street comes the sound of muffled drums, and Bridget, at the window, can see the heads of the pikes carried by the troops in the procession. She calls her mother, who enters, fol-

ILLUSTRATED MUSIC TALKS

Brilliant Pianiste Broadcasts

LISTENERS to 2YA on Monday night, December 28, heard from that station for the first time a well-known Auckland pianiste in the person of Miss Alice Law, who is at present in Wellington representing her city at the Conference of the Society of Musicians.

Miss Law, who has been associated for some time with station 1ZR, Auckland, makes a speciality of illustrated musical talks. This feature from 1ZR is considered to be one of the finest from that station, and she has received an encouraging amount of commendation as a result. Taking as her subject the notable figures in musical history, she not only presents some of their finest music, but talks about the musicians and their work, adding interest to the recital.

It was along these lines that Miss Law broadcast on Monday night and on which she will again broadcast on January 18, when she will take as her subject Mendelssohn. In this type of work she has given lecture-recitals to the Auckland Lyceum Ladies' Club (of which she is a member), the Penwomen's League and other organisations.

Miss Law has had a brilliant musical career, which was commenced in New Zealand. Going to London, she studied for and gained the L.R.A.M. degree. Returning to New Zealand she took up the teaching profession, but just prior to the War, went back to England and from there to Germany, to study at the Stern Conservatorium, of which

lowed shortly after by old Mrs. Cromwell.

The drums stop, and for several minutes all is quiet. Then, out of the stillness, they commence again, this time to the accompaniment of voices and sounds of movement from the streets.

As Ireton remarked, "He was a king and he despoiled his people. When that is, kings must perish."

The last scene is in Mrs. Cromwell's bedroom in Whitehall, where Cromwell is now installed as Protector. It is six years later, and Mrs. Cromwell, now 94, is on her death-bed,



she now holds a diploma. This is a coveted honour, held by very few musicians.

Whilst in Berlin she was offered a staff position and a request was made that she should not go "back to that savage country where her talent would be wasted."

"Strangely enough," Miss Law said, "my work was more appreciated in Germany than elsewhere." This is a fine tribute as the Germans are probably one of the most musical races and set a very high stan-

dard in music—particularly pianoforte.

Whilst in that country Miss Law heard all the famous artists of the world. She was offered a scholarship—an extremely rare honour—but because she wished to study under a different master, chose not to accept it. "It is as well I made that decision," said Miss Law, "as, had I remained in that country I would have been detained there, probably over the war period, as a few months after I left the country, war was declared."

Miss Law is a well-known Auckland teacher and has coached pupils for the highest musical examinations, including L.A.B., F.T.C.L., in theory and pianoforte. She takes a keen interest in the work of the Blind Institute, several of her blind pupils having received scholarships and medals.

It is to be hoped in future we shall be able to hear more of Miss Law's broadcasts.

She tells her son she is proud of him. "It will be a freer land because you have lived in it, my son. . . . And now, I am tired. . . . I leave my heart with you. A good night."

She falls asleep, and the curtain drops, leaving Cromwell praying at his mother's bedside.

High Efficiency

IN a review of the year's work, the Broadcasting Corporation mentions that its stations transmitted for nearly 68,000 hours, and the percentage of breakdown time was only .03.

Radio in the Islands

A Visitor's Experiences

MR. S. A. HEGINBOTHAM, who has returned to New Zealand after being loaned for six years by the P. and T. Department to the Cook Islands Administration, took the first radio set to the group. Rarotonga alone has twenty to-day, mostly owned by Europeans.

The most sought after broadcasts are the news sessions from New Zealand, which constitutes the white people's daily paper. Only a few natives have sets, and their delight is jazz from America and Australia, which both come in very well in the group. So, also, does Japan. Being in the tropics, atmospheric interference is bad, but that is compensated for in a measure by the absence of induction.

"Radio," says Mr. Heginbotham, "is the greatest invention of the age as far as the islands are concerned, and as soon as they get a little money after depression the natives will buy sets freely. One of the most striking uses of radio in the group has been the furnishing of medical advice from the doctor at Rarotonga to patients on the islands. Then, again, by being in contact with approaching ships we are now able to let the natives know exactly when to pick their fruit. There is no such thing to-day as fruit rotting on the wharves waiting for delayed steamers."

"Pirates" Rife In England

Estimated at One Million

LONDON is leading with radio pirates in quite a profitable manner. The Post Office has been sending out wireless detector vans, five of them identifiable as such by the aerial visible on the roof, and one disguised as a private car. As a result of the voyages of the detector vans through some 5000 miles of London streets, 80,000 licenses have been taken out within a week, in addition to the normal growth of licenses issued.

"Give me a wireless license quickly, the van is in our street," was the frank demand of one householder. Within a week the Post Office has received £10,000 from these evaders, and about a hundred prosecutions have been authorised, while many more are being considered. A Post Office authority estimates that, judging from these London disclosures, there are probably a million unlicensed wireless sets throughout the country.

Ingenuous Transmitters

A RADIO mechanism designed to alter the characteristics of broadcast speech, so that it becomes unintelligible to all listeners not equipped with the proper equipment has been invented by an American experimenter. By his plan the speech is broken up into three parts and transmitted on three channels. At the receiving end the components are combined in the correct relationship.

Vocal Gems from

"MARTHA"

Presented by Harison Cook and his Company,
will form a portion of the evening's programme
from 2YA on January 11

FRIEDRICH FREIHERR von FLOTOW was born in Germany, but received his musical education in Paris. One of his biographers has said, "It was in Paris alone he could find stimulus for work. Life had always been made easy for him; he had never felt the icy touch of poverty. It was his pleasure to move in the gilded salons of the great, and to take his place in the fashionable world of Paris."

Such was the brilliant atmosphere which stimulated Flotow to write the sparkling melodies with which his opera, "Martha," abounds, and inspired him to introduce that charming old Irish melody, "The Last Rose of Summer," into his opera, just as Boieldieu introduced "Robin Adair" into "La Dame Blanche."

The story of "Martha" is simple. The action takes place near Richmond, in Surrey, England. Lady Henrietta (Martha), maid of honour to Queen Anne, is bored with life and, hearing the peasants on their way to the statute fair, persuades her cousin, Sir Tristan de Mickleford, and her maid, Nancy, to disguise themselves, with her, as peasants and go to the statute fair. She assumes the name of "Martha." At the fair she and Nancy accept and receive the earnest-fee from two young farmers, Plunkett and Lionel, and find themselves legally bound to serve them for twelve months. In spite of the efforts of Sir Tristan to save them, they are led away to the farm-house by the two farmers.

The "kitchen scene" opens with the two girls being brought into the kitchen by Lionel and Plunkett. They throw themselves down on chairs, saying that they are tired, and attempt to say "good night." Plunkett disillusioned them by telling them that there is work to be done before they go to bed, and soon has them at spinning-wheels while he shows them how to spin. At the end of this spinning quartet Nancy upsets her spinning-wheel and runs out of the room, followed by Plunkett.

Martha and Lionel are left alone, and the latter's sentimental nature causes him to fall in love with Lady Henrietta (Martha), and she sings the "Last Rose of Summer" for him, but spurns his love. They are interrupted by the return of Nancy, chased by Plunkett, who catches her but is immediately rewarded by a very substantial box on his ear. He is just about to lose his temper when the clock strikes midnight and the charming "Goodnight" quartet is sung. The girls take candles and go to their room and the men go out.

During the night Sir Tristan arrives and rescues the girls, and all escape through the window. They are unsuccessfully chased by the farmers and their servants. Lionel is almost heart-broken and later meets Lady Henrietta at a hunting party,

but she again dismisses him by telling her friends that he is mad.

Lionel loses his memory, but is tended by Plunkett, who has brought him up since his father's death and who has a ring which the father said should be sent to the Queen if ever Lionel was in distress. This ring is conveyed to the Queen's hands by Lady Henrietta, and Lionel proves to be Earl of Derby. He, however, will take no comfort, even from the hands of Lady Henrietta, until she devises the idea of repeating the fair in her private grounds. Lionel's wandering senses then return and he is made happy in the possession of his beloved "Martha."

* * * * *

This opera recalls to mind a story. Many years ago, when the Carl Rosa Opera Company produced "Martha," the tenor role (Lionel) was assigned to the English tenor, J. W. Turner. On the Carl Rosa contracts there is a clause which states, "All of the hair of the face must be shaven if required by the exigencies of the play represented." The period of the action of "Martha" requires that all the male characters shall be clean shaven. J. W. Turner possessed a heavy moustache, of which he was inordinately proud. What was to be done?

Carl Rosa insisted on the removal of the moustache. Turner lost his temper and said he would remove himself from the so-and-so company before he would remove his moustache. The outcome was that he was dismissed for breach of contract, and forthwith founded an opera company of his own, which ran successfully for many years. After the death of J. W. Turner the company was actually bought from his son by the Carl Rosa Opera Co., which had once dismissed the father. Such are the tricks of fate.

CAST

Lady Henrietta . . Kathleen Ferris
Nancy . . . Mrs. Wilfred Andrews
Lionel Richard Maunder
Plunkett Harison Cook

Programme

1. *Story of the opera, told by Harison Cook.*
2. *Duet, "Dearest Lady," sung by Lady Henrietta and Nancy.*
3. *Aria, "My Raptured Gaze," sung by Lionel.*
4. *The famous drinking song, "Tell Me, Good Friends," sung by Plunkett.*
5. *The Kitchen Scene, concluding with the "Goodnight" quartet.*

In this article Harison Cook tells something of the story of "Martha," an opera which, though comparatively obscure, contains many beautiful melodies. Several of these have been chosen for presentation over the air, and the reasons for the choice made are outlined. Mr. Cook also relates a curious little incident which occurred while he was with the famous Carl Rosa Opera Company.

THE selections which will be given from 2YA on Monday, January 11, have been chosen for two reasons:

First.—The bright duet from Act 1, sung by Lady Henrietta (Martha) and Nancy well shows the careless spirit of adventure possessed by the former and the more solid, frolicsome nature of the latter. The well-known solo, "My Raptured Gaze," sung by Lionel, depicts his sentimental nature in strong contrast to the bluff, "hail-fellow-well-met" character of Plunkett, so well shown in his "Drinking Song."

Second.—Act 2, known as "The Kitchen Scene," has (Concluded on page 10.)

Martha

(Continued from page 9.)

been selected not only because of its own charm, but because it conveys excellently the delightfully melodious nature of the music of 'Martha.' This scene finishes with the "Goodnight" quartet, a gem which rarely misses the distinction of a repeat when sung on the stage.

Tips and Jottings

SENSITIVE measuring instruments should not be placed close to powerful motors, dynamos, loudspeakers, or eliminators, as they may easily be seriously impaired in this manner.

POWERFUL permanent magnets, as used for moving-coil loudspeakers, or electro magnets, such as M.C. pot windings, create strong magnetic fields in the space around them, and therefore are to be shunned while wearing a delicate watch, which may easily become magnetised.

IF you are employing a neutralised R.F. stage, do not forget that this will need re-neutralising if a different valve is employed for it.

IN nearly all circuits it is the moving vanes of the variable condensers which are connected toward earth to avoid hand-capacity effects.

WITH indirectly-heated A.C. valves the undesirable A.C. hum is eliminated by using a separate electron-emitting cathode heated by radiation from a hot "filament" placed very close to it.



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A Radio Pioneer

Inventor of the Galvanometer

CAREFULLY stored away in the United States National Museum at Washington is a piece of electrical apparatus which is famous the world over.

It is a very simple galvanometer—the first ever made. A type of instrument, of course, which would be scorned by any practical man at the present day, but, nevertheless, an exceedingly interesting instrument. Its maker, Joseph Henry, the "Father of Induction," lived long in obscurity. He began life as a silversmith's apprentice.

Later he became a school teacher, and subsequently, through the sheer brilliance of his work, he gained for

time laboratory condensers are called) was discharged—was derived from the electrical energy stored up by the jar.

Henry's accuracy of observation, coupled with the assistance of his newly-invented galvo, took him a stage further, however. He noticed that when the Leyden jar was discharged through the galvanometer, although the needle was always strongly deflected, it was not always deflected the same way. Sometimes, for instance, the needle would be deflected to the right, while at other times it would go to the left.

A trivial observation, one might think, which, for many of us, would imply nothing at all. To the super-keen intellect of Henry, however, this variation in the deflection of his galvanometer needle implied something tremendously important.

Henry made his observations on this subject in 1842, and in the same year he wrote:—

"The phenomenon requires us to admit the existence of a principal discharge in one direction and then several reflex actions backward and forward, each more feeble than the preceding, until equilibrium is obtained."

Discovery of Radio Frequency.

IN other words, Henry had noted and recorded for the first time the oscillatory nature of the discharge from an electrical condenser. He had discovered radio-frequency.

Henry understood the nature of his discovery perfectly clearly. He saw that when a condenser is discharged a steady stream of current is not obtained. The current derived from the condenser, he noted, is oscillatory in nature, and from this realisation he went on to the inception and development of another mighty principle of radio science—the principle of Induction.

For some time Henry had known that a rapid and interrupted flow of current in a circuit could set up a strange influence in a distant and altogether separate circuit. A current, he held, that "induced" a sort of replica of itself in another circuit. In his own words:—



ALLAN McKIMMING,

who will be heard in company with Mr. and Mrs. J. W. Bailey in two sketches from 1YA on January 14.

himself the post of Professor of Mathematics and Physics at Princetown University. Finally he was put in charge of the Smithsonian Institution at Washington, an American institution somewhat analogous to our own Royal Institution in London.

Perhaps if Henry had never made this galvanometer, with its magnetised darning needle, and its turns of wire, laboriously wrapped round with bits of silk, gathered, we are told, from a waste box, radio science might still have been a thing of the future.

Who knows?

At any rate, it is certain that to Joseph Henry of Washington, U.S.A., the radio and electrical world owes a debt which is only justly repaid by the christening for all time of the unit of inductance—the "henry"—in his name.

Henry constructed several galvanometers, but the one in the U.S. Museum at Washington seems to have been his earliest model, and, in many respects, his favourite one. He applied this instrument to many novel uses. He knew that the spark obtained when a Leyden jar (as the old-

"A single spark from the prime conductor of a machine of about an inch long thrown on to the upper end of a circuit of wire in an upper room produced an induction sufficiently powerful to magnetise needles in a parallel circuit of iron in the cellar beneath, at the perpendicular distance of thirty feet, with two floors and ceilings, each fourteen inches thick, intervening."

A Landmark of Science.

HENRY had found that the electrical inductive influence could pass through space and through solid matter. Just as a wireless wave travels outward into space from its aerial of origin, and produces, or, to be more correct, induces a replica of its originating current in the receiving aerial, so Henry's machine-generated sparks set up waves which travelled downward into his cellar and thus enabled him to erect a series of observations which have long been regarded as one of the most prominent landmarks of science.

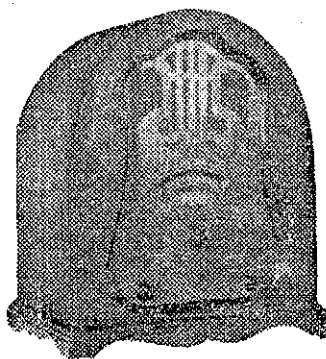
Henry, fortunately for himself, and in striking similarity to his English contemporary, the renowned Michael Faraday, lived long enough for his name to become well recognised, for, as we have seen, he ended his days in charge of the great Smithsonian Institution at Washington.

The Outspan Five

Used with Beverage.

A CORRESPONDENT writes: "Using my 'Outspan Five,' with a Beverage aerial, I can receive all the Australian and New Zealand A class stations and most of the B's, as well as several small-powered stations, such as Hastings, Greymouth, and Wairoa. Several Japs can be tuned in after 9.30 p.m., at medium speaker strength, as also can KFI and two other Americans clashing with 1YA and 2YA. I have heard 2FC and 2BL weakly in the daytime, although my locality is not considered to be a good one, and several sets I have had have not given good results. On the standard aerial I could receive little more than the Australian and New Zealand A class stations.

"I tune the aerial with a coil and condenser, and have a .0001 fixed condenser that can be switched into the aerial when necessary. This enables me to separate stations which would otherwise be jammed together."



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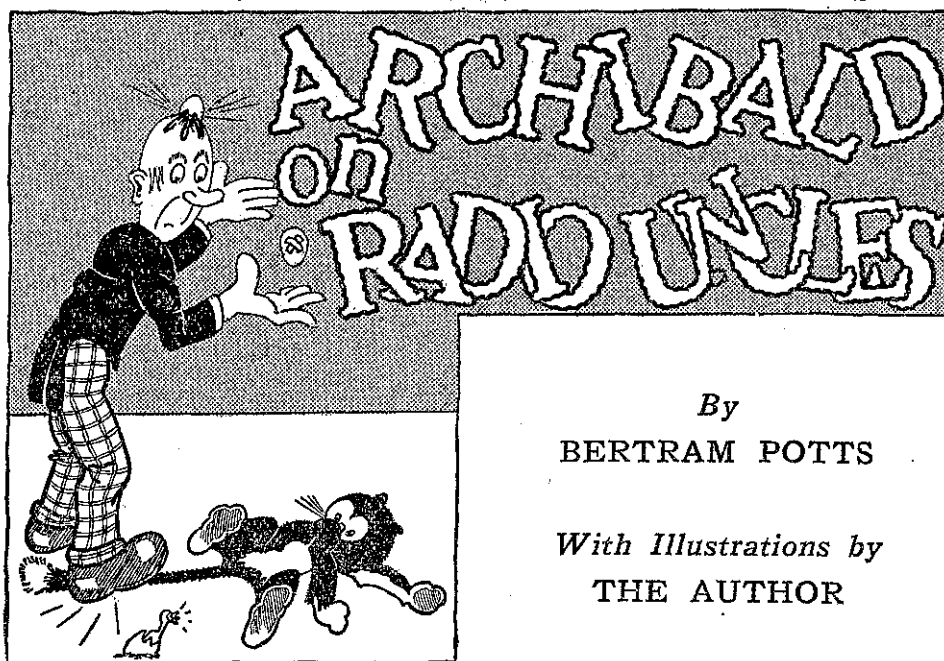
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I 'AVEN'T 'ad much experience with uncles, so I claims to be free of bias. There's four chief kinds of avuncular relative: The Radio Uncle, what yer 'ears but never sees; the Rich Uncle, what yer never 'ears and never sees; the Ordinary Uncle—poor, but 'onest—what nobody can get rid off; and "Uncle," what 'as the shop and takes what yer wants ter get rid of—sometimes! There's less popular types what visits yer in disguise—like the carbuncle! The Radio Uncle, then, is a member of a shady family takin' things all round!

I always thinks there must be somethin' wrong with Radio Uncles, because they 'aunts the innards of yer set and is 'eard only in the evenin's about the time that slugs and burglars is gettin' ready for work.

*Why does 'e lurk where cobwebs is and make a noise at night?
Per'aps 'e 'as a warty nose and is a fearsome fright!*

*Cock-eyed, bow-legged, with cuddy lugs, with nose what signals red,
Flat-footed, bald, and 'ammer-toed, with knobs upon 'is 'ead!
A scare-crow struck by thunderbolt, what shuns the light of day,
But rides at night on witches broom to watch the giants play!
'Neath cabbage patch, where fairies frisk, I'll spy out for meself,
And see if Radio Uncles prance and cakewalk like an elf!*

I borrows the butcher's 'orse at the week-end and rides into the country to ponder if anythin' can't be done for the Radio Uncle, for

'e deserves yer sympathy, even though 'e must be a disappointment to 'is teacher what taught 'im grammar and thought 'e might grow up a useful citizen! Sometimes I've thought I'd like to be a Radio Uncle meself, and 'ave nothin' to do all

day except 'ave a 'oliday, but I ain't got no influence! If I wasn't so handsome, I might get a job—but me chance is comin'! 'Ow do I know?—because I studies 'ow the wind blows to see which way the cat'll jump. Radio Uncle is doomed, because I 'ave seen the shadow cast by the writin' on the wall. And I'm practisin' to be the new type of Radio Uncle—and I'll be the only one available! 'Ave the Radio Uncles thought what television means? The kids what listens will see them and realise what they really is, and they'll 'ave to talk from be'ind a curtain! But I knows kids—I used' to be one—and when Uncle Archibald appears on the televiddle they'll 'ave a great time!

*I'll juggle eggs and balance kegs and swallow pegs and knot me legs,
And ride on bikes with barkin' tikes among big spikes and swallow pikes!
I'll do some tricks with ducks and chicks, and do 'igh kicks and balance bricks,
And swing some clubs and wrestle cubs, and train some grubs from native shrubs!
Swing up and down and act the clown, fall on me crown, and pull a frown;
I'll dance on skates, jump over gates and into crates what's full of plates!*

By
BERTRAM POTTS

With Illustrations by
THE AUTHOR

Could any Radio Uncle to-day do all that? No! In between the items I intends to 'elp parents by showin' the kids in me own funny way how to make their shoes shine and wash their necks with a laugh!

I IN order to practise these stunts I starts trampin' to get me muscles to show signs they exists. It was 'ot and sunny when I sets off, but was rainin' 'ell for leggin's when I comes back like a drowned rarebit. I tries to get a job as a blacksmith, but the Society for the Preservation of Radio Uncles must 'ave got wind of me scheme and bribed the man to refuse me! Anyways, I practises at 'ome to juggle eggs, but I 'ad a accident when I stands on the cat's tail and lets a egg suicide on me pate!



*Now, throwin' knives at doors is quite expensive,
The blades snaps off, the panels all gets 'oles,
And when I'd smashed the clock, it makes me pensive,
The stilts was far too weak—the curtain poles!
And when I skates into the kitchen dresser
And sits among the wreck of plate and cups,
The missus boots me, says I'm just a messer—
Me poor old life is full of downs and ups!*

Mostly downs! She says she don't want to discourage me from being a Radio Aunt, so she 'ands me the bread knife and asks me to try sword-swallowin' for a change!

Your in sadness,
ARCHIBALD.

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News and Views of the D.X. Club

Answers to Correspondents

A. G. (Inglewood): The first installment of the "Cathode" Super will appear next week.

DX880C (Pt. Chalmers) and others: Your letters have been held for the "Radio Log."

"Shortwave" (Johnsonville): The approximate dial readings of stations you want identified are of no help unless those of nearby stations are given as a guide.

DX91W. (Rongotea): The nom-de-plume you suggest is rather too similar to our system of club numbers. Why not use your own official club number?

DX840C: Thanks for information re VK4GO.—"Amazon" (P.N.).

Identification Wanted

Station heard at noon on Dec. 27. A baritone solo, followed by a violin selection, and a soprano solo, were heard.

Are YOU a Member of the DX Club?

If not, post your application to the DX Editor, Box 1032, Wellington, enclosing 2/6 to cover cost of badge and certificate (post free). Subscription to the "Radio Log"—the dxer's own magazine—is 6/6 per annum, post free. Book your order now and receive the latest in dx news.

Numbers of recordings were given. A xylophone solo, followed by a march, concluded the programme. Dial reading 18. Last letter of the call was "O."—"Short-wave" (Johnsonville).

Australian on 500 k.c. (600m.), heard on Dec. 28, relaying 3LO. Heard at various times between 9 p.m. and 1 a.m.—DX52MC (Christchurch).

[Are you sure about that 500 k.c.?—Ed.]

Stations Identified

DX52MC (Chch.): You heard a new station, 2SM, Sydney, operating on 1270 kc. (236.2 m.), with a power of 3 kw. The station is operated by the Catholic Broadcasting Company, and the studio is situated in Australian House, Carrington Street, Sydney.

DX Topics

New Aussies.

STATION 2GN, Goulburn, was heard testing on approx. 1390 kc. (216 m.) at 12.30 a.m. on the 16th, while 2CO, Corawa, was heard at 12.30 a.m. on their opening night, Dec. 17, at R7, on 560 kc. (535 m.).—"New Chum" (Wellington).

Suspicious.

ALTHOUGH I sent in a long report of over 40 items taken over a period of ten days, WCFL did not verify, but wrote saying that if I was sure I had picked them up on long-wave and not as a relay on short-wave, they would be only too pleased to forward a verification. Fortunately I have again managed to obtain sufficient to prepare another report, and am hoping for better luck this time. What American stations are associated with the North-West Broadcasting System? I have heard a station on 300 m. (1000 kc.) mention this often when signing off at 8 p.m. Cannot get his call.—"Joey" (Hokianga).

XER Well Heard.

XER was heard from 11 to about 12.25 on the 25th at R6 on the speaker. Reports were asked for. KFOX has also been heard recently.—DX1220C (Timaru).

Publicity for the Club.

AT about 11.38 p.m. on December 27 I tuned in to XER, Del Rio, Texas, and heard them speaking about a letter from a Mr. T. H. Dren (?), a member of the New Zealand DX Club. I wrote to XER some time ago for verification, but have not received a reply, though I sent an international coupon.—"Three-Valve" (Kaikoura).

DX Jottings.

CONDITIONS recently have been very unfavourable for dxing. Static has had full control for the last three weeks. A few of the Americans are still to be

heard between 7 and 8 p.m., but at no appreciable strength. Latest verifications are from KOB, New Mexico, and Bucharest, Rumania. The latter sent a card with a photograph of the station, stating that the items mentioned were verified, and conveying greetings to all New Zealanders.—"Digger" (Hamilton).

Frequency of 3CB.

IN a recent issue of the "R.R." N. Jenkins (Masterton) gives the correct wavelength of VK3CB, East Richmond, as 206.8 m. (1450 k.c.). This station has been heard here recently at good volume on approx. 240m. (1245 k.c.). Dec. 25 and 26 were very good for reception, 2CO, 3CB, and KYW being among the stations logged.—DX12NW (Nelson).

KCRC Heard.

STATION KCRC, which is owned by the Champlin Refining Company, is located at Enid, Oklahoma, and transmits on 1370 k.c., with a power of 250 watts. I heard this station recently.—"Omsk" (Whakatane). On Nov. 1 I logged KFNF while carrying out its monthly test. The accompanying lists of Cuba stations may be of interest to readers.—DX170C. [The list mentioned appears in a panel on the opposite page.—Ed.]

Details of XEN.

I RECENTLY forwarded a report to XEN in mistake for XER, and it was forwarded to the correct destination by the former station. XER'S address is "Villa Acuna," Coahuila, Mexico. XEN, who recently changed their frequency to 710 k.c. (422m.), transmits during the following hours: 1-4 p.m., general information and music; 7-11 p.m., concerts; 11-12 p.m., local and foreign news and comments. All C.S.T. reports were asked for.—R.I.W. (Kapiti Island).

Particulars of 2KO.

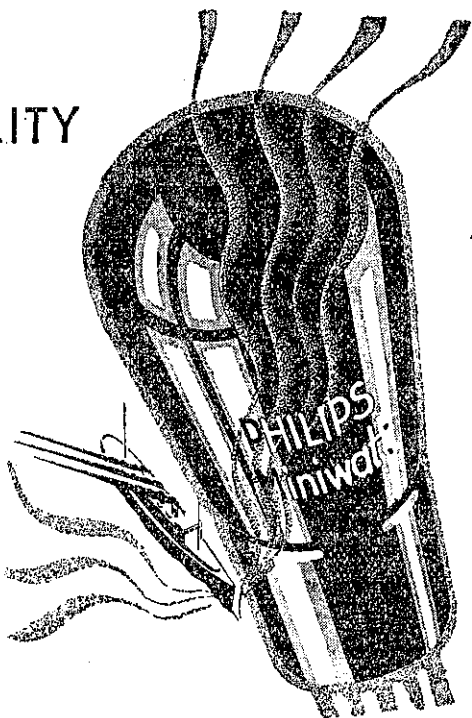
I HAVE been able to cross one station off my black list. This is station 2KO, Newcastle, from whom I have just received a confirmation of my report of July 24. They congratulate me on receiving their transmission of that date as the power used was only 12 watts. They also state that when I received them they had been on the air for only 20 minutes in their first test, and mine was the first DX report received. The transmitter is crystal controlled, on a frequency of 1415 k.c. (212 metres), and the address is: The Newcastle Broadcasting Co., Ltd., A.M.P. Chambers, 57 Hunter Street, Newcastle. I believe the power used now is 200 watts.—H.W. (Bluff).

Station PCJ

WE have received advice from Philips Lamps Ltd. that the short-wave station PCJ has discontinued transmission for a period of at least six months from the commencement of November.

DEPENDABILITY

YOU can stake your life upon the dependability of Philips Valves. In the mighty laboratories of Philips they have been designed and produced—first the master valve, and then the hundreds of thousands of replicas which do not vary from the original. A hair's breadth to Philips laboratories is a yard.



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Valve Protection

WHENEVER constructing battery sets provision should always be made for a fuse to protect the valves in case of an accidental short-circuit. The best place to insert this is between "A—" and "B—" which are usually joined inside the set. This wire should be broken and a flashlamp bulb holder, complete with bulb, should be wired in the break. Be careful, however, that you use a flashlamp bulb and not one of the heavy torch bulbs, which will take anything up to half an amp, and which will consequently not burn out before your valves.

A Potentiometer Warning

MANY present-day sets use potentiometers for controlling reaction, and for adjusting screen grid potential. It is not widely known, however, that there is a right and wrong way of connecting one up. It should be connected in such a way that the battery switch throws it out of action when this is turned to the "off" position. Quite often it is so wired that it is not cut out of the circuit when the switch is so turned. A 300 ohms potentiometer across a six-volt battery passes 20 m. amps continuously. The drain is small, but in time it will run the battery down. Matters are still worse where a potentiometer is connected wrongly across the "B" battery for adjusting screen grid potentials, for a few mills continuous drain will soon flatten the heaviest type "B" battery.

A Multi-range Voltmeter

A LOW-READING voltmeter can easily be adapted to read voltages outside its range by placing a compression type high resistance in series with it. First of all, however, measure the voltage of a grid bias battery—say, one of nine volts. Now include the resistance in the circuit and so adjust it that the meter reads 4.5 volts. The actual voltage is, of course, 9 volts, and so we must multiply the reading by two. Next take a "B" battery of the type having numerous taps. Place the voltmeter and resistance across 18 volts, when the reading will be, say, 9. Now increase the resistance till the reading is 4.5. As the actual voltage is 18, the scale readings must now be multiplied by 4. Proceed along these lines until the desired voltage range is obtained.

Jottings

WHEN using a multi-range voltmeter or ammeter always assume that the volts or amps. to be tested will be a little over rather than a little under the expected voltage or amperage, for whereas a shunt resistance can easily be altered for a lower value if necessary, the switching on of excessive volts or amps. may ruin the instrument.

ALTHOUGH a slavish adherence to makers' instructions regarding "B" voltage and grid-bias voltage is not necessary, it is as well to remember that such figures are worked out

Cuban Broadcasters

The following list of Cuban stations may be of interest to Dxers.—DX170C.

Call	Location	Watts	K.c.
CMBC,	Havana	100	887
CMBX,	Marianao	200	1064
CMBZ,	Havana	100	1027
CMC,	Havana	500	840
CMCE,	Havana	100	1098
CMCF,	Havana	250	644
CMCA,	Colon	300	834
CMHA,	Cienfuegos	200	1154
CMHC,	Tuinucu	500	791
CMHD,	Caibarien	250	920
CMJ,	Havana	500	815
CMK,	Havana	2000	730
CMW,	Havana	1000	600
CMX,	Havana	250	920
HHK,	Port au Prince, Haiti	1080	831
WKAQ,	San Juan, Porto Rico	500	890

for the benefit of listeners, and therefore they should only be departed from in cases where the valve owner is quite sure of the effect of the modification he is making.

ALL grid return and earth connections, etc., in an indirectly-heated A.C. valve circuit are made, not to the heater electrode itself, but to the electron-emitting cathode placed in close proximity to it.

WHEN connecting up voltmeters, am-meters, etc., remember that they are marked for polarity and should always be connected the right way round.

AS a "B" battery tends to recover a little when not in use, voltage tests should be made after it has been working a little while, or the reading may be misleading.

IF you are building a set embodying two audio-frequency transformers remember that these should be of different types, as all sorts of troubles are liable to arise if the same type of audio transformer is used in both cases.

A REDUCTION of the filament voltage on the detector valve of a short-wave set will often help to cure threshold howl.

A LITTLE lubricating oil rubbed in with the finger-tips and polished with a soft duster will often restore a discoloured ebonite panel.

THE incorrect adjustment of grid bias may cause an unnecessarily heavy drain upon the "B" battery and will bring about distortion.

IF you cut off a piece of cardboard strip of suitable length and push a small screw through it, the cardboard strip will enable you to hold the screw steady in what appears to be an inaccessible position while you are operating the screwdriver.

ONE of the great objections to swinging-coil reaction is the fact that by this method the tuning is not so independent of the setting of the reaction, as when a condenser is used for the latter.

WHEN a long passage or hall is not available for an indoor aerial and it has to be placed in a very small room, it is generally advisable to try the effect of different positions for the wires.

DEFECTS in the wiring of a set can often be detected easily by testing with a pair of 'phones and dry cell.

IF you are using a screen-grid set and have a variable high-resistance on hand, try connecting this in the B plus lead to the screening grid as very often a fine variation of the voltage to this point gives improved results.

OWING to its fairly high anode consumption, a pentode cannot be used successfully with small batteries, but should be run from the mains or from batteries of the large-capacity type.

IF a small disc, such as a cigarette tin lid, is threaded on to the aerial just before it reaches the lead-in tube, The rain running down the lead-in wire will be diverted at this point and, therefore, the insulation across the lead-in tube will be improved.

AN ordinary on-off switch fitted across the terminals of one loud-speaker wired in series with another will enable it to be switched into circuit without affecting the other speaker.

FOR "family" use one of the permanent types of crystal detector is generally more satisfactory than the "cat's-whisker" which easily gets out of adjustment.

DETECTOR or audio stages in which fairly high anode resistances are used will always need far more B voltage at the battery plug than it is intended to apply to the valve, owing to the drop in voltage across the resistances.

The December Issue of

RADIO LOG

The DX-ers' Own Magazine

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Revised conditions for the half-yearly cup competition, including alterations suggested at a special meeting of the club.

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The Multi-mu Valve. A non-technical article specially written for Dx-ers.

The Earth. This should interest all Dx-ers who are interested in getting improved results.

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QUESTIONS: ANSWERS

FRANK KEE



The Technical Editor will, through these columns, be pleased to help readers experiencing trouble with their sets. Queries are limited to three—for more than this a shilling fee is charged, and a similar fee is payable for queries answered by post. Supplying layouts, circuits and solutions of intricate theoretical problems is beyond the scope of this service.

A coupon must accompany all requests for information. Non-appearance of the coupon in any issue cannot be regarded as a reason for its not being used.

Address all queries, The Technical Editor, Box 1032, Wellington.



SNEDDO (Whangarei): What is the voltage drop across a 280 rectifier?

A.: It depends upon the current being passed. In no case is it more than from 15 to 20 volts. If you want to get 250 volts rectified (unsmoothed) your secondaries will be required to deliver approximately 240 or 235.

2. What is the best treatment to give a home-made transformer on completion to guard against insulation breakdown?

A.: Immerse it in transformer wax or transformer compound. Do not shellac it.

3. What is the comparison between a 171A and a 245 power valve with regard to frequency response?

A.: Any valve provided it is operated under conditions recommended by the manufacturers will give an almost perfect frequency response. 245 is the better valve in that in being able to supply a greater power, it is better able to work a loudspeaker at all frequencies than the 171A.

B. H.W. (Foxton): The addresses you require are: ZL2BQ, J. Dacre, Fire Station, Castlecliff, Wanganui; ZL2JX, W. A. McCutcheon, 77 Pretoria Street, Lower Hutt. ZL2HS, W. T. Shannon, 406 Jackson Street, Petone.

2. The yearly subscription to the "Radio Record" is 12/6 post free, payment in advance.

T. A.P. (Otekaite): For full information concerning transformer design, see the 1931 "Radio Guide." Your next question is not clear.

2. The address is: Supreme Instruments Corp., 411 Supreme Buildings, Greenwood, Miss., U.S.A.

R. S.J. (New Plymouth): My set has extra terminals for the loudspeaker. I have been using headphones on these. Is this affecting the set or the phones?

A.: It is most unlikely. It would not affect the set, but it is possible, however, that if there is direct current at the phone terminals you are passing too much current through the phones. However, it is most unlikely, and we think you are perfectly safe.

2. Should I use a condenser with the phones, and if so, should it be in series or in parallel?

A.: It should not be necessary to use a condenser.

E. A.B. (Invercargill): Is there a positive and a negative in a.c.?

A.: Yes, only we do not refer to the positive and negative. Rather they are known as the phase and neutral, but for radio purposes you need not worry about these points.

2. How is it possible to determine the positive and negative when installing an a.c. set?

A.: To install an a.c. set you certainly must distinguish between phase and neutral. In a three-pin plug it is usual for the phase to be the top left-hand pin, the neutral right, and the earth the bottom pin standing on its own. It is possible that the cap can be in any position, but the positions are nevertheless relative. The phase must go to the cord with the red tracer, the neutral to the black, and the earth to the third one, which may be any colour. However, this is a radio serviceman's or electrician's work, and you should not have to worry about making the connections to the wall. Who ever installs your set is really responsible. There is proper test for phase neutral and earth, but as you are not allowed to make that test there is not much to be gained by our detailing it.

3. We thoroughly recommend the course you refer to. However, if you do not wish to go up for an operator's ticket make this clear to the principal of the school, who will probably be able to arrange for you a cheaper course.

GINGER (Otahuhu): I have a three-valve set, using 227, 112 and two 201A. Would the set be improved by re-

newing with another make of valves?—
A.: No.

2. Would it be much trouble to add a further stage?

A.: Yes, we would not advise you to attempt it.

CONSTANT READER (Otago): Would it be possible to have my set changed to a super het., and if so, what would be about the cost?

A.: No, it would be impossible, without entirely rebuilding it, and this would cost you more than a new set would.

2. What make of super het. battery radios are on the market at the present time?

A.: That we cannot say, not knowing of any, other than the Radiola.

3. Are super hets harder on batteries than others?

A.: No, except that they have more valves, and more valves require more current.

A. P. (Otau): Will the resistances be correct for a super six using six volt valves?

A.: Yes; the resistances are in the plate circuit not in the filament circuit.

2. The theoretical shows two 1 mfd. condensers in the B+1 lead, and none in the screen lead, while in the lay-out diagram it shows one in each lead.

A.: We are afraid that in this case the lay-out diagram is the correct one. There should be a 1 mfd. condenser between each lead and earth.

RAD. (Te Awamutu): When and where are the examinations for the radio serviceman's certificate held?

A.: The period between the examinations has not yet been decided. There will be at least one a year.

2. The examinations are held at a convenient centre in the larger centres

Information Coupon

(To be used with all requests for information.)

Name of set

Number of valves

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries

Date

Please Note:—

(1) Be specific and brief, tabulating, if possible.

(2) Write legibly, and on one side of the paper.

(3) We do not design circuits, but accept suggestions for feature articles

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"Q.S.T.," Dec., 1931. 1/11.

"Break-In" (N.Z.), Dec. 7d.

"Radio Engineering Principles," by Lauer and Brown, 19/-. (A general text-book on radio).

"Drake's Radio Encyclopedia, 1931" (practical reference work), 45/-.

"The Microphone," (U.S.A.) monthly for amateur radiophone, 1/-.

"101 Hook-ups" ("Radio news"), 2/11.

"Modern Sets, 1932," 1/8.

"Radio Call Book and Technical Review" (formerly Citizen's Call Book Quarterly), Dec. issue, 1/11.

"Wireless Constructor" Nov. issue (all the world on one dial). 11d.

"Break-in" December (N.Z. Amateur's publication). 4d.

"Radio Questions and Answers" ("Radio Record"), 1/8.

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"Sound Pictures and Trouble Shooters Manual," by Cameron and Rider. The projectionist's "sheet-anchor," 46/-.

"Practical Radio Repairing Hints," by Rider. Stocks never last long, 13/3.

"Scott's Radio Handbook, 1931," 1/8.

"Wireless Weekly," 32-page call-sign booklet for broadcasters, amateurs and short-wavers, 4d. (Useful.)

"Radio Retailing," Nov. issue. U.S.A.'s best commercial magazine, 1/11.

"Morse Made Easy," 7d.

"Radio Log and Lore" (World's Best Log of the World), 1/10.

"Radio Log" (N.Z.), Dec., 7d.

"Radio Amateur Call Book," Sept., 1931. 5/3.

Special Short-Wave issue ("Popular Hobbies") (Complete list S.W. stations. New time conversion chart. Three special S.W. sets). 7d.—Rush it!

"Practical Radio Telegraphy," by Nilson and Hornung, 18/6.

Blue Prints—"Batteryless Neutrodyne," "Selective Crystal Set, Two Stages Audio," "6-Valve Neutrodyne, One Transformer and Two Resistance-coupled Audio Stages," "3-Valve, Browning-Drake," "7-valve Super Het." 1/6 each.

"Principles of Radio Communication," by Morecroft, 41/6.

"Elements of Radio Communication," by Morecroft, 19/-.

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Auckland: F. R. Jeffreys, 466 Queen St.

Palmerton North: Radio Supplies & Service Co. (E. B. Borham), 245 Main St.

Blenheim: Tomlinson & Gifford.

Nelson: Keith Walker, Baird's Buildings.

Timaru: J. H. Healey, Bookseller.

Christchurch: A. T. Williams, Bookseller, 85 Cashel St. W.

Dunedin: H. H. Driver, Bookseller, George St.

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throughout New Zealand. The centres for the examination just finished were given in the "Radio Record" about a month ago.

3. Where can I get the P. and T. regulations?

A.: At the present time they are under revision, and are not necessary for the examination.

4. A book was sent me of the electrical wiring regulations, and stated that P.W.D. radio regulations were included in these, but I cannot find them. Where can I get them?

A.: With the book there should have been a slip directing you to the passages which should be noted. If you did not get the slip write again to the Employers' Federation and they will send you one. You are also required to know the fire underwriters' regulations, and you can obtain these from the council of Fire Underwriters' Association of New Zealand, 97 The Terrace, Wellington.

DYNAMIC (Onehunga): I have a five-valve set which uses 201A's in all stages. I have recently substituted the speaker for a dynamic cone. The results are very disappointing. There is no volume. I tried a 603 and a similar power valve in the last stage, but without any appreciable improvement.

A.: The original model 300 does not use grid bias, and the same B+ tapping was used for all valves except the detector. It appears now that you are using grid bias. What alterations have been made and who has made them? Are you quite certain that you are applying bias to the last valve only? If you are putting only 15 volts bias on to the second last valve, there is no wonder nothing will come through. At the same time the voltage on the last valve should be as high as possible, possibly 135 to 150, while that on the other valves could quite conveniently be 90 to 135. It is unwise, however, to use a dynamic cone speaker with a small battery set such as you possess. Dynamic cone speakers are built for powerful sets which are capable of supplying to it the requisite amount of energy. Your set was designed for a sensitive speaker such as a horn or a light cone, and we advise you not to use the dynamic type. However, you should get quite good results if you can get the last valve working correctly, which it would appear you have not. Check up, too, to see that you are getting the field current through from the rectifier. It is possible that there is a slight disconnection, and this would cause the symptoms of which you complain. Regarding the step-down transformer, it is probably not necessary, as you have a high resistance voice coil, and, as you say, the 171 fairly nearly matches it. C603 is really near enough because the impedance of the valve should be at least half that of the speaker. They do not have to be the same, as you presume, so in your case a step-down transformer is not necessary. However, if you are using C603 or 171A it would be advisable to use a 1-1 transformer in order to keep the high voltage current out of the speaker, otherwise you may burn out the coil. Do not think, however, that by using a transformer or a filter of any description you will get louder results. You will not, unless by a remote chance the direct current from the valve is choking the speaker.

A Cause of Instability

AN often unsuspected cause of instability in a receiver is the undue proximity of certain connecting wires; for example, grid and plate leads. This is quite likely to cause uncontrollable oscillation. Sometimes it is found that the wiring cannot be spaced further owing to the disposition of the components, and it may be thought undesirable to alter the layout. In such a case, if some of the more important wires, such as the grid and plate leads mentioned above, are cased in earthed metal tubing the set can often be made completely stable.

This tubing should, of course, be of fairly large diameter, or otherwise its presence will throw a large unwanted capacity across the tuned circuit and render ganging, if this is used, difficult. In this case the internal diameter of the tubing should be at least twice the external diameter of the wire, including its insulating sleeving. Soft copper or brass tubing may be readily obtained for this purpose, or as an alternative metal braiding may be used. For a temporary substitute, ordinary tinfoil may be wrapped round the insulating sleeving of the leads which require screening, and held in place by binding with a length of thin bare copper wire, the free end of which could be connected to the nearest point of the earth potential.

Avoiding Hand-Capacity

THE small semi-variable compression type condensers are usually made up of two metal plates or sets of plates with interleaving sheets of mica. Capacity is varied by a set screw, the rotation of which tends to reduce or increase the spacing between the plates. It is important to notice that to minimise hand capacity effect the set of plates which makes metallic contact with the adjusting screw should be joined to the earth or low potential end of the circuit. Identification marks are not normally provided for the terminals, but their internal connections are easily traced without dismantling by making an electrical test. Before doing so, however, it is, of course, essential that the control knob should be screwed home sufficiently for contact to be made between the screw and the metal plates.

Smoothing Out Hum

THERE are two vital factors where the smoothing of audio frequency variations is concerned, namely, capacity and inductance. It often happens, due to one of several possible reasons, that hum is experienced when working a set from an eliminator, and consequently extra smoothing is desirable. Unless the hum is very bad this smoothing can conveniently take the form of extra capacity. No alterations need be made to the eliminator. All you need to do is to connect externally 2 mfd. fixed condensers across the "B+" output terminals and the "B-" output terminal. Another place where extra capacity sometimes helps is across the by-pass condensers of decoupling resistances.

Wiring Hints

AND now for a couple of tips in connection with wiring components. The bolts and nuts holding the terminals or valve holders should always be tightened up before the components are mounted. Nothing is more exasperating than to try to tighten a terminal which just revolves round and round with the whole bolt and nut. Secondly, small box spanners, which may be obtained at any radio store, will save you much time and trouble when tightening nuts.

Using Frame Antenna

IT is often assumed that any receiver using one or two stages of r.f. amplification will work satisfactorily on a frame antenna if the latter is correctly connected in the circuit. This, however, is not always the case. Often a receiver which is normally quite stable will become uncontrollable when an attempt is made to use it in this way. This instability will often persist even when an earth connection is used with the frame, although the addition of an earth is generally considered a cure for such trouble. The trouble is due to the large field which the frame antenna possesses, and it can only be overcome by extra screening or by moving the antenna to a position more remote from the receiver.

A.C. Power Valves

FOR those who cannot afford to make a complete change-over from ordinary to A.C. valves, it is quite practicable to lighten the load on the accumulator by driving the filament of the output or power-valve direct from the mains. A step-down transformer is required to reduce the A.C. voltage to that taken by the valve. The valve filament terminals are connected directly across the secondary winding, which is preferably centre tapped to earth.

Useful Hints

IF you assemble your own batteries from dry cells do not forget that good insulation between the rows is even more important than insulation between the individual cells.

ALTHOUGH tap water is sometimes used successfully to renew the level of the electrolyte in an accumulator, its use is decidedly risky, and distilled water (obtainable at a chemist's for a few pence) is far better.

COPPER is usually considered the best metal for aerial wire, but phosphor bronze and silicon bronze run it close.

GENERALLY speaking, there is no advantage in using a "cage" or "sausage" aerial for broadcast reception, unless only a limited space is available.

IF aerials attached to different sets are separated by only a few feet it will be impossible to avoid a certain amount of mutual interference when the sets are working.

A LONG lead-in should always be avoided if possible, so the best place for the set is close to the lead-in's point of entry.

DO not throw away your old panels, for you will find that terminal strips and similar handy accessories can be turned up from them with very little trouble.

TERMINAL shanks, soldering tags, and similar points should be filled and tinned before a set is completely assembled, as the operation is much easier at this stage than when all the components are screwed into place.

IF a panel has become slightly bent by leaning up against a wall it can often be flattened by warming it, and placing it between flat boards on which a heavy weight is standing, until the ebonite has cooled.

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DISTORTION---Its Cause and Cure

(By the Technical Editor)

DISTORTION in its widest sense is radio itself, for it is inherent in every component. It is sometimes very difficult to trace and often more difficult to cure. However, let us examine the question a little more closely and see exactly what is wanted, for one could write for the whole three hours on the subject.

The owner complains that his loudspeaker will not handle sufficient volume without distorting. That is the usual complaint. To the average owner all distortion is in his speaker which, being the last link, is the one to be blamed.

However, the radio serviceman must not take it for granted that the distortion is in the speaker, for in nine cases out of ten it will be elsewhere. So the first thing when going on a job such as this is to turn on the set and listen for yourself. Is the man expecting too much of his radio? Has he heard a new one that will handle far more than his older battery set, become dissatisfied, and blamed his speaker? We must take it for granted that he is not expecting too much, that there is real distortion.

Types of Distortion.

NOW distortion can be of two kinds—wave form distortion and tone distortion. The former is of the type which shows itself in a rattle, blasting, etc., when the volume is turned up. The latter manifests itself in an absence of certain notes in the musical scale. It may be the bass, the middle notes, or the treble. The question, however, says that he complains that it will not handle sufficient volume, therefore we can take it for granted that the trouble is wave form distortion.

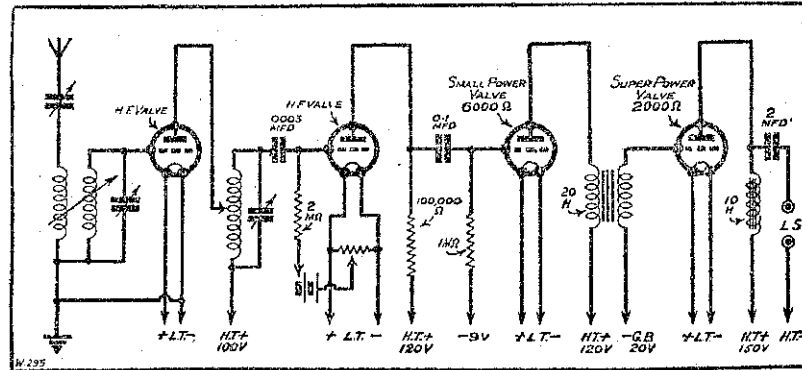
The Speaker.

THE first duty of the serviceman is naturally to take a cursory glance at the speaker, making any adjustments possible. If this does not effect a cure, as it will probably not do, then he must look elsewhere. An experienced serviceman will be able to locate

Week by week we are going through the questions asked in the recently held radio serviceman's examination. Last week we dealt with the aerial—Question 1, and this week we go on to Question 2.

An owner complains that the loudspeaker of his set will not handle reasonable volume without distorting. Explain how you would go about curing the trouble.

- In the case of a battery operated set with magnetic speaker.
- In the case of a mains-operated set with dynamic speaker.



A well-designed set that will give reasonable volume without distorting. Note particularly the valves of the coupling resistances and condensers.

roughly from the sound in the speaker the source of the trouble. However, it must not be taken for granted that the examiner knows anything about radio and we must detail exactly what to do.

As it is rather difficult to describe the varying types of noises and how they represent distortion in different parts of the set, we shall make a systematic search, beginning of course with the batteries.

The Batteries.

TURN the set on, leave it on for a few minutes, and then test every

battery commencing with the "A," which is tested both with the voltmeter and hydrometer. The "B" battery is tested not only from a positive maximum to negative, but to each of theappings, as it is possible that a high resistance cell may cause all the trouble. Likewise the "C" battery is measured. When we are taking the measurements we must notice particularly if all connections are correct. Trace these out along the battery cable to the set, checking particularly the polarity of the "C" battery. Often this has been replaced and either the batteries are connected together wrongly or the battery as a whole is reversed.

Now, having checked the batteries, check the voltages at the valves themselves. If the serviceman is possessed of a high quality tester he need merely slip the plug into each socket in turn and run through the various measurements, plate current, plate voltage, filament voltage, filament current, etc., and he can soon see if a valve is operating under its correct

characteristics. This will often reveal trouble in nearby components. It will also act as a test on the valves.

Valves.

WHILE doing this note particularly that the correct valves are used in their right places. For instance, in a resistance capacity set you will not expect to find valves of a low impedance unless, of course, they were in the last stage. Similarly, in a transformer coupled set you would not expect to find a semi-power valve in the second last stage. Actually quite a large number of sets employ a valve of this type in that socket, and distortion is caused in a rather interesting manner. This valve has a high plate current which, when flowing through the primary of the preceding transformer, lowers its inductance, matching becomes impossible, and distortion results. The first audio valve should have an impedance of about 10,000 ohms, although if it is followed by resistance coupling, high frequency or resistance capacity type is necessary, in which case great care must be taken to ensure correct operating conditions.

The second i.f. valve should be of low impedance of approximately 6000 ohms. Where a heavy speaker is employed and more volume is expected, the impedance should be even lower.

Use of a Milliammeter.

WE mentioned a moment ago that we should test each stage by a high quality commercial tester. Many servicemen cannot afford these rather expensive instruments, and must use the ordinary milliammeter. Turn the set off and place the milliammeter in turn in the B+ lead to each valve, commencing with the detector. If we are to make an exacting test, a meter with several scales will be required, because whereas we may only need a maximum of 5 mils for the detector, one with 20 may be needed for the power valve.

When the meter is in the circuit it should, when the set is turned on and tuned, remain fairly steady, or at least flicker not greater than 10 per cent. If, however, there is a kicking and it is occurring downward each time, there is too little grid bias, or too much "B" voltage for the bias used, and the remedy here is obvious. Increase grid bias or decrease the "B" until the kicking ceases or is fairly equal in either direction. If, however, the milliammeter kicks upward we have

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the reverse, too much grid bias, or too little "B," and here again the remedy is obvious.

In recommending a power valve for the last stage, one must take into consideration the current it will use. If the owner of the battery set does not have an eliminator, and a means for charging an "A" battery, it would be unwise to try to sell him a power valve which will run his batteries down rapidly. Far rather do the best one can for his set as it is, and tell him that he cannot handle much more volume without putting himself to a great expense.

In Old Sets.

THE few points we have now gone over are the most common causes of distortion, particularly in factory-built receivers. However, in sets of older design and those made by home constructors, there are many other points that can cause trouble. Probably transformers and grid leaks are the most common.

Very many transformers are too small and, as explained before, have not the primary inductance and cannot match the valve preceding it; consequently distortion takes place. Furthermore, they cause tonal distortion by cutting off, usually, the low notes. The serviceman should make certain that good transformers are used in any set for which good quality is expected.

Look over the transformers to see if there are any loose bolts, as often a loose lamination will give rise to a rattling on very loud passages. In resistance capacity coupled sets, check over the values of the grid leaks and condensers. Here is the rule for valves.

The resistance in the anode circuit should be from two to three times the resistance of the valve impedance. The grid resistance should be four times the anode resistance and the coupling condenser can now be obtained from the table given herewith.

Grid leak.

(megs.)

0.5

1.0

2.0

3.0

5.0

Condenser.

(mfd.)

.02

.01

.005

.0035

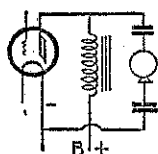
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Defective Connections.

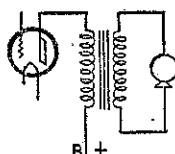
CHECK over the set for defective connections, particularly open grid circuits. Try reversing the windings of one or the other or of both transformers, if two are used, and see if this makes any difference. As a matter of fact, after resistance coupling the transformer will in very many cases have the secondary connected up in the reverse manner in order to get the best results.

Detector Overloading.

DISTORTION on the high frequency side of a set is not uncommon, and being mixed up with some form of instability, often gets through to the audio stages and causes distortion. Often distortion is caused in the radio amplifier by too great a signal being imposed on



Choke-Condenser



Output Transformer

Alternative Magnetic Speaker Conn's

An output filter not only often cures distortion, but it is a safeguard for the speaker.

the detector, causing detector overloading. Detector overloading can be detected by an accentuation of sibilants and the upper frequencies. These disappear when the volume is reduced. The voltage on a grid leak detector should be from 20 to 50 volts. It needs to be fairly high in order to handle the volume. Where an anode resistance is used in the detector circuit the voltage must be considerably higher in order to compensate for the loss through the resistance.

Distortion due to the detector can often be identified by the double hump in the tuning, that is louder signals are obtained on either side of the resonant point on the tuning dial. The cure in this case is either to make an extra aerial tapping so that the aerial can be brought in direct to the detector or use a smaller aerial. Of course one could change over to anode bend detection, but this is not always possible. In the case of anode bend detection check very carefully the grid bias. Try increasing it to see if any improvement is made.

A choke which has a peak somewhere about on the wave-length of the station to which is listening will also cause instability and so will battery coupling. Too high a value of grid leak will often cause distortion and a not infrequent cause is a free grid on the detector or screen grid valve. In the case of the detector this may lead to grid choking, or there may be sufficient leakage in the valve holder, or in the grid condensers to prevent excessive choking, while in the case of the s.g. valve very often almost satisfactory results can be obtained even though the grid is free. Where loud signals are to be handled the value of the grid leak resistance should not be more than 2 meg. It could be even reduced to one for local station work. If h.f. cur-

rent is getting into the audio amplifier, a choke and condenser should be used in the detector circuit. The choke should have a value of about 200,000 microhenries and low self capacity of three or four microfarads. The by-pass condenser should be of the capacity of .0003 mfd.

L.S. Coupling.

APART from h.f. amplification another fault may possibly appear, due to incorrect coupling between the last valve and the speaker. If an output transformer is used, check up the ratio. The ratio of the output transformer should be equal to the square root of twice the valve impedance divided by the speaker impedance or

$$R = \sqrt{\frac{\text{valve impedance} \times 2}{\text{speaker impedance}}}$$

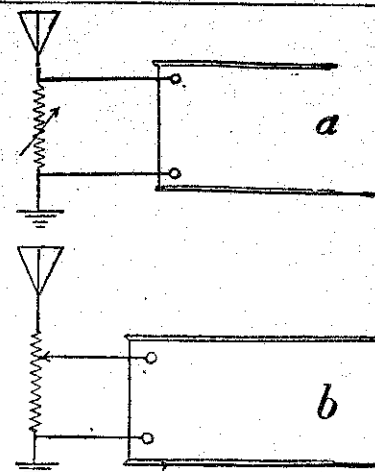
Where push-pull valves are used one does not multiply the valve impedance by two.

This, however, is not a common cause of distortion, because if put in commercially, they are usually correct. Speaker impedance should be that at 250 cycles.

Often the inclusion of a filter will improve a set that is prone to distortion.

THE second part of the question relates to distortion in an a.c. set using a dynamic speaker. In general what has been laid down for the battery-operated set holds good for the a.c. set. However, the procedure is slightly different and there are other complications which may possibly enter in. In the first place the set must be turned on and the type of distortion noted. Tune very carefully to a station and test for overload. It is possible that the owner of the set has not been tuning his set correctly. Particularly is this true for super-heterodyne receivers, which distort chronically if all the stages are not in resonance and these tuned correctly to the incoming wave.

By listening to the speaker it is usually easy to tell if the distortion is located either in the speaker itself



Detector overloading can be prevented by the use of pre-radio volume control. A uses a resistance of 100,000 ohms, b a potentiometer of approximately the same value.

or in the receiver. As the speaker is more complicated than the magnetic cone speaker, more troubles are likely to centre in it, and more attention must be paid to it than in the case of the battery-operated set. Distortion in a speaker may be due to a loose centering device allowing the moving coil to rub against the pole faces when heavy volume is being handled. Very often by moving the cone of the speaker this rub can be felt and so cured. It may, of course, be necessary to take the speaker away and make the adjustment on the work bench. If the centering device appears to be quite in order, test the pot for magnetism, which test can best be carried out by holding a screw-driver or some metal object against the centre piece, which should strongly attract the metal. If this is weak, the trouble is in the field supply. This may be of two types. The pot winding may be incorporated in the set as a choke or may be supplied by a separate rectifier. In the latter case (Concluded on page 26.)

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Feature Peeps

At

Future Programmes

SUNDAY

1YA Notes

THE church service to-night will be that of St. Andrew's Presbyterian Church, the preacher being the Rev. Ivo. Bertram; organist and choir-master, Dr. Neil McDougal. At approximately 8.30 p.m. there will be a relay of the municipal band concert from Albert Park. George Buckley will conduct.

Items from 2YA

THE service will be relayed from the Taranaki Street Methodist Church, the preacher being the Rev. T. R. Richards. At the conclusion of the church service a concert by the band of the Wellington Division of the Royal Naval Volunteer Reserve and 2YA artists will be on the air. Featuring on the programme will be Aya Symons, violiniste, in several numbers, about which more appears elsewhere. Keith Grant, baritone, will also be heard in two brackets.

From 3YA

AT approximately 6.30 p.m. the station will relay the evening service from the Oxford Terrace Baptist Church, the preacher being the Rev. L. A. North; the organist, Mr. W. Melville Lawry; choir-master, Mr. Vic. Peters. At 8.15 p.m. the station will relay the concert from 4YA, Dunedin.

4YA Jottings

THE church service will be relayed from St. Paul's Anglican Cathedral, the preacher being Canon E. E. Nevill, the organist and choir-master Mr. E. Heywood. At approximately 8.15 p.m.



PATRICIA McLEOD,

an Auckland lyric soprano, who will be heard in several numbers from 1YA shortly.

—S. P. Andrew photo.

from the Dunedin Town Hall an organ recital by Dr. V. E. Galway, assisted by vocal artists will be broadcast. At 9.30 p.m. the station will return to the

studio for numbers by well-known 4YA artists.

MONDAY

Items from 2YA

The feature on the programme to-night is the opera "Martha," presented by Harison Cook and company.

It will occupy approximately an hour, the balance of the programme being contributed to by Mrs. Wilfred Andrews, contralto, Kathleen Ferris, soprano, Harison Cook and Richard Maunder. The orchestral music will be supplied by the Orchestra, under Signor A. P. Truda.

Notes from Christchurch

THE evening's concert will be provided by the New Brighton Municipal Band, under the conductorship of Mr. J. A. Nuttall, and assisting artists.

Selections from 4YA

IN the place of the international programme, one of high class recordings will be provided, such numbers as Toti del Monte in the "Mad Scene" from "Lucia di Lammermoor," the Band of the Royal Air Force playing "Washington Post," Galli-Curci in "Sempere Labera," Fionzaley Quartet in two numbers, and the Mayfair Orchestra in "No, No, Nanette" selections will be included.

TUESDAY

Features from 1YA

A MISCELLANEOUS programme, the orchestral music for which will be supplied by the 1YA Chamber Orchestra, will be provided. The Asquiths, well-known novelty entertainers, will broadcast ten minutes of bright patter. At 9.31 p.m. there will be a programme of recorded operatic gems.

2YA Notes

THE feature of to-night's programme will be the studio presentation of the historic drama "Oliver Cromwell," by John Drinkwater. It will be produced under the direction of Victor S. Lloyd.

Dunedin Topics

ST. KILDA'S BAND will be present in the studio to-night and will provide an interesting programme, contributed to in the main by the Reggiardo Trio.

FEATURETTES

"Martha"

2YA, Monday

"Oliver Cromwell"

2YA, Tuesday

Excerpts from "Cabaret Girl"

2YA, Saturday

WEDNESDAY

Auckland Notes

WELL-KNOWN 1YA artists will be responsible for a high-class varied programme. Xylophone and piano numbers will be broadcast by Jack Waters and Ray Jury, while Gus and Eric will be heard in novelty piano and vocal numbers.

Jottings from 2YA

THE ordinary international programme to-night will be replaced by one of high-class recorded gems. At approximately 9 p.m. Dr. Guy H. Scholefield, O.B.E., will speak on a subject of international importance.

3YA Topics

THE Salon Orchestra under Francis Drake provides the orchestral music for to-night, while the Lichfield Male Quartet will be responsible for the major portion of the vocal numbers. Betty Hilliard, contralto, will also be heard in several numbers. Two numbers which should please will be "Gems of Erin" (Irish traditional number) and "Poet and Peasant" (Suppe), played by Stan Birch on the banjo-mandolin, with piano accompaniment.

Dunedin Selections

OUTSTANDING on to-night's programme will be Margharita Zelandia, who will give another recital; her numbers will be sung to orchestral accompaniment. Assisting artists will be F. E. Wood and John Kennedy.



DOUG. STARK,

The well-known 2YA Scottish comedian, who is making a welcome reappearance before the microphone.

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THURSDAY

Jottings from 1YA

THE 1YA Chamber Orchestra will be present again this evening to provide the instrumental music. Mr. and Mrs. J. W. Bailey, well known as entertainers at 1YA, and Allan McSkimming will be heard in two bright sketches entitled "Fortune Favours Fools" and "Social Butterflies."

Jottings from 2YA

THE programme to-night will be provided by the Port Nicholson Silver Band, assisted by 2YA artists.

Notes from Christchurch

THE Studio Orchestra under Harold Beck will be responsible for the instrumental music to-night. Millie O'Grady, soprano, with flute obbligato by A. E. Hutton, will sing that delightful number made famous by Galli-Curci, "Lo, Here the Gentle Lark" (Bishop). Other artists will be Belle Renaut, contralto; Charles Williamson, tenor; Eileen Warren, pianiste.

FRIDAY

Gleanings from Auckland

THE Moore Sisters, instrumentalists, will be heard in three brackets, which will include Liszt's "Liebestraum"; novelty entertainment will be provided by the Black and Bennetto duo, while novelty instrumental numbers will be broadcast by Meredith's Adelphians. The well-known lyric soprano, Patricia McLeod, will sing two brackets.

Features from Wellington

THE Orchestrina, under Signor A. P. Truda, will play the overture "Raymond" selection, "Lola from Berlin," Waldteufel's "French Spirit," and other well-selected numbers. The Lyric Quartet and Dorothy Spiller will provide the vocal numbers, while Len Ashton will broadcast two humorous items "Our Village Concert" and "The Musical Motorist."

Notes from 3YA

THE Chatterboxes will be present this evening, and will broadcast a short burlesque of their own arrangement entitled "Thought Reading." An English concertina duo will be heard in two brackets, including the well-known waltz "Over the Waves."

From 4YA

McCAW'S saxophone band, "The happy Four," Pettit's Orchestra, H. McL. Eggers, ventriloquist, and W. G. Carey will be responsible for the programme to-night. It is of a light vaudeville type and should be well received.

SATURDAY

Jottings from 1YA

THE programme to-night will be interrupted for a relay of a running description of the broadsiding at the Western Springs Stadium. The items will be of the light vaudeville type, with plenty of novelty numbers. J. F. Montague, dramatist, will broadcast "Fagin," by Dickens, and "Picking the Winner," an original number. Renz and Arta, the well-known xylophone



ELTON BLACK AND ALICE BENNETTO.

The well-known Auckland novelty entertainers, who will be heard in "A Pierrot Fantasy" on January 15.

and marimba artists, will be heard in several numbers.

Jottings from Wellington

EXCERPTS from the "Cabaret Girl" (Kern) will be presented this evening by the Salon Orchestra, under Mat Dixon, and assisting artists.

2YA listeners will be pleased to-night to hear Doug. Stark, Scottish comedian, who has recently returned from abroad. While abroad Mr. Stark broadcast numerous numbers from the American stations, and also had the opportunity of interviewing many of the famous English broadcast humorists, so that his numbers may be looked forward to with pleasure.

Also featuring to-night is a talk by Major-General Merlin, who will continue his adventures with the Bolsheviks. All who have made the acquaintance of Major-General Merlin in previous narratives will certainly not miss this talk. It is certainly one of the most interesting series of talks that has been broadcast from 2YA.

From 3YA and 4YA

MADAME M. REGGIARDO'S Sextet, assisted by the "Select Four," will provide the programme from 3YA and 4YA to-night. The Radietts will broadcast original sketches and patter.

Children's Sessions

2YA, WELLINGTON.

Monday.—Kipling Lady and Uncle Jeff will be here to-night to tell you stories and entertain. There's a delightful little programme arranged for you by Mr. Claude Sander, including clog dancing, trios, rhythmic bands, mouth organs and choruses, not forgetting our little solo singers.

Tuesday.—Jumbo's turn to-night, and he has with him the little people from Khandallah with their songs and recitations; and as a special request they are doing "Little Red Riding Hood" for you.

Thursday.—Here comes Tweedledum and he's found his rattle, but lost Tweedledee. But if you listen carefully

you will hear more of the adventures of "Alice in Wonderland." Also, Mr. Reynolds is bringing a party of little singers to the studio, and they have been practising up some of the songs you love to sing to you.

Friday.—If you listen to-night you will hear a cantata called "Soot and the Fairies," performed by some of our little cousins. There will also be birthday greetings sent by Uncle Jim and some more about "Uncle Remus."

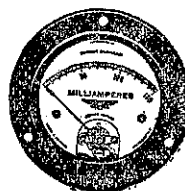
Saturday.—A special Christopher Robin evening to-night. If you listen you will hear how "Christopher Robin" and "Pooh" came to an enchanted place, and about "Buckingham Palace" when they changed guards, and all the other things that Christopher Robin saw and did. Aunt Molly and Uncle Jasper will send you greetings, and sport will be here to hear "Puppy and I."

Sunday.—The Children's Choir from the Newtown Church of Christ, under the leadership of Mr. Thomas, will sing for you to-night. Uncle George will talk to you and conduct the service.

B.B.C. Governors Appointed

THE King has approved of the re-appointment of Lord Gainsford as vice-chairman of the B.B.C. and of Viscountess Snowden and Dr. Montague Rendall as governors for a period of one year.

The King also has approved of the appointment of Mr. Harold Brown to be governor for a period of five years. Mr. Brown, who takes the place vacated by Sir Gordon Nairne, who has retired, has had wide commercial and financial experience.



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Notes and News from the North

(By "Microphone.")

A NEW series of lectures to be given under the auspices of the Workers' Educational Association will be begun from 1YA next week. The Rev. W. G. Monckton, tutor for the association on "International Relations," will speak on "Present Day Problems" every Tuesday evening; the Rev. W. Jellie, tutor for "Modern Poetry," will deal with "Literature and Life" every Wednesday evening; and Mr. Ernest Blair, president of the association, will speak on "Art and Craft on the Amateur Stage" every Thursday evening. Mr. Blair is a well-known amateur producer and has been actively associated with the dramatic activities of the association. He is a member of the Grafton Shakespeare Dramatic Club.

THE first relay by 1YA of broadsiding sports will be carried out on Saturday evening, when Mr. Gordon Hutter will describe the events at the Western Springs Speedway. Relays of these sports will be carried out by 1YA at regular intervals in the future. The sports were recently successfully relayed by 1ZR, the announcer being Mr. W. Hindeman. The Plunket Shield cricket matches during the next few weeks will be described by 1YA. During Mr. Gordon Hutter's absence at Ninety Mile Beach the work of sports announcer will be carried out by his brother.

A VERY useful refinement which often enables the last ounce to be got out of a set is a .0001-mfd. fixed condenser, joined between the plate and filament of the detector valve. (But use a good one, for obvious reasons!)



MILLICENT O'GRADY,
a charming lyric soprano, singing
from Christchurch on January 14.

Full Programmes for Next

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

Sunday, January 10

1YA, AUCKLAND (875 KILOCYCLES)—SUNDAY, JANUARY 10.

- 3.0 : Selected recordings and literary selection.
 6.0 : Children's song service, conducted by Uncle Leo.
 7.0 : Relay of service from St. Andrew's Church. Preacher: Rev. Ivo Bertram. Organist and Choirmaster: Dr. Neil McDougall.
 8.30 (approx.): Relay of Municipal Band Concert from Albert Park. Conductor: Mr. George Buckley.
 March—The Band, "Agüero" (Franco).
 Overture—The Band, "The Flying Dutchman" (Wagner).
 Cornet—Mr. J. Davies, "Cleopatra" (Damare).
 Suite—The Band, Peer Gynt: (a) "Morning" (b) "Ase's Death," (c) "Anitra's Dance," (d) "In the Hall of the Mountain King" (Grieg).
 Piccolo—Mr. Hal. C. McLennan, "Souvenir de Liege" (Gennin).
 Selection—The Band, "Yeomen of the Guard" (Sullivan).
 Intermezzo—The Band, "Dream Flowers" (Translatour).
 Hymn—The Band, "Light's Above Celestian Salem" (Elliot).
 March—The Band, "Dunedin" (Alford).
 10.0 : God save the King.

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

- 3.0 : Selected gramophone recordings.
 6.0 : Children's song service, conducted by Uncle George and assisted by the children's choir from the Kent Terrace Presbyterian Church, conducted by Mr. Jack.
 7.0 : Relay of service from the Taranaki Street Methodist Church. Preacher: Rev. T. R. Richards.
 8.15 (approx.): Concert by the Band of the Wellington Division Royal Naval Volunteer Reserve, and 2YA Artists.
 March—The Band, "Great Little Army" (K. Alford). Selection, "La Militaire" (W. Raymond).
 Soprano—Miss Christina Ormiston, (a) "The Lord is my Light" (Allit-sin); (b) "The Lotus Flower" (Schumann); (c) "Spring Night."
 Violin—Miss Ava Symons—(a) "Schon Rosmarin" (Kreisler); (b) "The Foggy Dew" (Arthur Alexander); (c) "Sicilienne and Rigandon" (Francoeur-Kreisler).
 Baritone—Mr. Keith Grant, (a) "Danny Deever" (Walter Damrosch); (b) "Mandalay" (Oley Speaks).
 Cornet solo—Mr. W. Bowman "Alas! Those Chimes" (Wallace).
 Waltz—Band—"The Grenadiers" (Rimmer).
 Violin—Miss Ava Symons, (a) "Chant" (Cameron White); (b) "Obef-tass" (Wieniawski); (c) "Serenade Espagnole."
 Soprano—Miss Christina Ormiston, (a) "Ave Maria" (Schubert); (b) "Open Secret" (Huntington Woodman).
 Band—Selection, "Fra Diavolo" (Auber).
 Baritone—Mr. Keith Grant, (a) "Western Wind" (May Brabe); (b) "My Resting-place" (Schubert).
 Band—(a) "Meditation, Sanctuary of the Heart" (Ketelby); (b) Hymn, "Abide With Me" (Monk).
 God save the King.

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

- 3.0 : Gramophone recital.
 5.30 : Children's hour, conducted by Rev. L. A. North, assisted by children from the Oxford Terrace Baptist Sunday school.
 6.15 : Chimes.
 6.30 : Relay of Evening Service from the Oxford Terrace Baptist Church. Preacher: Rev. L. A. North. Organist: Mr. W. Melville Lawry. Choirmaster: Mr. Vic Peters.
 7.45 : Selected recordings.
 8.15 (approx.): Relay of programme from 4YA, Dunedin.
 10.0 : God save the King.

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

- 3.0 : Chimes. Selected recordings.
 5.30 : Children's song service, conducted by Big Brother Bill.
 6.15 : Instrumental recordings.
 6.30 : Relay of evening service from St. Paul's Anglican Cathedral. Preacher: Canon E. R. Nevill. Organist and choirmaster: Mr. E. Heywood.
 7.45 : (approx.): Instrumental recordings.
 8.15 : Relay from the Dunedin Town Hall of Organ Recital by Dr. V. E. Galway, assisted by vocal artists.
 9.30 : From the Studio:—
 Bass solo—Mr. P. E. Woods, (a) "From Oberon in Fairyland" (Slater); (b) "The Bandolero" (Stuart).

- Violin solo—Mr. Maitland McCutcheon, (a) "L'Abeille" (Schubert); (b) "Palme" (Fibich).
 Soprano solo—Miss Clare Dillon, (a) "Caro Nome" (Verdi); (b) "Has Sorrow Thy Young Days Shaded" (Moore).
 Violin—Mr. Maitland McCutcheon, "Sonata in F Major" (Beethoven) (for violin and piano).
 Bass solo—Mr. P. E. Woods, "I Triumph, I Triumph" (Carissimi).
 God save the King.

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

- 7.0 to 8.15 : Church relay.
 8.15 to 10.0 : Studio concert.

Monday, January 11

1YA, AUCKLAND (875 KILOCYCLES)—MONDAY, JANUARY 11.

SILENT DAY.

2YA, WELLINGTON (720 KILOCYCLES)—MONDAY, JANUARY 11.

- 10.0 : Chimes. Selected gramophone recordings.
 11.12 : Lecturette—"Cooking."
 11.37 : Lecturette—"Health Hints or First Aid."
 12.0 : Lunch-hour music.
 2.0 : Selected recordings.
 3.30 and 4.30 : Sporting results.
 5.0 : Children's hour, conducted by Uncle Jeff.
 6.0 : Dinner music session.
 7.0 : News reports and sporting results.
 7.40 : Talk by Representative of Society of Opticians, Mr. Hays Towns—"Little Bits of Glass."
 8.0 : Chimes.
 8.1 : Record—Milan Symphony Orchestra, "The Sicilian Vespers" (Verdi).
 8.8 : Soprano—Miss Kathleen Ferris, "The Carnival of Venice" (Benedict).
 8.13 : Bass—Mr. Harrison Cook, (a) "Young Dietrich" (Henshel); (b) "The Tune the Bo'sun Played" (Loughborough).
 8.19 : Orchestra—Selection from "Aida" (Verdi).
 8.29 : Contralto—Mrs. Wilfred Andrews, "The Secret of Bliss in Perfection," from "Lucretia Borgia" (Donizetti).
 8.33 : Orchestra—Overture, "Martha" (Flotow).
 8.40 : Presentation of vocal gems from the opera "Martha" (in English), including the famous "Kitchen Scene." Cast of Characters—Lady Henrietta, Kathleen Ferris; Nancy, Mrs. Wilfred Andrews; Lionel, Mr. Richard Maunder; Plunkett, Mr. Harrison Cook.
 1. Story of the Opera, told by Harrison Cook.
 2. Duet (Lady Henrietta and Nancy), "Dearest Lady."
 3. Aria (Lionel), "My Raptured Gaze."
 4. The famous drinking song (Plunkett), "Tell Me, Good Friends."
 5. The Kitchen Scene (complete).
 9.25 : Orchestra—(a) "Traumerei" (Reverie) (Schumann); (o) "Czardas" (Delibes).
 9.33 : Record—Violin, Yehudi Menuhin, "Concerto in G Major—Adagio" (Mozart); "Sarabande and Tambourin" (Leclair—Sarasate).
 9.41 : Contralto—Mrs. Wilfred Andrews, "Out of the Mist" (Sanderson).
 9.45 : Tenor—Mr. Richard Maunder, (a) "Questa o Quella" (Verdi); (b) "Monsieur Triquet's Couplet" (Tschalkowsky).
 9.50 : Orchestra—(a) "Valse Lente" (Berger); (b) "Faust Ballet No. 4."
 10.0 : Selected dance music.
 11.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—MONDAY, JANUARY 11.

- 3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 7.30 : Talk.
 8.0 : Chimes. Band programme by New Brighton Municipal Band (Conductor, Mr. J. A. Nuttall) and assisting artists.
 March—Band, "Clear the Road" (White). Waltz—Band, "Always the Same Sweet Pal" (A. Jolson).
 8.10 : Bass—Mr. E. J. Johnson, (a) "The Dover Patrol" (Carrington); (b) "Young Tom o' Devon" (K. Russell).
 8.16 : Record—Male Chorus—Happiness Boys, "Etiquette Blues."
 8.20 : Violin, 'Cello, and Piano—The Melody Trio, Song Melodies—"Trees" (Rasbach); (b) "A Little Twilight Song" (R. C. Clarke).
 8.25 : Record—Humour—Rupert Hazel, "A Radio Fan's Dream."

Week-all Stations-to Jan. 17

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- 8.31: Record—Instrumental—Cello, W. H. Squire, "Melodie in E."
 8.34: Soprano—Mrs. B. H. Shuis, (a) "June Rapture" (Lehmann); (b) "Lovers in the Lane" (Lehmann); (c) "Love's Lament" (Head).
 8.39: Selection—Band, "Souvenir d'Opera" (Rimmer).
 8.49: Humour—Mr. Frank Moran, "When the Circus Came to Town."
 8.54: Fantasia—Band, (a) "Veracity" (Bourne); (b) "Whistling in the Dark" (Connolly); (c) "Bathing in the Sunshine."
 9.7: Weather forecast and station notices.
 9.9: Cello and Instrumental Trio—The Melody Trio, (a) "The Swan" (Saint-Saens); (b) "Parted" (Tosti).
 9.15: Bass—Mr. E. J. Johnson, "The Deathless Army" (Trotter).
 9.19: Waltz and Foxtrot—Band, (a) "You Will Remember Vienna" (Timms); (b) "Moonlight-Saving Time" (Nicholls).
 9.29: Humour—Mr. Frank Moran, "The Bullfighter" (Weldon).
 9.36: Record—Instrumental—London Novelty Orchestra, "The Teddy Bears' Picnic."
 9.39: Soprano—Mrs. B. H. Shuis, (a) "What is a Song" (Curran); (b) "That's All" (Brahe).
 9.43: Violin and Instrumental Trio—The Melody Trio, (a) "Estrellita" (Ponce); (b) "La Paloma" (Yradier); (c) "Neapolitan Nights."
 9.55: Record—Humour—Clapham and Dwyer, "Buying a House."
 9.59: March—Band, "Faithful and True" (Ord Hume).
 10.2: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—MONDAY, JANUARY 11.

- 3.0: Chimes. Selected recordings.
 4.30: Sports results.

PHENOMENAL

RECORD BUSINESS ACHIEVEMENT BY STEWART-WARNER RADIO IN NOVEMBER AND DECEMBER

We are happy to report that figures show November and December as the two best months' radio business since we took over the distribution of Stewart-Warner Radio six years ago.

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STEWART-WARNER Round-the-World RADIO

- 5.0: Children's session, conducted by Big Brother Bill.
 6.0: Dinner music session.
 7.0: News session.
 8.0: Chimes. Overture—London Symphony Orchestra, "In a Summer Garden."
 Soprano—Toti del Monte, "Mad Scene" from "Lucia di Lammermoor."
 Violin—Fritz Kreisler, (a) "Marguerite"; (b) "Serenade."
 Bass-baritone—Peter Dawson, (a) "Fiddler of Dooney" (Dunhill); (b) "Song of the Highway" (May).
 Royal Opera Orchestra, "Le Chasseur Maudit" (Caesar Frank).
 Miriam Licette and Dennis Noble and Chorus, "Give Me My Hand of Fairest" (Mozart).
 Violin Solo—Roderick Gray, "Culloden Medley."
 Male Chorus, with orchestra—"Jolly Good Fellows Every One."
 Weather report and station notices.
 Overture—New Regenta Orchestra, "The Desert Song" Selection.
 The Trinity Glee Singers—"Plantation Song Medley."
 Band Selection—H.M. Royal Air Force Band, "Washington Post" March.
 Baritone—Riccardo Stracciari, "O Sommo Carlo" (Verdi).
 London Symphony Orchestra—"Briggs Fair" (Dellus).
 Soprano—Galli Curci, "Sempere Labera" (Verdi).
 Flonzalet Quartet—(a) "Quartet in D Minor"; (b) "Allegro Moderato—Andante" (Mozart).
 Chorus, Nash, Williams—"Ah, My Friends, I Salute You."
 Mayfair Orchestra—"No, No, Nanette" Selections.
 10.0: God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—MONDAY, JANUARY 11.

- 7.30 to 8.0: News and information.
 8.0 to 10.0: Studio concert.

Tuesday, January 12

1YA, AUCKLAND (875 KILOCYCLES)—TUESDAY, JANUARY 12.

- 2.0: Relay of resume of the Plunket Shield cricket match, Canterbury v Auckland, at Eden Park.
 5.0: Children's session, conducted by Uncle Dave.
 6.0: Dinner music session.
 7.0: News and market reports.
 7.40: W.E.A. session.
 8.0: Chimes. March—1YA Chamber Orchestra (Conductor, Mr. Harold Baxter), "The Middy" (Alford).
 Overture—1YA Chamber Orchestra, "Plymouth Hoe" (Ansell).
 8.11: Contralto—Miss Winifred Johnson, (a) "Four by the Clock" (Mallinson); (b) "Song of Thanksgiving" (Allitsen).
 8.17: Selection—1YA Chamber Orchestra, "The Vagabond King" (Friml).
 8.27: Novelty Entertainment—The Asquiths, Twenty Minutes' Novelty Entertainment.
 8.37: Fantasia—1YA Chamber Orchestra, "Evolution of Dixie" (arr. Lake).
 8.44: Tenor—Mr. Denis Sheard, (a) "Nita Gitana" (Newton); (b) "The Vagabond" (Molloy); (c) "Serenade" ("Student Prince") (Romberg); (d) "Love, Here is My Heart" (Silesu).
 8.56: Fantasia—1YA Chamber Orchestra, "Darkey's Dreamland."
 9.2: Weather report and station notices.
 9.4: Humour—Mr. W. Trevor Binns, (a) "Me Photograph" (Anon.); (b) "Guy de Vere on Football" (Anon.).
 9.14: Patrol—1YA Chamber Orchestra, "Wee MacGregor" (Ames). Suite—"Vive la Danse" (Finck).
 9.26: Contralto—Miss Winifred Johnson, (a) "Rest Thee, Sad Heart" (del Riego); (b) "Vanity Fair" (Clutsam).
 9.31: Programme of Recorded Operatic Gems:
 Selection—New Light Symphony Orchestra, "Madame Butterfly."
 Soprano—Rosa Ponselle, "Casta Diva" (Bellini).
 Chorus—La Scala Chorus, "La Tempesta" (Verdi).
 Tenor—Browning Mummery, "Never Did I Behold So Fair a Maiden."
 Overture—Milan Symphony Orchestra, "Mignon" (Thomas).
 God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—TUESDAY, JANUARY 12.

- 10.0: Chimes. Selected gramophone recordings.
 11.12: Lecturette—"Fabrics and Fashions."
 12.0: Lunch-hour music.
 2.0: Classical hour.
 3.30 and 4.30: Sporting results.
 5.0: Children's hour, conducted by Jumbo.
 6.0: Dinner music session.

- 7.0 : News, reports and sporting results.
 7.40 : Lecturette by a representative of the Agricultural Department—"For the Man on the Land."
 8.0 : Studio presentation of the Historical Drama, "Oliver Cromwell," by John Drinkwater. Under the direction of and produced by Victor S. Lloyd.
 10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—TUESDAY, JANUARY 12.
 SILENT DAY.

4YA, DUNEDIN (650 KILOCYCLES)—TUESDAY, JANUARY 12.

- 3.0 : Chimes. Selected recordings.
 4.30 : Sports results.
 5.0 : Children's hour, conducted by Big Brother Bill.
 6.0 : Dinner music session.
 7.0 : News session.
 8.0 : St. Kilda Band—(a) March—"Mephistopheles" (Douglas). (b) Waltz—"Queen of Emeralds" (Greenwood).
 Soprano—Miss Kathleen Geerin, "Ballatella" (Leoncavallo).
 Baritone—Mr. Thomas Kennedy, (a) "Gloria" (Buzzi Peccia); (b) "Serenade" (Schubert).
 Reggiardo Trio—(a) "In a Rose Bower" (Friml); (b) "Flowers of Love."
 Contralto—Miss Gwenda Burt, (a) "At the Midhour of Night" (Coven); (b) "Love, I Have Won You" (Ronald).
 St. Kilda Band—(a) Tone Poem—"Labour of Love" (Fletcher). (b) Tenor Horn Solo—"Iona" (Allison).
 Reggiardo Trio—(a) "Simple Confession" (Thome); (b) "At Nod."
 Soprano—Miss Kathleen Geerin, (a) "Revien Revien" (Berlioz); (b) "Rosebud" (Arditi).
 St. Kilda Band—Overture, "Raymond" (Thomas).
 Baritone—Mr. Thomas Kennedy, "Macushla" (McMurrugh).
 Reggiardo Trio—(a) "A Shy Coquette" (Grant); (b) "Apple Blossoms" (Roberts); (c) "Lamparite" (Lake).
 Contralto—Miss Gwenda Burt, "The Rose Enslaves the Nightingale."
 St. Kilda Band—(a) Fantasia—"D'ye Ken John Peel" (Greenwood). (b) March—"Ravenswood" (Rimmer).
 God save the King.

Wednesday, January 13

1YA, AUCKLAND (875 KILOCYCLES)—WEDNESDAY, JANUARY 13.

- 3.0 : Selected recordings and literary selection.
 5.0 : Children's session, conducted by Uncle Reg.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 7.40 : W.E.A. session.
 8.0 : Chimes. Record—Orchestral—Berlin Philharmonic Orchestra, "Roses of the South" (Strauss).
 8.5 : Vocal—Baritone—Mr. Arthur Gally, "Border Ballad" (Cowen).
 Vocal Quartet—The Savoy Quartet, "Love, My Star" (Mascagni).
 Male Alto—Mr. Bert Skeels, "Macushla" (MacMurrugh).
 Vocal Quartet—The Savoy Quartet, "Little Tommy Went a-Fishing."
 8.17 : Xylophone and Piano—Messrs. Eric F. B. Waters and Ray Jury, (a) "Peleg's Vision" (Losey); (b) "Aragonaise" (Massenet).
 8.26 : Novelty Piano and Vocal—Sybil and Eric, (a) "A Garden in the Rain" (Donaldson); (b) "Old-Fashioned Girl" (De Sylva).
 8.33 : Banjo solos—Mr. James E. Deane, (a) "The Kilties" (Grimshaw); (b) "Lancashire Clogs" (Grimshaw).
 8.40 : Talk—Mr. Arthur Cone, "My Experiences in Hitch-hiking Around the World."
 9.0 : Weather report and station notices.
 9.2 : Vocal Quartet—The Savoy Quartet, "Alabama Lullaby" (De Boll).
 Tenor—Mr. Frank Campbell, "An Emblem" (Thompson).
 Vocal Quartet—The Savoy Quartet, "Lucky Jim" (Parks).
 9.11 : Novelty Piano and Xylophone—Messrs. Eric F. B. Waters and Ray Jury, (a) "Lonesome Little Doll" (Cowan); (b) "The Whistler."
 9.18 : Novelty Piano and Vocal—Sybil and Eric, (a) "Lover, Come Back to Me" (Romberg); (b) "I Bring a Love Song" (Romberg).
 9.25 : Banjo Solos—Mr. James E. Deane, (a) "Magnolia Waltz" (Morley); (b) "Whistling Rufus" (Mills).
 9.29 : Vocal Quartet—The Savoy Quartet, "In the Gloaming" (Harrison).
 Bass—Mr. Sid. Hislop, "Sergeant of the Line" (Squire).
 9.35 : Programme of dance music.
 11.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—WEDNESDAY, JANUARY 13.

- 10.0 a.m. : Chimes. Selected gramophone recordings.
 11.37 : Lecturette—"Hollywood Affairs."
 12.0 : Lunch-hour music.
 2.0 : Selected recordings.
 3.30 and 4.30 : Sporting results.
 5.0 : Children's hour, conducted by Aunt Daisy.
 6.0 : Dinner music session.
 7.0 : News, reports and sporting results.

- 7.40 : Lecturette—Mr. A. E. Watson, "Tourist and Health Resorts."
 8.0 : Chimes. Programme of recorded music.
 8.1 : Overture—B.B.C. Wireless Military Band, "The Mill on the Rock."
 8.9 : Tenor—Tito Schipa, (a) "Guapparia" (The Bully's Serenade) (Bovio-Falvo); (b) "Piscatore e Pusilleco" (The Fisherman of Pusilleco).
 8.17 : Cello—Hans Bottermund, "Adagio from Concerto in D Major" (Haydn).
 8.23 : Vocal Gems—Light Opera Company, "The Quaker Girl" (Monckton).
 8.31 : Selection—Light Symphony Orchestra, "Princess Ida" (Sullivan).
 8.39 : Soprano—Toti Dal Monte, (a) "Lo Dice Ognun"; (b) "La Richezza ed il Grado" (Donizetti).
 8.47 : Pianoforte—Vladimir Horowitz, (a) "Capriccio in F Minor" (Dohnanyi); (b) "Valse Oublie" (Forgotten Waltz) (Liszt).
 8.53 : Concerted—Covent Garden Opera Company with London Symphony Orchestra, "Die Fledermaus" (Finale Act 2) (Strauss).
 9.1 : Weather report and station announcements.
 9.3 : Lecturette—Dr. Guy M. Scholefield, O.B.E.
 9.18 : Instrumental—Grand Symphony Orchestra, "The Jewels of the Madonna"—(a) "Intermezzo," (b) "Apache Dance" (Wolf-Ferrari).
 9.24 : Contralto—Sigrid Onegin with Berlin State Opera House Orchestra and Doctor's Choir, "Alto Rhapsody" (Brahms).
 9.40 : Violin—Yehudi Menuhin, (a) "Sarabande and Tambourin" (Leclair-Sarasate); (b) "Concerto in G Major—Adagio" (Mozart).
 9.48 : Vocal Duet—A. Pertile (tenor), B. Franci (baritone), (a) "In Vain Alvaro"; (b) "Thy Menaces Wild."
 9.56 : Selection—Band of H.M. Coldstream Guards, "Pirates of Penzance."
 10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—WEDNESDAY, JAN. 13.

- 3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour.
 6.0 : dinner music session.
 7.0 : News and market reports.
 7.30 : Addington stock market reports.
 8.0 : Chimes. Record—Orchestral—Boston Symphony Orchestra, "Hungarian Rhapsody No. 1 in F Major."
 8.8 : Male Quartet—Lichfield Male Quartet, (a) "The Quest" (Percival); "They Kissed" (Hawley).
 8.14 : Record—Instrumental—Piano, Mark Hambourg, "Harmonious Blacksmith" (Handel).
 8.18 : Contralto—Miss Betty Hilliard, "The Enchantress" (Hatton).
 8.23 : Orchestral—Salon Orchestra (Conductor, Mr. Francis Bate), Suite of Dances, "Vive la Danse"—(a) "Pas de Deux"; (b) "Pas Seul"; (c) "Ensemble" (Finale) (Finck).
 8.32 : Record—Humour—Miff Mole and His Molers, "Lucky Little Devil."
 8.38 : Tenor—Mr. F. Ritchie, (a) "Serenata" (Tosselli); (b) "My Desire."
 8.44 : Banjo Mandolin with Piano—Mr. Stan Birch, "Poet and Peasant."
 8.49 : Male Quartet—Lichfield Male Quartet, "Lullaby" (Brahms).
 8.52 : Record—Twins' Grand Orchestra, "Sizilietta."
 8.56 : Orchestral—Salon Orchestra, (a) "Love's Dream" (Bennet); (b) "La Rosita" (Paul Dupont).
 9.5 : Weather report and station notices.
 9.7 : Record—Band—Sousa's Band, "London Bridge."
 9.11 : Male Quartet—Lichfield Male Quartet, "Softly, Softly, O'er the Sea."
 9.14 : Baritone—Mr. P. A. Caithness, "Two Grenadiers" (Schumann).
 9.17 : Orchestral—Salon Orchestra, Waltz, "Stories of Vienna Forest."
 9.27 : Contralto—Miss Betty Hilliard, (a) "Angel's Serenade" (violin obbligato by Gladys Vincent) (Braga); (b) "Author of All My Joys."
 9.34 : Banjo, Mandolin and Piano—Mr. Stan Birch, Medley, "Gems of Erin" (Irish traditional airs).
 9.41 : Tenor and Baritone—Lichfield Male Duo, "The Battle Eve" (Bonheur).
 9.45 : Record—Sam Lanin and His Orchestra, "Tears."
 9.49 : Male Quartet—Lichfield Male Quartet, (a) "Holy Night, Peaceful Night" (Franz Gruber); (b) "Always More" (Franz Gruber).
 9.56 : Orchestral—Salon Orchestra, Novelty, "The Evolution of Yankee Doodle" (Lake).
 10.5 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—WEDNESDAY, JANUARY 13.

- 3.0 : Chimes. Selected gramophone recordings.
 4.30 : Sports results.
 5.0 : Children's hour, conducted by Big Brother Bill.
 6.0 : Dinner music session.
 7.0 : News session.
 8.0 : Chimes. Orchestra—Pettitts, "La Voix des Cloches" (Luigini).
 Soprano—Margharita Zelanda, with orchestral accompaniment, (a) "Mare D'Incanto" (Morasca); (b) "A Fairy Went a-Marketing."
 Bass—Mr. F. E. Woods, "Come to the Fair" (Martin); "In Sheltered Vale" (D'Alquin).
 Tenor—Mr. John Kennedy, "I Seek for Thee in Every Flower" (Gauz).
 Soprano—Margharita Zelanda, with orchestral accompaniment, (a) "The Piper of Love" (Carew); (b) "Charmant Oiseau" (Daird).
 Bass—Mr. F. E. Woods, "When the Roses Bloom" (Reichardt).
 Tenor—Mr. John Kennedy, (a) "Mary of Argyle" (Nelson); (b) "Loch Lomond" (Trdtl.).
 Soprano—Margharita Zelanda, with orchestral accompaniment, (a) "Visi d'Arte" (Puccini); (b) "The Wind" (Spross).
 Orchestra—Pettitts, "Pizzicato" (Thorne).
 Soprano—Margharita Zelanda, with orchestral accompaniment, (a) "Elf and Fairy" (Densmore); (b) "Un bel di Vedremo" (Puccini).

9.30: Dance music.

11.0 : God save the King.

2XB, NEW PLYMOUTH (1230 KILOCYCLES)—WEDNESDAY, JAN. 13.

7.30 to 8.0: News and information.

8.0 to 10.0: Studio concert.

Thursday, January 14**1YA, AUCKLAND (875 KILOCYCLES)—THURSDAY, JANUARY 14.**

3.0 : Selected recordings and literary selection.

5.0 : Children's session, conducted by Skipper.

6.0 : Dinner music session.

7.0 : News and market reports.

7.40: W.E.A. session.

8.0 : Chimes. March—1YA Chamber Orchestra (Conductor, Mr. Harold Baxter), "Great Little Army" (Alford). Overture—"Light Cavalry"

8.12: Soprano—Miss Chrissie Foster, (a) "Old Sweetheart" (Day); (b) "There's a Little Green Cabin" (Forster).

8.18: Record—Piano—Ignace Paderewski, "Valse Brillante in E Flat Major." Vocal Gems—Light Opera Company, "Veronique" (Messenger).

8.26: Sketch—Mr. and Mrs. J. W. Bailey and Mr. Allan F. McSkimming, "Fortune Favours Fools" (Overton).

8.41: Selection—1YA Chamber Orchestra, "Mirella" (Gounod).

8.51: Baritone—Mr. H. Barry Coney, (a) "Praise Ye the Lord" (Bantock); (b) "What a Wonderful World it Would Be" (Lohr).

8.58: Record—Novelty Instrumental—Bertini Bros., "Wedding Chimes."

9.1 : Weather report and station notices.

9.3 : Morceaux—1YA Chamber Orchestra, (a) "Wedding of a Rose" (Jessel); (b) "Dervish Chorus" (Sebek). Selection, "In a Persian Market" (Ketelbey).

9.15: Soprano—Miss Chrissie Foster, (a) "When Love Fills Your Heart" (Russell); (b) "Invitation" (Barry).

9.21: Record—Violin—Fritz Kreisler, "Shepherd's Madrigal" (Kreisler). Record—Choral—Mixed Chorus, "Sea Songs."

9.29: Sketch—Mr. and Mrs. J. W. Bailey and Mr. Allan F. McSkimming, "The Social Butterflies" (Evelyn).

9.34: Suite—1YA Chamber Orchestra, "Yankiana" (Thurban).

9.44: Baritone—Mr. H. Barry Coney, "The Jolly Beggar" (Dear).

9.48: Record—Novelty Instrumental—International Novelty Quartet, "The Dicky Bird Hop" (Gourley).

Record—Male Quartet—The Revellers, "Singing a Vagabond Song."

Comedy—Clarkson Rose, "Single and Married" (Rose).

9.57: March—1YA Chamber Orchestra, "Jollity" (Ganglberger).

10.1 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—THURSDAY, JANUARY 14.

10.0 : Chimes. Selected gramophone recordings.

10.45: Lecturette—"Cooking."

12.0 : Lunch-hour music.

2.0 : Selected recordings.

3.15: Lecturette—Miss I. F. Meadows. Talk prepared by Home Science Extension Department of Otago University.

3.30 and 4.30: Sporting results.

5.0 : Children's hour, conducted by Tweedledum.

6.0 : Dinner music session.

7.0 : News, reports and sporting results.

8.0 : Chimes. Programme by Port Nicholson Silver Band and 2YA artists.

8.1 : Band—March, "The Scindian" (Rimmer); "Serenata" (Toselli).

8.12: Baritone—Mr. C. E. Winspear, (a) "Charmed Cup" (Roehel); (b) "For You Alone" (Geehl).

8.18: Record—Zonophone Minstrels, "The White Blackbirds."

8.24: Sketchers—"Kiddie" (Twyford).

8.35: Band—"Bacchanale Waltz" (Rimmer); Cornet Solo—"Hallstorm."

8.47: Songs at the Piano—Miss Florence Penny, (a) "Kissing Time" (Nor-ton); (b) "My Heart is a Haven" (Steinel).

8.53: Band—Selection, "Rossini" (arr. Owen).

9.2 : Weather report and station announcements.

9.4 : Baritone—Mr. C. E. Winspear, (a) "The Curfew" (Gould); (b) "Shadows" (Hill).

9.10: Record—"The Story of the Pied Piper," by John Henry.

9.16: Band—Trombone Solo with band accompaniment, "Lend Me Your Aid."

9.24: The Sketchers—"Counter Attractions" (West); "Dippy" (West).

9.29: Songs at the Piano—Miss Florence Penny, (a) "Big Lady Moon" (Coleridge-Taylor); (b) "Curly-headed Babby" (Clutsam); (c) "Half-way Down" (Simpson).

9.36: Band—Tone Poem, "Labour and Love" (Fletcher).

9.43: Record—Carson Robison Trio, (a) "Open Up Dem Purly Gates" (Robison); (b) "I Hear Dem Bells" (Jenkins).

9.57: Band—March, "The Cossack" (Rimmer).

10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—THURSDAY, JANUARY 14.

3.0 : Gramophone recital.

3.15: Home science talk.

5.0 : Children's hour.

6.0 : Dinner music session.

7.0 : News and market reports.

7.15: Talk—Mr. E. B. Wiltshire, "Books of the Month."

7.30: Talk—Mr. O. W. B. Anderson, "Work of the New Zealand Horticultural Societies."

8.0 : Chimes. Orchestral—Studio Orchestra (Conductor, Mr. Harold Beck), "Carnival Overture" (Dvorak).

8.10: Soprano—Miss Millicent O'Grady, flute obbligato by Mr. A. E. Hutton, "Lo, Here the Gentle Lark" (Bishop).

8.15: Piano—Miss Aileen Warren, (a) "In a Mountain Glen" (Barratt); (b) "The Sea Mews' Flight" (Barratt); (c) "The Clock Prelude No. 17" (Chopin).

8.22: Record—Choral—La Scala Chorus, "O Signore dal Tinto Natio."

8.25: Tenor—Mr. Chas. R. Williamson, (a) "In Springtime" (Tirendalli); (b) "To the Nightingale" (Brahms).

8.31: Orchestral—Studio Orchestra, (a) "Minuet" (Mozart); (b) "Valse Triste" (Sibelius); (c) "Norwegian Dance" (Carse).

8.42: Contralto—Miss Belle Renaut, (a) "Evening Boat Song" (Schubert); (b) "Twas in the Lovely Month of May" (Schumann).

8.48: Flute—Mr. A. E. Hutton, "La Sympathie" (Croner).

8.53: Record—Vocal gems from "Toni."

8.56: Orchestral—Studio Orchestra, Four Pieces from Suite in D, (a) "Gavotte"; (b) "Bourree"; (c) "Air"; (d) "Gigue" (Bach).

9.7 : Weather report and station notices.

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

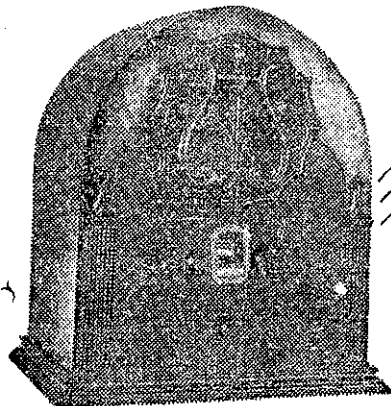
9.15: Piano—Miss Aileen Warren, (a) "In a Gondola" (Palmgren); (b) "Little Hakon" (Grieg).

9.22: Tenor—Mr. Chas. Williamson, (a) "I Seek for Thee in Every Flower" (Ganz); (b) "Sea Rapture" (Coates).

9.27: Contralto—Miss Belle Renaut, (a) "Indian Serenade" (Orlando Morgan); (b) "In the Garden" (Schumann).

9.32: Orchestral—Studio Orchestra, "Dance of the Archers" (Borodin).

9.36: Programme of Dance Music by Bailey-Marston's Dance Orchestra, interspersed with suitable recordings.

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- Foxtrots—(a) "Faithfully Yours" (Brockman); (b) "Song of the Islands" (King); (c) "Just One More Chance" (Coslow).
 Foxtrots—(a) "Ain't That the Way It goes?" (De Sylva, Brown, and Henderson); (b) "You Didn't Have to Tell Me" (Donaldson); (c) "Can't You Read Between the Lines" (Dubin).
 Foxtrots—(a) "Just a Blue-Eyed Blonde" (Fioreto); (b) "When Your Lover Has Gone" (Swan); (c) "Nobody Loves No Baby."
 Foxtrots—(a) "Were You Sincere?" (Rose); (b) "At Your Command" (Tobias); (c) "I Found a Million-Dollar Baby" (Rose).
 Orchestra—(a) "Choo Choo" (Malneck); (b) "Sing Another Chorus, Please"; (c) "Lazy River" (Carmichael).
 Orchestra—(a) "Let's Get Friendly" (Dougherty); (b) "Oh! It Looks Like Rain" (Agar); (c) "Elizabeth" (Kalscher).
 Orchestra—(a) "I Wanna Sing About You" (Friend); (b) "Pardon Me, Pretty Baby" (Rose); (c) "K.F. 1" (arr. Marston).
 11.12: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—THURSDAY, JANUARY 14.

SILENT DAY.

Friday, January 15

1YA, AUCKLAND (875 KILOCYCLES)—FRIDAY, JANUARY 15.

- 3.0 : Selected recordings and literary selection.
 5.0 : Children's session, conducted by Nod and Aunt Jean.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 7.40: Sports talk.
 8.0 : Chimes. Record—Overture—Milan Symphony Orchestra, "Semiramide".
 8.18: Tenor—Mr. Leslie Belcher, (a) "I'll Sing Thee Songs of Araby" (Clay); (b) "Morning" (Speaks).
 8.19: Instrumental Trio—The Moore Sisters, (a) "Minuetto" (Borreson); (b) "La Cinquintaine" (Marie).
 8.27: Novelty Entertainment—Black and Bennetto Duo, "A Pierrot Phantasy".
 8.37: Novelty Instrumental—Meredith's Adelphians, Foxtrot—"Please Don't Talk About Me When I'm Gone" (Skept). Waltz—"One Night, Madame" (Brown). Foxtrot—"There Ought to be a Moonlight Saving Time" (Kahal-Richman).
 8.45: Lyric Soprano—Miss Patricia McLeod, (a) "Bonnie Sweet Bessie" (Anon.); (b) "An Island Shieling Song" (Kennedy-Fraser).
 8.51: Humour—Mr. Allan McElwain, "Some Humour."
 9.1 : Weather report and station notices.
 9.3 : Talk—Mr. A. B. Chappell, "A Topical Talk."
 9.18: Instrumental Trios—The Moore Sisters, (a) "Lion de Bal" (Gillet); (b) "A Flower Song" (Lange).
 9.24: Tenor—Mr. Leslie Belcher, (a) "Oft in the Stilly Night" (Irish); (b) "Who is Sylvia?" (Schubert).
 9.30: Novelty Instrumental—Meredith's Adelphians, Foxtrots—"Carry On" (O'Hagan); "Latest Hit" (O'Hagan); "It's the Girl" (Baer).
 9.37: Novelty Entertainment—Black and Bennetto, "A Pierrot Phantasy."
 9.47: Instrumental Trios—The Moore Sisters, (a) "Liebestraum" (Liszt); (b) "Bourree" (Bach).
 9.54: Lyric Soprano—Miss Patricia McLeod, (a) "On Cessnock Banks" (Trdl.); (b) "My Mother Bids Me Bind My Hair" (Haydn).
 9.58: Record—Regimental Band of H.M. Grenadier Guards, "Faithful and Bold" (Rust).
 10.1 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—FRIDAY, JANUARY 15.

- 10.0 : Chimes.
 11.12: Lecturette—"Fashions."
 12.0 : Lunch-hour music.
 2.0 : Selected recordings.
 2.30 and 4.30: Sporting results.
 5.0 : Children's hour, conducted by Uncle Jim.
 6.0 : Dinner music session.
 7.0 : News, reports and sporting results.
 7.40: Talk—C. S. Dempster, "Cricket and Reminiscences."
 8.0 : Chimes.
 8.1 : Orchestra (conducted by Signor A. P. Truda), Overture, "Raymond."
 8.8 : (a) Tenor, Mr. Chas. Williams, "My Dearest Queen" (Jones). (b) Lyric Quartet, "Uncle Moon" (Scott).
 8.17: Contralto—Miss Dorothy Spiller, (a) "Allah" (Willeby); (b) "Heart of Gold" (Manney).
 8.23: Orchestra—Selection, "Lola from Berlin" (Schwartz).
 8.33: Humour—Mr. Len Ashton, "The Musical Motorist" (Newman).
 8.38: Lyric Quartet—Tenor Solos, (a) "Bah-lock-Lythe" (Shaw); (b) "When I Was One and Twenty" (Gurney). Bass Solo—"The Gallant Salamander" (Barnard). Quartet—"Sailors' Chorus" (Parry).
 8.47: Orchestra, (a) Gavotte, "Stephanie" (Czibulka); (b) "Spanish Dance" (Mozzkowski).
 8.56: Contralto—Miss Dorothy Spiller, (a) "Betty's Garden" (Sanderson); (b) "What a Wonderful World it Would Be" (Loehr).
 9.2 : Weather forecast and station announcements.
 9.4 : Lyric Quartet—"Honey, I Want Yer Now."
 9.8 : Humour—Mr. Len Ashton, "Our Village Concert" (Spurr).
 9.15: Orchestra, (a) "Valse Song D'Automne" (Joyce); (b) "French Spirit" (Waldteufel).

- 9.30: Dance programme.
 11.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—FRIDAY, JANUARY 15.

- 3.0 : Gramophone recital.
 4.25: Sports results.
 5.0 : Children's hour.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 8.0 : Chimes. Record—Orchestra—Halle Orchestra, "Romeo and Juliet."
 8.8 : Baritone—Mr. Fred. C. Penfold, (a) "The Song of the Volga Boatmen" (Challapin-Kranaman); (b) "Spanish Gold."
 8.14: Orchestra—Salon Orchestra (Conductor, Mr. Francis Bate), Suite: From the South, (a) "A Legend"; (b) "Moorish Dance Song"; (c) "In the Tavern" (Nicode).
 8.25: Burlesque—The Chatterboxes, "Thought Reading" (own arrangement).
 8.33: English Concertina Duo—The Campbell Boys, Schottische: "Florence Medley" (arr. Campbell); "Scottish Airs" (arr. Middleton).
 8.40: Record—Don Cossacks Choir, "Dance Song."
 8.44: Cornet—Mr. N. G. Goffin, "The Mocking Bird" (Cox).
 8.51: Contralto—Mrs. Anita Ledsham, (a) "A Lake and a Fairy Boat" (Homer); (b) "The Sweetest Flower that Blows" (Hawley).
 8.57: Orchestra—Salon Orchestra, "Entr'acte et Valse Ballet Coppelia."
 9.3 : Weather report and station notices.
 9.5 : Record—Grenadier Guards Band, "The Larks' Festival" (Brewer).
 9.9 : Baritone—Mr. Fred Penfold, "The Bandolero" (Leslie Stuart).
 9.14: Record—Trio Cherniavsky, "Spanish Serenade" from Trio in B Flat Minor.
 9.18: Orchestra—Salon Orchestra, "Licheslieder—Waltzer" (Brahms).
 9.26: Humour in Song and Story—The Chatterboxes, "Introducing 'Girls Past and Present'" (Rutherford).
 9.38: English Concertina Duo—The Campbell Boys, (a) (Ocarino) Polka, "La Matische" (arr. Campbell); (b) Waltz, "Over the Waves."
 9.45: Record—Male Quartet, "Tell the Doctor" from "Funny Face."
 9.48: Cornet—Mr. N. G. Goffin, "When the Swallows Homeward Fly" (Abt).
 9.51: Contralto—Mrs. Anita Ledsham, (a) "Dawn in the Desert" (Boenke); (b) "Under the Blossoming Trees" (Bohm).
 9.57: Orchestra—Salon Orchestra, (a) "Serenade" (Widor); (b) "Morisca."
 10.6 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—FRIDAY, JANUARY 15.

- 3.0 : Chimes. Selected recordings.
 4.30: Sports results.
 5.0 : Children's hour, conducted by Big Brother Bill.
 6.0 : Dinner music session.
 7.0 : News session.
 8.0 : Chimes. McCaw's Saxophone Band, (a) March, "Golden Spur" (Weber); (b) March, "School Life" (Johnson).
 The Happy Four, (a) "Broom, Green Broom" (Reay); (b) "Gossip Joan" (Shaw).
 Entertainer—Mr. W. G. Carey, (a) "Just a Cottage Small" (Hanley); (b) "Aloha-oe" (Trdl.).
 Pettit's Orchestra, (a) "Ball Room Chatter" (Ocki Albi); (b) "Barcarolle" (Jansen).
 McCaw's Saxophone Band, (a) Tango, "Amorita" (Zamecnik); (b) Tango, "Harmony Rag" (Nichols).
 Ventriloquist—Mr. H. McL. Eggers, "Comedy Sketches."
 The Happy Four, (a) "Scots Wha Hae" (Patterson); (b) "Come Back to Erin" (Claribel).
 McCaw's Saxophone Band, (a) "Indian Trail" (Lamater); (b) "Powder Rag" (Birch); (c) "Beale Street Blues" (Handy).
 Pettit's Orchestra, (a) "Faust Ballet Music" (Gounod); (b) "Dernier D'Amour" (Gungl).
 Entertainer—Mr. W. G. Carey, "Old Time Songs" (arr. Carey).
 Soprano solos—(a) "Love in Spring Time" (Gounod); (b) "Bonnie Wee Thing" (Burns).
 The Happy Four—(a) "John Peel" (arr. Reay); (b) "Cuddle Moon."
 Pettit's Orchestra, (a) "Menuet Pompadour" (Wachs); (b) "Valse de la Reine" (Coleridge-Taylor).
 McCaw's Saxophone Band—"None So Rare" (from "Martha").
 God save the King.

Saturday, January 16

1YA, AUCKLAND (875 KILOCYCLES)—SATURDAY, JANUARY 16.

- 3.0 : Selected recordings, and literary selection.
 5.0 : Children's session, conducted by Cinderella.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 8.0 : Chimes. (During the evening there will be a relay of running description of broadsiding from Western Springs Stadium).
 Record—Palladium Orchestra, "The Grasshoppers' Dance" (Bucalosi).
 Contralto—Mrs. B. Jellard, (a) "My Ships" (Barrett); (b) "My Dear Soul" (Sanderson).
 Xylophone and marimba—Reno and Arta, Overture, "Caliph of Bagdad" (Boieldieu). Foxtrots, "Dream a Little Dream of Me" (Kahn); "Walkin' My Baby Back Home" (Turk).

Novelty entertainment—Ernest and Wendy, "Bits and Pieces."
 Bass-baritone—Mr. H. A. Barton, (a) "All Joy Be Thine" (Sanderson);
 (b) "Thy Sentinel Am I" (Watson).
 Record—Banjo, Eddie Peabody, "I'll Be Blue Thinking of You."
 Elocutionary—Mr. J. F. Montagu, dramatic, "Fagin" (Dickens);
 humorous, "Picking the Winner" (original).
 Novelty piano and vocal—Don Tasker and Johnnie Madden, "Synco-
 pated Piano and Song Numbers."
 Weather report and station notices.
 Xylophone and marimba—Reno and Arta, Dance, "Hungarian No. 5"
 (Brahms); Waltz, "Blue Danube" (Strauss); Foxtrot, "Would You
 Like to Take a Walk?" (Warren); "You'll Be Mine in Apple Bloss-
 som Time" (Tobias).
 Novelty entertainment—Ernest and Wendy, "Bits and Pieces."
 Bass-baritone—Mr. H. A. Barton, "The Admiral's Broom" (Beyan).
 Novelty piano and vocal—Don Tasker and Johnnie Madden, "Synco-
 pated Piano and Song Numbers."
 Contralto—Mrs. B. Jellard, (a) "When the Heart is Young" (Buck);
 (b) "The Dream Flower Tree" (Drummond).
 The day's sporting results.
 Programme of dance music.
 11.0 : God save the King.

2YA, WELLINGTON (720 KILOCYCLES)—SATURDAY, JANUARY 16.

12.0 : Chimes. Trotting results, Wellington Trotting Club's summer meet-
 ing, from Hutt Park.
 3.0 : Selected recordings.
 3.30 and 4.30 : Sporting results.
 5.0 : Children's hour, conducted by Uncle Jim.
 6.0 : Dinner music session.
 7.0 : News, reports and sporting results.
 8.0 : Chimes. Presentation of Excerpts from "The Cabaret Girl" (Kern).
 8.1 : Record—Dajos Bela Orchestra, "The Bird Catcher" (Zeller).
 8.8 : Duet—Mr. Ray Kemp (baritone), Mr. Will Hancock (tenor), "Mr.
 Gravvins and Mr. Gripps."
 Soprano—Miss Gretta Stark, "Dancing Time."
 8.14 : Salon Orchestra, under Mr. M. T. Dixon, "Potted Overtures."
 8.24 : Scotch humour—Mr. Doug Stark, "Soosie Maclean" (Lauder).
 8.30 : Record—Cinema Organ, Jesse Crawford, (a) "Siboney"; (b) "Maria,
 My Own."
 8.36 : Tenor—Mr. Will Hancock, "First Rose of Summer."
 Duet—Mr. and Mrs. Ray Kemp, "Journey's End."
 8.42 : Salon Orchestra, "A Doll's House" (Engelman).
 8.52 : Soprano—Miss Gretta Stark, "Shimmy With Me."
 8.56 : Record—Clapham and Dwyer, "Discourse on Golf," the Royal and
 Ancient Game.
 9.0 : Weather forecast and station announcements.
 9.2 : Talk—Major-General Merlin, "My Adventures with the Bolsheviks."
 9.17 : Salon Orchestra—Selection, "Chu Chin Chow" (Norton).
 9.27 : Tenor—Mr. Will Hancock, "At the Ball."
 Contralto—Mrs. Ray Kemp, "Kalua."
 Duet—Miss Gretta Stark (soprano), Mr. Will Hancock (tenor), "Look-
 ing All Over For You."
 9.36 : Record—"John Henry's Tigers" (Henry).
 9.40 : Humour—Mr. Doug Stark, "The Postie" (Gibson).
 9.45 : Cornet solo, with orchestral accompaniment, "The Lost Chord."
 9.53 : Baritone—Mr. Ray Kemp, "London, Dear Old London."
 Etude Quartet—Finale of "Cabaret Girl."
 9.59 : Salon Orchestra—Selection, "Molloy's Songs" (arr. Baynes).
 10.6 : Dance music.
 11.0 : Sporting summary.
 11.10 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SATURDAY, JANUARY 16.

3.0 : Gramophone recital.
 4.25 : Sports results.
 5.0 : Children's hour.
 6.0 : Dinner music session.
 7.0 : News and market reports.
 7.30 : Sports results.
 8.0 : Chimes. Relay of programme from Station 4YA, Dunedin.
 10.0 : Programme of dance music.
 11.0 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SATURDAY, JANUARY 16.

3.0 : Chimes. Selected gramophone recordings.
 4.30 : Sports results.
 5.0 : Children's hour, conducted by Big Brother Bill.
 6.0 : Dinner music session.
 7.0 : News session.
 8.0 : Chimes.
 Madam M. Reggiardo's Sextet—Selection: (a) "In a Persian Market"
 (Ketelbey); (b) "Romance of a Rose" (Engelmann).
 The Select Four—(a) "Marching Through Georgia" (Curwen); (b)
 "All Through the Night" (Bantock).
 The Radietts—In original sketches and patter.
 Xylophone—Mr. W. J. Sinton, Overture, "Poet and Peasant" (Suppe).
 The Ted Heaney Novelty Instrumental Quartet—Popular airs.

Madam M. Reggiardo's Sextet—"Sweet Dreams" (O'Connor); Violin
 Solo, "Meditation" (Massenet).
 Soprano Solo—"I Can Laugh, I Can Live" (Rubens).
 The Select Four—(a) "It was a Lover and His Lass" (Morley); (b)
 "McGregors' Gathering" (Moodie); (c) "How Sweet the Moon-
 light" (Calcott).
 The Radietts—In song, patter, and dance.
 Madam M. Reggiardo's Sextet—Selection, "Good News" (De Sylva).
 The Ted Heaney Novelty Instrumental Quartet—Further popular
 selections.
 Bass Solo—"Leader of the Town Brass Band" (Longstaff).
 Xylophone—Mr. W. J. Sinton, (a) "Island March" (arr. Pettit); (b)
 "Dancing Stars" (arr. Pettit).
 Madam M. Reggiardo's Sextet—(a) Waltz, "Nights of Gladness" (An-
 cliffe). (b) Two-Step, "Buffalo Bill's Farewell" (Sweeney).
 10.0 : Dance music.
 11.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SATURDAY, JANUARY 16.

7.30 to 8.0 : News and information.
 8.0 to 10.0 : Studio concert.

Sunday, January 17

1YA, AUCKLAND (875 KILOCYCLES)—SUNDAY, JANUARY 17.

3.0 : Selected recordings and literary selection.
 6.0 : Children's song service, conducted by Uncle Leo.
 7.0 : Relay of service from the Pitt Street Methodist Church. Preacher,
 Rev. W. Walker; Organist and Choirmaster, Professor W. A. Moor.
 8.30 : Relay of Municipal Band Concert from Albert Park. Conductor, Mr.
 George Buckley.

2YA, WELLINGTON (720 KILOCYCLES)—SUNDAY, JANUARY 17.

3.0 : Chimes. Selected recordings.
 6.0 : Children's evening song service, conducted by Uncle George and assisted
 by the children's choir from Newtown Church of Christ, under the
 leadership of Mr. Thomas.
 7.0 : Relay of evening service from Vivian Street Baptist Church. Preacher,
 Rev. L. J. Boulton-Smith; Organist and Choirmaster, Mr. Charles
 Collins.
 8.15 (approx.) : Studio concert by Wellington Municipal Tramways Band
 and 2YA artists.
 Band—March, "When the Guards are on Parade" (Nicholls). Hymn,
 "Fierce Raged the Tempest." Selection, "Maritana" (Wallace).
 Tenor—Mr. Arthur Clark, (a) "Skye Fisher's Song"; (b) "A Hebridean
 Riever's Song"; (c) "A Fairy's Love-Song."
 Contralto—Isabel Robertson, (a) "Nearer, My God, to Thee" (Carey);
 (b) "God's Garden" (Lambert).
 Band—(a) Characteristique "March of the Manikins" (Fletcher).
 (b) "Always the Same Sweet Pal" featuring Bandsman Brown
 (flexatone) and Bandsman Michell (xylophone).
 Baritone—Ernest Glading, (a) "Song of the Torrent" (Mallinson);
 (b) "Lord Randall" (arr. Cyril Scott).
 Weather report and station notices.
 Cello—George Ellwood, "National Dances"—(a) Hungarian—"Czar-
 das" (Fischer); (b) Polish—"Mazurka" (Popper); (c) Polish—
 "Alla Polacca" (Goltermann); (d) Spanish—"Taratelle" (Popper).
 Tenor—Mr. Arthur Clark, (a) "The Troutling of the Sacred Well";
 (b) "Heart o' Fire Love"; (c) "An Island Shelling Song."
 Band—(a) Tone Poem, "Finlandia" (Sibelius); (b) Celebrated Quar-
 tet from "Rigoletto" (Verdi).
 Contralto—Isabel Robertson, (a) "Remember" (Landon Ronald); (b)
 "Ships that Pass in the Night" (Wilkinson-Stevenson).
 Baritone—Mr. Ernest Glading, "Border Ballad" (Cowen).
 Band—Waltz, "Viennese Nights" (Strauss); "Prelude" (Rachmani-
 noff); March, "Stars and Stripes" (Sousa).
 10.0 : God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SUNDAY, JANUARY 17.

3.0 : Gramophone recital.
 4.25 : Sports results.
 5.30 : Children's song service by children of Anglican Sunday Schools.
 6.15 : Chimes.
 6.30 : Musical recordings.
 7.0 : Relay of evening service from St. Mary's Anglican Church, Merivale.
 Preacher, Rev. G. W. Dent. Deputy-organist, Dr. T. L. Crooke.
 8.15 : Orchestral—Studio Orchestra (Conductor, Mr. Harold Beck), "Zampa."
 8.28 : Contralto—Mrs. R. F. Jamieson, (a) "Ashoo at Her Lattice" (from
 "Jhelum River") (Woodforde-Finden); (b) "Along the Road of
 Dreams" (Brown).
 8.29 : Violin, "Cello and Piano—Miss Gladys Vincent, Mr. Francis Bate and
 Miss Doreen Daly, from Double Concerto in A Minor—"Allegro."
 8.37 : Record—De Reske Singers, "Tis Me, O Lord."
 8.40 : Violin—Miss Gladys Vincent, "2nd Movement 2nd Concerto in D Minor"
 8.44 : Baritone—Rex Harrison, (a) "God is Our Refuge" (Stephens); (b)
 "The Mother Ship" (Paul Edmunds); (c) "Slow, Horses, Slow"
 (Mallinson); (d), "A Song of Thanksgiving" (Allison).

- 8.59: Orchestral—Studio Orchestra, (a) "Egyptian Dance" (Ansell); (b) "Edelweiss Gavotte" (Trouble); (c) "Gnomes' March" (Ketelbey).
 9.7: Weather report and station notices.
 9.9: Violin, 'Cello and Piano—Miss Gladys Vincent, Mr. Francis Bate and Miss Doreen Daly, from Double Concerto in A Minor—(a) "Andante," (b) "Vivace non Troppo" (Brahms).
 9.19: Record—Choral—The Gresham Singers, "The Shepherdess."
 9.23: Orchestral—Studio Orchestra, "The Old Ballet" (Massenet).
 9.33: Contralto—Mrs. R. F. Jamieson, Songs from Memory Land—(a) "That Hour With You"; (b) "All Roads Lead Home" (Tait).
 9.39: 'Cello—Mr. Francis Bate, (a) "Ave Maria"; (b) "Gavotte No. 5."
 9.45: Record—Le Scala Chorus, "Va Pensiero Sull'Alti Dorale" (Verdi).
 9.53: Orchestral—Suit Orchestra, "Vienna Life" (Strauss).
 10.8: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SUNDAY, JANUARY 17.

- 8.0: Chimes. Selected recordings.
 8.30: Children's song service, conducted by Big Brother Bill.
 8.15: Instrumental recordings.
 8.30: Relay of evening service from the Hanover Street Baptist Church. Preacher, The Rev. Mr. Tuckwell. Choirmaster, Mr. H. P. Desmoulins.
 7.45: Instrumental recordings.
 8.15: Relay of concert programme from 3YA, Christchurch.
 10.0: God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, JANUARY 17.

- 7.30 to 8.15: Church relay.
 8.15 to 10.0: Studio concert.

Distortion

(Continued from page 17.)

test the rectifier and the connections associated with it.

In the case of the former, many factors may enter in. If used as a choke it is possible that there is a break-down actually in the speaker itself and this can usually be determined by a continuity test. The service manuals accompanying a.c. sets usually specify the resistance of the dynamic speaker field and this should be checked up with a ohmmeter which, by the way, every serviceman should possess. If this is in order and the magnetism is weak, then look to the radio set on the other side of the choke. An open circuit of any description in the previous portions of the set associated with the power supply would diminish the amount of current flowing through the circuit and so weaken the magnetism in the speaker. This entails a systematic search of the receiver which can best be done by testing the valves, which is the next step in any case in our search.

Testing the Valves.

FIRST test the power-valve, not only for operating voltages, but for balance. Power-valves must be balanced to within five or ten per cent. if quality is desired. By balancing is meant that the plate current taken by the two must be the same. From the power-valve go back right through the set testing all valves, not only for weakness in emission, but also for an internal short circuit. The latter, however, more usually causes hum.

Other Tests.

HAVING been assured that all the voltages and valves are correct, test chokes, transformers, etc., for partial short circuit, mainly in the secondaries of transformers. Particularly would a break-down in the secondary of a pushpull transformer cause the trouble. If a gramophone pickup is available, or if the set is one of the combination types, try the audio side, and if this is in order, as it probably is if all the tests have been made and a negative result obtained, the trouble is obviously in the radio section, and in all probability is due to the condensers being out of alignment. Particularly in super heterodynes must the stages be balanced up and generally checked over. An open circuit in one of the grid returns of the h.f. valves will also cause distortion, as would a break-down in the bias resistor on any valve. See that the volume control is working properly, for quite often the volume control introduces distortion through one of several channels, depending upon the nature of the trouble. Look over the set for anything that would cause loss of volume, for if the set is not as sensitive as it should be it is quite likely that the man is trying to force his set, causing overloading and so distortion.

Lastly, check the output transformer for correct ratio. If the set is a commercially made one it is most unlikely that this will be wrong, unless some defect has taken place in the transformer itself, which is unlikely.

Summary.

SUMMING up, we would expect to find the trouble in the speaker it-

self, or in the circuit directly associated with it. In the pushpull valves, or in their circuit, particularly in the grid returns and the resistances and condensers associated with them.

We have not taken into consideration the inadequacy of design or the faults in design, for it is presumed that a commercial A.C. set with a dynamic speaker is quite satisfactory when it is installed. With the battery set, however, the case is somewhat different, because some of them are quite old, and standards in those days were very much different from what they are now, and the radio serviceman would have to make some alterations in design in order to give complete satisfaction to his client.

Indian Broadcasters Close

Lack of Funds

OWING to a serious lack of funds the Indian Government has found it necessary to close down every broadcasting station throughout the country.

It was on July 23, 1927, that the Indian Broadcasting Company's first station—Bombay—was opened, to be followed shortly afterwards by the inauguration of the Calcutta station. It was hoped at the time that a third transmitter at Madras would be opened in due course. It was recognised by all who understood anything of Indian conditions that the problem which broadcasting in that country presented would be a difficult one to solve. The mixed communities, the relatively small number of Europeans and educated Indians, together with the vast number of illiterates, of an infinite variety of castes and creeds, made of broadcasting in India something entirely different from what it was in any other country in which that service had been introduced.

Although broadcasting was commenced with an English trained staff, and therefore, under the best auspices, the financial difficulty was an ever-present menace. The odds against ultimate success were tremendous, and a stern fight was put up. Not many months ago the whole broadcasting service was taken over by the Government, but it was soon evident to those in charge that the losses were too great to be borne indefinitely; hence the recent decision.

Ultra-shortwave Experiments

AN interesting experiment in testing the suitability for broadcasting purposes of "ultra-short waves" will be made shortly in conjunction with the Marconis by the B.B.C.'s engineers, and a special transmitter using waves in a 6.5 to 8 metre wave-band is being installed at Broadcasting House, the huge new headquarters to which the corporation's activities are gradually being transferred from Savoy Hill.

Clubs Affiliation

A REQUEST has come from the Tanagera Radio Club that efforts be made to affiliate all radio clubs throughout the Dominion.

"This step is long overdue, as we feel that, while individual clubs can have little voice in the control of radio broadcasting, we believe that if those clubs were united under one body, there would perhaps be a chance of the listeners as a whole having some say in the matter. Radio clubs and listeners' leagues are being formed in nearly every town of any size in New Zealand, and we would suggest that even an affiliation of such clubs under each district, with every district again affiliated under one governing body, 'The New Zealand Radio Club,' would be a step in the right direction. Such subdivision into districts would be to the benefit of the smaller local clubs, since a visit from a 'District Officer,' say, for the purposes of a lecture, would tend to hold the smaller clubs together."

Amateurs' Convention

AN error crept into the report of the Radio Convention where it was stated that the meeting recommended that other than transmitters should be admitted to membership. The position is that any person with a genuine interest in radio is eligible and the actual point in question was relative to the status of transmitting and non-transmitting members when dealing with matters which really affect certificated amateurs only. The whole issue was one which entailed considerable discussion, as there were certain aspects which necessitated careful consideration. Summarised, it amounts to this, that the incoming executive need to decide whether to advise that there be two classes of members and their status. The matter can be placed before all members so that they should be practically unanimous in their decision.

Radio For Algerian Schools

THE town council of Algiers, following the example of Paris, Lyons, and Bordeaux, has just voted a credit of 40,000 francs with the object of equipping twenty schools with broadcast receiving sets, for the purpose of the lessons (states a French contemporary). For instance, in the case of a lesson on some great musician, his principal works, played or sung by an artist, will be broadcast from the Algiers station and listened to by the pupils through the school's loud-speaker. Similarly, when the life and works of a famous poet or dramatist are dealt with, readings from the poems or plays concerned will be transmitted from the studio for the benefit of those following the lecture. The schools chosen for the initial experiment are those above the primary ones, and known as "écoles primaires supérieures," but, if successful, the scheme will later be applied to Algiers schools in general, and eventually extended to schools throughout the main towns of Algeria.

RADIO GOODS *What to Buy and Where*

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MULLARD VALVES All Radio Dealers.

bane and 4RK, Rockhampton, dance music from a cabaret was also being relayed. Then I sought the voice of a city dear to me, Melbourne, my native town, and the New Year was just breaking while 3LO relayed the joyous cathedral chimes of St. Paul's which were filling the air with tuneful reverberations. The boisterous cheering from the crowded streets came wafting through the ether. I left the peals of St. Paul's and switched back to 2FC. The cabaret band was playing "Auld Lang Syne," and the dancers were singing the old familiar song. While listening to 3LO I had switched momentarily to 4QG, Brisbane, and 4RK, Rockhampton, and had just caught the Brisbane Town Hall clock thundering out the midnight hour. The announcer then expressed his good wishes for the New Year to everyone. I now returned to the Queensland stations again and heard a cabaret band playing "Auld Lang Syne," while the dancers sang the song lustily. A male reciter then gave an appropriate rendition.

Back to 3LO, and once again I listened to the peals of St. Paul's until at 12.19 a.m., Melbourne time, they ceased. The bellringers had certainly performed magnificently.

There was still one Sydney "B" class station holding the air. It was 2UE, and I was in the nick of time to catch the station staff singing the final bars of "Auld Lang Syne."

On to 5CL, Adelaide, I pressed ahead of the New Year. A cabaret band was providing music for a merry gathering of dancers. The few remaining minutes of the old year soon fled, and as 1932 burst in the band struck up "Auld Lang Syne," which was heartily sung by the gathering. This rite having been completed, it was a case of "On with the dance," and the band continued to provide delightful music for the merry-makers.

Now came a long wait till the New Year touched Perth, 3300 miles to the westward and four hours behind. A concert programme was being broadcast from 6WF, Perth. My loudspeaker was now being subject to occasional crashes from distant lightning, these electrical discharges being plainly distinguishable from the ordinary static, which resembles more the ceaseless beating of surf on a sandy beach. Lightning, on the other hand, comes in a peculiar sharp and briefly sustained rasping sound. I have observed its effect when local displays of lightning have been visible, and, once noted, these discharges can always be

GOOD JOBS FOR RADIO EXPERTS!

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Following the Old Year into the West

(Continued from page 3.)

identified, whether local or distant. They now stood out prominently against a background of peppery static.

However, it was not sufficiently severe to necessitate more than a quarter reduction in the volume of reception. From 6WF came the strains of "Auld Lang Syne" and cheering, and I knew that the old year had finished its unhappy career so far as this quarter of the globe was concerned. I knew that far to the westward it was fleeing across the Indian Ocean, followed hotly by the New Year, to be joyously wel-



MARGHARITA ZELANDA.

The unusually gifted N.Z. soprano, who will broadcast from 4YA this week.

comed by the multitudes in distant lands. May it prove worthy of its welcome, I devoutly wished as I glanced at the clock—it was 4.15 a.m., New Year's morning (New Zealand time). I switched off the current from my set. Dawn was breaking. The gale whistled shrilly as it swept my aerial.

The New Year on Short-wave

AND now we shall ask Mr. F. W. Sellens to take up the running for with short waves it was possible to reach the American continent and follow the old year from New York to Honolulu,—22½ hours behind New Zealand.

Last year the coast-to-coast broadcast was heard from one station—

W2XAF—through the National Broadcasting Company.

This year the Schenectady station closed before the journey was completed, but by turning in W3XAL, it was possible to continue from where W2XAF left off.

At 4.45 p.m. here, 11.45 p.m. New Year's Eve, New York, W2XAF concluded a relay from the Hotel St. Regis, Fifth Avenue, New York, and went over to the Hotel New Yorker, where dance music was heard till 5 p.m. (midnight). They then changed over to the riverside, where hooters, sirens, etc., could be heard. After two minutes of this, a quick change was made to the crystal room of the De Witzler Hotel, Albany, where "Auld Lang Syne" was heard. Members of the orchestra wished their radio audience a happy New Year.

The first musical item after the greetings was "Shout for Happiness." Later another change was made, this time to the New Kenmore Hotel, Albany. At 5.58 p.m., W2XAF joined the National Network, and went over to Chicago, where there was still two minutes of the old year left, "Auld Lang Syne" was heard from Chicago at 6 p.m. (midnight there), followed by greetings. Music and greetings were relayed from four different places in Chicago. W2XAF then returned to their studio for further music, but closed before the next time zone was reached.

W3XAL was next tuned in, to hear the New Year celebrations at Denver. Midnight struck there at 7 p.m. our time. This was followed by "Adeste Fideles" on bells and peals. Dance music was heard from Denver till 7.45 p.m., when the next change was made to San Francisco, where the "Vagabonds" entertained with music at the Palace Hotel till 7.59 p.m., when the Hotel St. Francis was visited to see in the New Year again. This was done in the usual way, by making plenty of noise with hooters, etc.

Los Angeles was visited at 8.20 p.m., and then back to Washington.

The last stage on the westward journey was to Honolulu, where the New Year arrived at 10.30 p.m. our time. Reception by now, although still good volume, had become very noisy, so that details could not be followed so easily. Some native music was heard from Honolulu, and greetings sent to many countries, including Australia and New Zealand, concluding with "All radio listeners, wherever you may be."

The call "WJZ (Z pronounced zee) New York" was heard several times during the relays. WJZ is the key station of the National Broadcasting Company.

Tips and Jottings

IF an aerial is placed close to telephone wires it will be screened by these, especially if half a dozen or more wires pass near it.

IF you spill acid on the carpet or clothes, neutralise it immediately with ammonia, soda, or bicarbonate of soda liberally applied.

WHEN a pick-up is inserted in the grid circuit of a detector valve whistling and distortion is often caused by unnecessarily long leads.

SOME cone loudspeakers are inclined to over-emphasise the high notes, so a pentode valve should not be used with these unless it is provided with a pentode output transformer.

ONE way of making a valve "soft" is to employ far more plate voltage than the makers recommend for it.

AS atmospheric disturbances generally come from a definite direction it is sometimes possible to minimise them by using a frame aerial.

TO get the maximum amount of power from a crystal set both the aerial and crystal circuits should be tapped into the tuned circuit.

ALTHOUGH the joining of a .25-meg. grid leak across the secondary windings of an audio transformer is apt to cut down the strength a little, it is often very efficacious in stopping a slight tendency to instability.

A SURE way of shortening the life of a "B" battery is to place it in warm quarters like a cupboard backing on to a fireplace or a shelf with hot-water pipes underneath it.

Radio Serviceman's Course

The newly instituted Radio Serviceman's Examination calls for an exact knowledge of radio principles and a correct diagnosis of radio troubles.

Can you face the examiner without being afraid of the results?

Write for our special course now and be in time for the next examination. Complete syllabus coverage. Results assured.

JOHNSON'S WIRELESS AND RADIO SCHOOL,
St. George Buildings, 8-10 Brandon St., Wellington.

A DX CLOCK

is Essential for Short-wave Listening.

Printed on Heavy White Paper.

Posted in Cardboard Tube

Get yours now from your dealer, bookseller, or direct from the publishers, "Radio Record," Box 1032,

WHY?

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

BURGESS RADIO BATTERIES

Broadcasting Control

(Continued from page 6.)

which was recently appointed under the Broadcasting Act of last session.

"For the future the broadcast service will be publicly owned and controlled by the Broadcasting Board. It will be the aim of the board to give best possible service commensurate with their financial resources. As the task ahead of the new board is a big one, I would ask all listeners for their sympathetic co-operation. It would seem that unless some further new invention appears that the possibilities ahead of broadcasting, both from the educational and social point of view, are almost unlimited."

After Midnight

Board Control

IMEDIATELY after the chimes at midnight, when the Broadcasting Company's control ended, a statement was read by the announcers on behalf of the Radio Board. This message appears elsewhere.

A further statement was made by the Postmaster-General and read at 9 p.m. on January 1, 1932, at the four YA stations.

"At midnight last night the ownership of the four YA stations passed from the Radio Broadcasting Company to the Post and Telegraph Department in accordance with an agreement made some years ago. The Post and Telegraph Department is buying the stations from the company and when the transaction is completed will hand them over to the Board established under the Broadcasting Act of last year. From to-day the Broadcasting Board will be operating the stations, and, as provided by Act of Parliament, it will be the duty of the board to improve and extend the service until the whole of New Zealand is adequately covered with as good a broadcasting service as can be provided with the funds available.

"I desire to take this opportunity of expressing the Government's appreciation of the service given to the listeners by the company during the past six years. Prior to the formation of the Radio Broadcasting Company other groups had carried on broadcasting, but without much success, and it was not until the YA stations came into existence that a regular service was given. The Radio Broadcasting Company pioneered the service in New Zealand, and even if their service did not meet with the approval of all, at least it must be acknowledged that the service to-day is organised on a very satisfactory basis.

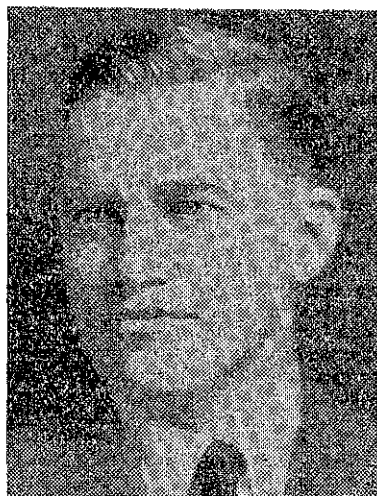
"In conclusion, I would ask for the new board the sympathetic co-operation of all listeners. A happy New Year to you all."

Seized of Its Responsibilities.

A FURTHER statement was made by the board:—"The board desires to inform listeners that it is fully seized of its responsibilities and that it will do its utmost to fulfil its functions in a manner satisfactory to licensees. It will endeavour to proceed along pro-

gressive lines with the idea of providing the best possible service and always with the idea of building up a broadcasting service that will be a credit to the Dominion. It will be appreciated that the board has not yet had an opportunity of investigating details and that it is not possible at this juncture to touch on policy matters. The board believes that the organisation taken over from the Radio Broadcasting Company is an efficient one; and it is not proposed to disturb it meanwhile.

"So far as programmes are concerned, while a few minor changes have been made, the board has concentrated



MR. A. R. HARRIS,

General Manager of the Radio Broadcasting Company, which went out of office at midnight on December 31.

on ensuring that a smooth service will be afforded throughout January. An advisory council to the board has yet to be appointed and, until the advice of that body is available, no noteworthy changes will be made.

"The members of the board extend to listeners their best wishes for 1932, and express the hope that, as time goes on, the board's efforts in the interests of broadcasting will meet with the approbation of licensees."

Staff and Plant

Change-over Arrangements

THE change over from company to board control has naturally raised the question in the minds of many listeners, "What will become of the staff and will the announcer be changed?" In all, 69 persons were employed by the Radio Broadcasting Company, and the board decided that none of these shall be thrown on to the labour market, for, with but a few exceptions, the whole staff has been taken over.

Arrangements have been made for the complete head office staff, with the exception of Mr. A. R. Harris, who was not an applicant for reappointment, Messrs. R. Lake and F. G. Walker, accountants, and Miss O. M. Taylor, typist, who have accepted other positions, to transfer to Wellington. They will be accommodated on the lower floor of 2YA, which is being altered. Owing to the noise made by the carpenters being picked up by the microphone, it is possible to work between 11 p.m. and 10 a.m. only, but the work

is proceeding satisfactorily, and by the time we go to press the alterations will be completed. The staff, which is already in Wellington, consists of Messrs. S. J. Hayden (secretary), J. M. Bingham (chief engineer), C. S. Booth (programme supervisor), J. I. Inkster (publicity officer), C. Atkinson (recorded music supervisor), G. Brocklehurst (accountant), E. Perreau (cashier), Miss D. Corrigan (music librarian), Misses I. E. Rowe, E. J. Bishop, T. R. Woodham, L. Lattimore, P. Spencer, and M. Hood (typists), Messrs. W. Huggins (operator), and H. Fletcher (assistant operator).

In future only station 3YA staff will be located in Christchurch, comprising the following:—Messrs. J. Mackenzie (station director), C. S. Bell (programme organiser), A. L. Curry (announcer), B. G. Henderson (operator), P. G. Hawes and G. F. Norris (relay operators), Miss Maynard Hall (children's organiser), and Miss D. M. Evans (typist).

The Broadcasting Bill provided for the taking over of the company's plant at valuation, or, failing an agreement, at a price fixed by arbitration. Arbitration has had to be resorted to, and an inspection of the plant and premises of the head office of the company was carried out by the Hon. Mr. Justice Blair last week. Mr. Justice Blair will inspect the premises at Dunedin when he has finished his work in Christchurch, but the final valuation will not be completed until early in this month.

And so we have started upon a new broadcasting era. It will be interesting to watch the developments. Slow they will be, but as the board has been charged to improve and extend the service we can hope for beneficial changes. But with the passing of the control from a private company to a corporate body, the responsibility of providing an acceptable service becomes one in which every listener, public body, and artist should co-operate. The board is only a trustee—the people are the owners.

Policy of the Board

NO definite statement has been issued regarding the policy of the board concerning any of the major questions of broadcasting control. The first meeting dealt with the essentials necessary to the change over, and so far no official statements have been made regarding the programme side, or for that matter any other side of broadcasting. The next meeting of the board will be held in three weeks, and it is hoped then that some of the major problems will receive attention and some policy points will be announced.

International Programmes

AS part of the policy of the board, the international programmes, which have been featured from each of the four YA stations, have been definitely withdrawn. In the meantime they are being replaced with high-class recordings.

HAVE you renewed your subscription to the—

"Radio Record and Home Journal."
Box 1032, Wellington.

The Year At 1YA

Many Plays

AS was the case in 1930, a feature of the broadcasts from 1YA was the comprehensive sports service, practically every variety of sports being covered. The announcing was in the capable hands of Mr. Gordon Hutter. Difficulty was again experienced in obtaining the co-operation of certain sports bodies for the relaying of sports, and it is hoped the new Broadcasting Board will be able to make satisfactory arrangements.

Many Interesting Relays.

THERE was a large number of interesting relays and rebroadcasts of outstanding events both in New Zealand and overseas. These included a relay from Hokitika of a talk by the trans-Tasman flyer, Mr. Guy Menzies, in January; rebroadcasts of addresses by his Holiness the Pope and Signor Marconi from the Vatican City in February; the opening by the Prince of Wales of the Empire Trade Exhibition in Buenos Aires, and an account of the Oxford-Cambridge boat race in March; relays of the Auckland Radio Exhibition in May; the ceremony of turning on the new turbines at the Auckland Power Board's station in June; broadcasts by the New Zealand cricketers via the London New Zealand radiophone service in August; and rebroadcasts of station WXAI, United States, in August and September, and a relay of the civic reception to "Wizard" Smith last month.

The entertainment side of the programme was well maintained. In spite of the copyright restrictions good progress was made with the development of radio drama. Some of the enjoyable plays presented during the year were a dramatised version of "Evangeline," "And So To Bed," "Treasure Island," "Joan of Arc," "School for Scandal," "The Price," "Destiny's Door," "The Black Mamba," "The White Owl," "The Doge of Venice," and "Kirk-o'-Field." The last six were written locally, being the work of Dr. G. de Clive Lowe.

Presentation of Plays.

IT is often said that lack of local talent is a deterrent to the improvement of broadcast programmes in New Zealand. The copyright restrictions on plays have served one good purpose; the excellent plays written locally prove conclusively that New Zealand, as well as having capable performers, has promising broadcast writers and producers. The development of this talent should be fostered by the board, and more inducement and incentive offered to the authors and artists. In Britain, the United States, Germany and Australia radio drama is a separate department in the programme organisation and each country has its own radio play producers.

The instrumental part of the station's activities was mainly in the hands of Mr. Harold Baxter's Salon Orchestra, which succeeded his Orchestral Octet, and the orchestra maintained a high standard of performance. In addition to the excellent relayed recitals by the Auckland Municipal

Band, performances have been given by the leading Auckland bands and club and ship orchestras. The Broadcasting Choir, under the conductorship of the station director, Mr. Len Barnes, was responsible for some splendid programmes. The variety of talks and lectures added to the good standard of the service. Excellent educational series of lectures were given by the Workers' Educational Association.

The programme from 1YA this month will be of a holiday nature and will not contain any revolutionary changes. Apart from the extended hours of transmission over the New Year, the regular schedule will be observed until further notice. One change of note will be the disappearance of the "international" programme on Tuesday evenings. The "international" programmes, which are electrical recordings of American broadcast items, have been presented weekly at 1YA since May last.

The Radiators.

A NEW combination of radio artists to be known as "The Radiators" will be on the air next month. The series of educational lectures conducted under the auspices of the Workers' Educational Association will be enlarged and talks will be given weekly by the association on Tuesday, Wednesday and Thursday evenings.

Appreciation and Farewell

A Tribute to Manager and Staff

AFTER the broadcast of the company's statement from 2YA on New Year's Eve Mr. Ball made a short speech eulogising the Broadcasting Co. and the staff.

BELIEVE me, I am grateful for this opportunity to voice, on behalf of the staff of 2YA, a few words of appreciation and farewell to the directors and general manager of the Radio Broadcasting Company. The hour is fast approaching when our official association with them will be terminated and our allegiance transferred to the new controlling authority. Before the severance takes place it is fitting that we should publicly acknowledge the happy relationship that has consistently prevailed between employers and employees.

We have been proud to play our part in the pioneering of the broadcasting service of this Dominion, and I do not hesitate to ask listeners to accept my assurance that our work for them has been a joy to ourselves, and that whatever sacrifice of time and personal con-

venience the exigencies of the service has necessitated on their behalf has been compensated by the fascinations of the service itself.

Mr. A. R. Harris.

PARTICULARLY do we wish to thank Mr. A. R. Harris for the courtesy and consideration he has extended to us all. His task has been heavy, his responsibility onerous, but we know that he has given of his best in fulfilment of the trust reposed in him. No one has been more zealous than he has for the preservation of the high standard of efficiency on which he has established the service.

A change in the system of control effected by Parliament as a matter of national policy based on the principle that a public service should be publicly owned and controlled requires that Mr. Harris and his co-directors of the Broadcasting Company shall relinquish control of the service. As from midnight to-night they will do so, I feel sure with the consciousness that they have done a great work for New

Zealand and that in the doing of it they have well earned the grateful appreciation of many thousands of listeners.

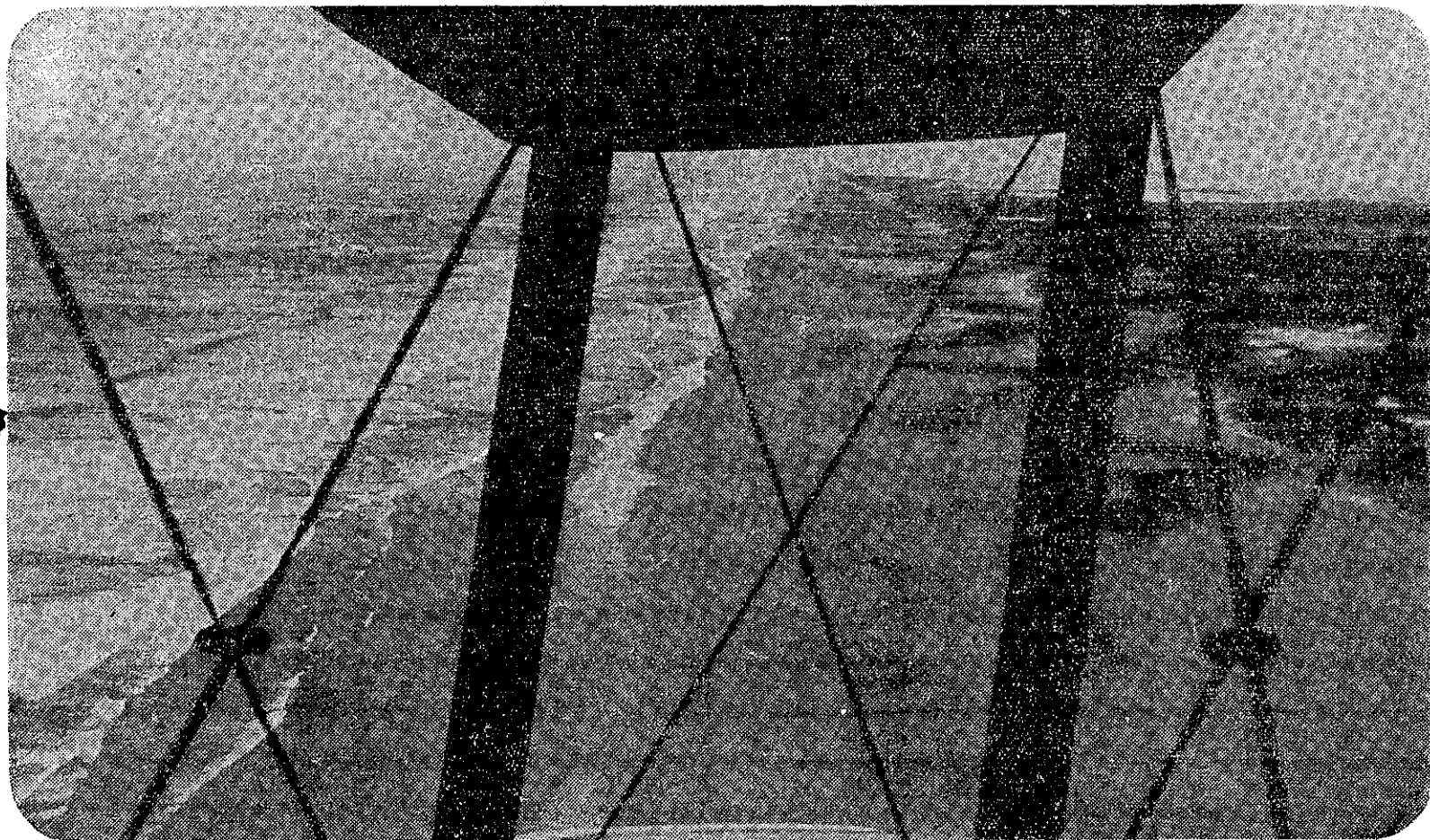
On behalf of the staff it is my pleasing privilege to express to them our best and kindest wishes for their welfare in the future. May I, too, voice the thanks of the staff of 2YA, to the ladies and gentlemen who are with us in the studios this evening.

Pleasant Relationship.

THAT the artists who have been regularly associated with the station, some of them since its inception, should have combined to present a complimentary concert to the directors was indeed a graceful and a happy thought. The compliment is indicative of the pleasant relationship that has existed between the artists and the executive officers of the service, a relationship which will assuredly continue under the new regime.

To the members of the honorary advisory committees and to the many honorary lecturers also I desire to express our warm appreciation of their helpful co-operation and of the many courtesies they have extended to the members of my staff and myself. Theirs has indeed been a labour of love—a truly practical demonstration of selfless community service.

And now it but remains for me to voice a cordial welcome to the board and to assure Mr. Vickery and his colleagues that they will have the loyal allegiance and zealous co-operation of the entire staff, to whom the promotion of the best interests of the service is at once a duty and a pleasure.



The Ninety Mile Beach, on which Wizard Smith hopes to break the world's land speed record. A broadcast will take place from the beach during the trials. —Photo courtesy, "Dominion."

Sponsored Programmes

An Appreciation and a Challenge



RECENTLY I had the pleasure of hearing one of the sponsored programme with which the Dublin station has been experimenting, but, having missed the opening announcement, I was unaware of its nature and sponsors. It was soon evident, however that the underlying motif was the sea—obviously a subject of wide appeal to British listeners, apart from the possible novelty of sponsored programmes as such. Orchestra, chorus, and vocalists combined to provide a well-rendered and pleasing variety of songs, rollicking sea chanties, selections from Gilbert and Sullivan, and other popular favourites, and although the announcer's American twang may have irritated some of us, the absence of any advertising matter was calculated to soften the heart of the stoutest antagonist to programmes of this kind. So far, so good. Nothing jarring—nothing irrelevant; just an hour's uninterrupted entertainment in which memories and traditions of the sea blended with a growing curiosity as to the name of the promoters of so excellent a programme.

Consequently it was with a feeling of pride and satisfaction that we heard the final announcement take the form of a short statement of facts concerning the successful activities of one of Britain's oldest and biggest industrial groups, whose name is a household word and whose achievements have gained them fame throughout the world. Such a fitting conclusion—neither too long nor too obtrusive—was a proud reminder of our world position in shipbuilding and aviation, and as long as sponsored programmes follow this model of good taste and elegant reserve they cannot fail to attract a large percentage of listeners.

But what of the future? Business is business, and none grasps this fact more thoroughly than those who purchase the right to call the tune. Any discrimination as to the advertiser's rights is next to impossible, and if one section of industry is permitted this form of advertising, then all sections must have the same right in proportion to their ability to pay. But all manufacturers and industries do not lend themselves to the same treatment as one which is inherently bound up with our national pride and inheritance.

America is a long way off, but there are doubtless many who listen to the more easily received French stations. How many listeners, however, understand the short announcements with which these otherwise good programmes are so freely interwoven? How many dance enthusiasts would care to hear between each item that indigestion and bad breath may be re-

From "Wireless World" we reprint this article, which was written because of certain disguised advertising that was broadcast in Ireland. The contributor, who wishes to remain anonymous, takes a generally broad view of the subject, but, whilst indicating that sponsored programmes in good taste and reserve can be a blessing, warns us that the ultimate effect of sponsored programmes must, in all probability, be disastrous, and that it is foolish to suppose it would be possible to stem the tide of commercialisation if once the principle of sponsored programmes were to be accepted.

lieved by chewing someone's aromatic india-rubber; or that a postcard to such and such a concern will bring you their profusely-illustrated catalogue of 220 pages, free, gratis, and for nothing? When that catalogue has been metaphorically rammed down your throat several times a night for months on end you may, in time, be reduced to the condition of the nervous man who waited up half the night because he didn't hear the lodger upstairs throw his other boot across the floor. Your interest in the programme diminishes in proportion as you become grotesquely fearful of what will turn up next. Unfortunately, there is no escape except to dispense with listening altogether, and in time you will come to hate that advertiser and everything associated with him, wireless included.

We in England are accustomed to having our news bulletins treated with respect. We tune in to the news because we want to hear the news. Moreover, those responsible for its preparation are careful to marshal their items according to a general plan that has unconsciously familiarised us with what to expect. In consequence, we may be reasonably sure of switching off at the appropriate moment without much fear of missing anything material. Contrast this with one of our Continental neighbours, and we find two voices alternating at the microphone. The first crisply informs us of some breathless event in the world of human achievement, followed by his colleague's oily admonition to your wife to wear a specific make of corset, or risk the loss of her beautiful figure and possibly the affection of her loved ones. No. 1 now takes over with a solitary item of sports news, whereupon the other butts in to the effect that no wife can be proud of her husband's pyjamas unless they come from the "Factory-to-consumer-direct-sales-

service" of the Pyjam Silk Corporation, whose name and address will be repeated to you as many times as human ingenuity can embody it in each and every announcement.

"But," you may say, "you cannot do this to us, because we get all the news we want from the papers, and, besides, we do not like dance music." Forgive me, but this is a mistake. When the payer calls the tune, he will have no scruples as to your aesthetic attitude toward the arts. Let me cite a case of a few weeks ago. The opera "I Pagliacci" was being given from a certain Continental studio, and Nedda had just concluded her love duet with Silvio, promising to meet him at midnight. Hard by, the treacherous Tonio was leading Canio to the secret meeting-place of the lovers, and one was all agog for the clash of music that was to herald the betrayal of a rival, the fruitless chase, and the climax of the "Motley." But no! At the crucial moment the opera was switched off and a crude announcement substituted by an advertiser whose monotonous repetitions are becoming a threat to one's peace of mind. And what, after all, is wireless entertainment but a convenient means of securing a temporary release from the bustle and business of the outside world? Once open the doors of broadcasting to the tender mercies of the modern advertiser and you not only sacrifice the sanctity of the home, but point the way to the prostitution of good taste and decency. Imagine the parallel in English. It is Sunday evening in the quiet seclusion of your drawing-room. From the loud-speaker comes the mellow rhythm of Gray's immortal words:

"Beneath those rugged elms, that
yew tree's shade,
Where heaves the turf in many a
mould'ring heap. . ."

Here a new voice fades in to tell you that the advent of Tomsons' Patent Tombstones have made the "mould'ring heap" a thing of the past, and an unsightly object of pity in any well-managed graveyard. Loving and discriminating listeners should write for the "T.P.T." catalogue illustrating scores of varieties of Tomsons' Patent Tombstones—the heritage of the dead. If you doubt these things, you have only to tune in to some of the Contin-

ental stations to learn the ugly truth of what is already an accomplished fact. Further instances might be cited ad nauseam, but may I conclude by saying that if you can associate the Hungarian Rhapsodies with crustless cheese, or the Unfinished Symphony with an alleged cure for perspiring feet, then by all means have your sponsored programmes—you will get your fill; but, take heed, a real danger is upon us.

Broadcasting in N.Z. History Sketched

PRIOR to the formation of the Broadcasting Company, several stations were in existence in different parts of the country. Station SAC, operated by Mr. J. I. Smail, of Christchurch, was the first commercial station to be on the air in the Dominion. The stations broadcasting at that time were mainly operated by amateurs and were not of sufficient power to give an efficient service to the Dominion. What was needed was a big organisation with capital to erect up-to-date stations in the four main centres.

The Government of the day realised that for the common good of the country a unified system of control was necessary and as the outcome of its investigations, it decided that private enterprise, governed by regulations, would be best suited to the Dominion's needs. This meant that the risks of establishing a new business would fall on private citizens.

So, in 1925, at the request of the then Prime Minister, the Rt. Hon. J. G. Coates, the Radio Broadcasting Company of New Zealand, Ltd., was formed by Messrs. W. Goodfellow, A. R. Harris, and Wm. McKellar. Mr. Harris had had technical experience in the United States, having been for a time a research worker in the laboratories of Thomas A. Edison, and he took charge of the business as general manager.

The company was under contract to the Government to establish four 500 watt stations. The first of these, 1YA, was established in Auckland. Next came 3YA, Christchurch. At the request of the Government, the company agreed to increase the power of 2YA at Wellington to 5000 watts, making it, in actual practice, the most powerful station in the Dominion and Australia. Following on the erection of 2YA came 4YA at Dunedin.

The company had many difficulties to surmount in building up the service. New Zealand, from a topographical point of view, is an awkward country to provide with an efficient service, but in the six years that it has been controlling the system the company has steadily increased the transmitting hours, improved the quality of transmission, and, by its efforts, has increased the number of listeners from less than 3000 to a total of 71,000.

During the last session of Parliament it was decided to transfer the undertaking, which had been put on a profitable basis by the company after five years of losses, to a board.

"The Valve With the

Life-like Tone."

TRAIL BLAZER OF



THE INDUSTRY

Specially selected by
Manufacturers because

America's Leading Set
of their reliability.

OBTAINABLE AT ALL GOOD RADIO DEALERS.

Short-wave News

FPC, Paris.

THE French Ministère de l'Intérieur (Home Office), under the call letters FPC (France Police Central), has installed a 2 k.w. telegraphy and telephony station in the capital. It is destined to work on long and short waves. The schedule of the short-wave transmissions are as follow (N.Z. Summer time): At 4 a.m. and 10 p.m. on 44.75 metres; at 4.15 a.m. and 10.15 p.m., on 59 metres; at 4.30 a.m. and 10.30 p.m., on 84 metres.

You will not hear very much more than the call and a few announcements for the present, as the station is still in an experimental stage.

B.B.C. Experimental Transmissions.

ACCORDING to a recent London cable, the B.B.C. will commence experimental transmissions on January 4 in preparation for the permanent Empire broadcasts.

As G5SW has always been an experimental transmitter (with a regular schedule for over four years) it is expected that the experimental transmissions referred to in the cable will be on different wavelengths to determine which are best for reception in the various parts of the British Empire.

Log for Week Ending January 2

RECEPTION during the past week was similar to the week before, so I will not detail all the stations.

On Tuesday and Wednesday evenings a Japanese station on about 30.4 metres came in like a local with native music and talk—plenty of the latter. On Wednesday, talk was on from 9.30 p.m. till 10.30 p.m., and still going strong. No sign of a call could be heard, but it was probably JIAA, as they have been experimenting on different wavelengths.

W1XAZ was heard on Wednesday morning at R5-6 from 7.45 to 8 a.m. The next day they were R2 at the same time. It is unusual to hear this station at this time.

G5SW was tried at 12.30 a.m. Friday morning (Thursday midnight). They were R7 with the usual rapid fade, but not quite so bad as sometimes. G5SW now commence their

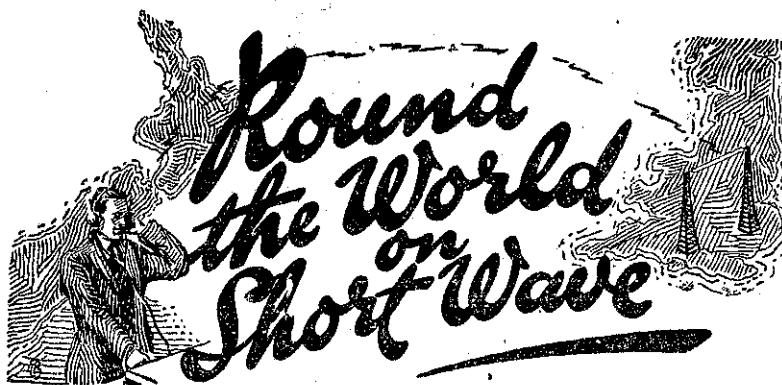
PREPARE FOR THE ADVANCE IN BROADCASTING AND RECEPTION OF INTERNATIONAL PROGRAMMES

Consult MACKS for all
Alterations, Improvements or
Repairs needed to

ALL MAKES OF SETS.

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77 KENT TERRACE,
WELLINGTON.
Tel. 28-779.



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

evening session at 6.45 p.m. (6.45 a.m. here), but reception is very poor.

W2XAF reached readable volume earlier than usual on Friday, being R7-8 by 2.45 p.m., but did not increase to any extent till near 4 p.m., when they were up to R9. This volume remained steady for about an hour, dropping to R8-9 by 6.30 p.m.

W3XAL, on the same day, January 1, was only R3 at 5.30 p.m., reaching R8-9 by 6.45 p.m., remaining at this

in these times of depression we have not too much "hoot."

Wellington members are going to be asked to think over the idea of a radio shack where they can foregather and discuss the mutual subject. A similar movement will eventually follow in Auckland. This would be of great benefit to country members. One idea that could be carried out would be an exhibition of home-made sets.

A Dixer's Map of Europe

A DXERS' map of Europe is now obtainable from the offices of the "Radio Record." The map, which is printed on linen, folds up into a small compass (about the size of the "Radio Guide") and is fitted like a book between two stout paper covers. The map shows the location of all the broadcasting stations in Europe, and is splendidly compiled. It is issued by the B.B.C.

Only a limited number of these are available, and may be had for 4/- (post free).

Supplies of "World Radio Identification Panels" have been exhausted, but we are writing for more, and orders will be filled in rotation on their arrival. Price 2/-.

Address correspondence to "Radio Record," P.O. Box 1032, Wellington.

volume till they went off the air soon after 10.30 p.m. Generally, reception from W3XAL was quite good, but the noise level was very high at times.

N.Z. Shortwave Club

Secretary's Letter

THERE will be a meeting of short-wave enthusiasts at 7.30 p.m. on Thursday, January 28, in Nimmo's Concert Hall, Willis Street, entrance in Bond Street. A general invitation is issued to all interested to attend, as this lecture will probably be a follow-up on the interesting talk on tuning delivered by Mr. McCarthy some months ago.

From indications I venture to make a prediction that short-wave will sweep New Zealand during 1932. This will be materially helped by the Empire scheme.

Just why I do not know, but many cards I received depicted owls, though

The laugh is rather against myself. I had a letter from what I thought was a boy. This was helped by another member who continually referred to his friend as young Bill, so my letters were written in appropriate strain. However, someone knocked at the door, and I found Bill to be a six-footer, so I now have to get someone else to judge the handwriting.

When writing for information, or when reporting to a station, it is better to pin the stamps for reply on to the letter, as

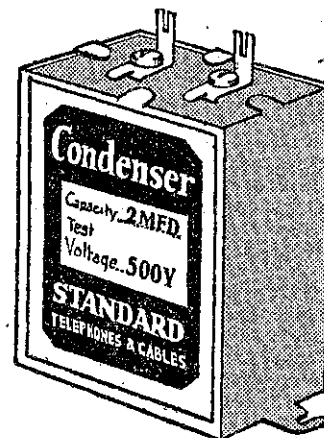
DX'ers! Write for that verification on D.X. notepaper and avoid missing out important details. Takes a quarter of the time to write out, too. Obtainable from P.O. Box 1032, Wellington, in two-dozen lots (minimum order), price 1/6, or six dozen for 4/-, post free. Special paper for club members.

stamped envelopes are not large enough to hold the cards or circulars. As a reminder, country members need only send 3/- for their sub., which is reduced for the remainder of the year.

Club address: A. B. McDonagh, secretary New Zealand Short-wave Club, 274 Cuba Street, Wellington. Pleased to hear from overseas listeners. Yours fraternally.—Mac.

THE MOST PRACTICAL GUIDE

to Home Set-Builders



When building a home-set and wanting a Condenser, the builder is naturally pulled this way and that way by the claims made on behalf of the various makes of Condensers. In the circumstances, the best thing to do is to be guided by the choice of thousands of other Radio builders. Obviously, there can be no greater or more practical recommendation in this regard than the Condenser—Standard—which has so entirely satisfied such a large number of Radio enthusiasts. Standard Condensers have given such universal satisfaction because they are so sturdily constructed, so free from weaknesses of any kind. Amongst other outstanding advantages, the "Standard" possesses an almost perfect di-electric, by which electrical loss is reduced to an absolute minimum. Obtainable from all Radio Dealers.

Standard

Telephones and Cables (Asia) Limited.

Head Office: G.P.O. Box 638, Wellington.

Auckland: G.P.O. Box 1897.

South Island: L. B. SCOTT, LTD., Christchurch.

Variety.

WHEN the outside world is a little sad and drooping, when evenings are long instinctively, we turn to our home for comfort and rest; then is the time of year when it is good—yes, even if we are rather hard up—to spend a little money upon the home—helping it, as it were, to create that atmosphere which we desire it to possess.

It is curious how just one article, chosen judiciously, can simply transform a room. An additional bowl of fruit or flowers, a new picture or cushion for the lounge, or some gaily coloured china or table mats for the dining-room.

For instance, I was feeling discontented with my sitting-room. By day it was warm and comfortable, but by night the colour scheme seemed to become a little dull and lifeless. I purchased a small reading-lamp, with a china bowl and deep peach-coloured shade, and placed it on a table of sufficient height to enable the rays to spread themselves well around the room.

My sitting-room now looks several degrees warmer and altogether more cheerful and inviting, and at the same time there is no crude glare to hurt the eyes.

So Feminine.

WE can welcome the return of a loose and lovely garment that the busy woman of the day can slip into on a winter's evening, when activities are over, or, in more wealthy social circles, can don after a strenuous day's walking. The tea-gown of velvet or brocade can be simply fashioned or of elaborate picture type. The best models should aim at a certain grace and simplicity as well as comfort, or the tea-gown loses the original idea of being a distinctly separate garment from a smart afternoon or evening frock. The picturesque idea is good, and colour is all-important. These apparently luxurious garments are by no means expensive to-day, when all the newest velvets and brochees are to be procured at most reasonable sums. Rose red, Madonna blue, wines, and the green range are all good shades for the velvet tea-gown.

The Topping "Topper."

HAVING more or less got away with the bowler hats, Paris, before August was out, attempted to force the "top hat," which was a sort of compromise between the ugly hard brim and square crown of the Robespierre shape of long ago and the modern top-hat. Even in beaver, this shape was looked upon as a joke. Even if it were possible with clusters of curls at the back, it could not be fashionable this season, for women are returning to the "bob" and "shingle" in such numbers that there could be no hope for the "topper"—England would have none of it!

Those Pearly Tints.

NIGHTLY applications of equal parts of grapefruit juice and glycerine will be found invaluable for keeping the hands smooth and white during the sports season. And for the complexion use an occasional grapefruit and egg pack. Beat the white of an egg to a light foam, add a teaspoonful of grapefruit juice, and beat again. Bathe the face and throat in warm water, dry quickly, and, while the skin is soft and moist, apply the mixture



evenly. Leave it on for half an hour, and rinse off with a quart of tepid water mixed with six drops of simple tincture of benzoin.

Fashion Flickers.

FEATHER capes are an important extra with the dinner frock. Sometimes a white and silver dress will have a shoulder cape of white ostrich. Smartest of all are the coloured coq feathers, made elbow-length like the coachman's fur cape of the 'eighties. These bright green and deep shot-purple capes look well over plain white satin frocks.

Keep the Cuttings.

"THE true Eugenie hat demands dressed hair," said a millinery expert at Olympia. "Hairdressers may say that short hair is remaining in fashion, but women cannot wear these new hats successfully on short hair. Perhaps there will be a return to fashion of hair-switches among those short-haired women who had the foresight to keep their cuttings."

The Economy Note.

IF you have two pans boiling on adjacent burners put a kettle of water between them, touching each. The

water will gradually be heated in this way and can be boiled in less time when it is required to fill up pans or for washing up and so on. Stand a kettle or a pan that may be required later near irons that are being heated in the same way. Many pans can be kept simmering over one flame if a piece of sheet-iron is placed over it.

Revoluting!

FROM an account in the "London Magazine" for August, 1768, we learn how little many ladies of that time cared about the cleanliness of their hair. It says: "I went the other morning to make a visit to an elderly aunt of mine, when I found her pulling off her cap and tendering her head to the ingenious Mr. Gilchrist, who has lately obliged the public with a most excellent essay on hair. He asked her how long it was since her head had been opened or repaired. She answered, 'Not above nine weeks.' To which he replied that that was as long as a head could well go in summer, and that, therefore, it was proper to deliver it now, for he confessed that it began to be a little hazarde." Then follows a repellent description of the opening of the head.

Surmounting these immense coiffeurs were caps or feathers. The caps rose high above the head and spread out at the sides into a pile of ribands and ornaments, while the feathers added still greater height to the whole.

The Ethereal Look.

THE Edwardians used white powder in order to obtain a marble white complexion, but this is a mistake, as dead white powder gives a mauve tinge to the face. One beauty specialist of the day will not allow any of her clients to buy white powder except for make-up of hands, shoulders, and arms, when a pearly effect is obtained with a dead white liquid powder.

For brunettes this specialist achieves an ethereal look with a primrose yellow powder, sometimes called almond yellow, combined with a lacquer red or dark geranium red lipstick. Rouge is going to be much less used for the pale complexion relies for its touch of colour only upon glowing lips. A liquid powder compiled from the prescription of a Cuban chemist, and used by South American women, gives exactly the matt cold texture of a gardenia to the skin. With this "ethereal" make-up the eyes must be treated to a very careful misty blue eye pencil, used sparingly, and applied to the eyelashes with minute palette sticks.

Household Hints

UMBRELLAS that are badly stained with mud may be cleaned by sponging with ordinary vinegar. Never use water for this purpose.

WOOLLEN knitted garments are less likely to shrink when washed if the wool, in skeins, lies for half an hour in very hot soapy water. Rinse well and mangle in a towel. Dry in the open air.

WINDOWS, mirrors, and picture-glass will be extra brilliant if they are cleaned with a cloth moistened with metal polish. Leave the glass until the polish is dry and then rub up with a chamouis or soft cloth.

Our Cookery Corner

Witches' Fluff.

BOIL half the contents of a tin of pineapple, one cupful sugar, and one cupful water together until it is syrupy and threads from the spoon. Colour bright green, with green colouring, and add twelve cut up marshmallows and stir until dissolved. Add one drop oil of peppermint and two teaspoonfuls lemon juice, and pour slowly over one stiffly-beaten egg white. Beat until thick and cold.

Crabflakes and Tomato.

FORCE half a large can of tomatoes, or their equivalent in fresh fruit, through a sieve. Add one teaspoonful salt, half teaspoonful sugar, and two drops of Worcestershire sauce, and heat to boiling. Soften one tablespoonful gelatine in two tablespoonfuls cold water, then dissolve in the hot tomato juice. Cool, and when just beginning to stiffen, add 6oz of crab meat (either fresh or canned will do equally well), two tablespoonfuls lemon juice and one tablespoonful of chopped sweet pickle. Pour into a jelly mould; when stiff and very cold, unmould on to lettuce beds and garnish with mayonnaise.

Cherry Puddings.

CUT into pieces the size of a dice 4oz of sandwich bread and place in a bowl. Add two gills of lukewarm milk, mix well, then press well and suppress the milk. Replace the bread in the same bowl with 1oz good butter and saltspoon of salt, three eggs, 3oz candied cherries cut in quarters, one teaspoonful vanilla essence and four tablespoonfuls of cream. Mix all well together with a wooden spoon for five minutes. Lightly butter six individual pudding moulds, sprinkle with a little flour, and then fill with the preparation. Place them in a pastry tin with hot water up to half their height, and set in a moderate oven for twenty minutes. Remove and unmould on a hot dish.

A Bacon Savoury.

RASHERS of bacon, fried onion, curry powder, raisins, tomato ketchup and toast. Spread out the required number of rashers and trim them neatly. On each lay half teaspoonful of chopped and fried onion, mixed with a little curry powder, and about half a dozen raisins which have been plumped in hot water. Roll up, place on skewers, and cook a few minutes in a hot oven. Set on fingers of toast or fried bread, which have been coated with tomato ketchup. Serve very hot garnished with parsley.

Pineapple Butterscotch Parfait.

MELT three tablespoonfuls of butter and one and a half cupful of brown sugar, letting it simmer but not burn. Add three-quarters of a cupful of syrup and let boil to a slightly thick stage. Pour over three slightly-beaten egg yolks and cook gently until thickened. Cool, then fold in three stiffly-beaten egg whites, a cupful and a half of cream which has been whipped, and a cupful and a half of crushed pineapple. Pack in freezer for several hours.

Jellied Asparagus Salad.

SOFTEN one tablespoonful of gelatine in a quarter teacupful of cold water. To the juice from one can of asparagus tips add sufficient water to make one teacupful liquid. Add bay leaf and one sprig of celery tops and boil for five minutes. Strain, pour the liquid over the gelatine and stir until the gelatine is thoroughly dissolved. Add 1½ green pepper, finely diced, one boiled carrot, diced and quarter teaspoonful salt. Arrange asparagus tips, tip end down, around the edge of the mould. When the gelatine mixture begins to stiffen, pour in the centre and chill. Serve, unmoulded, on lettuce with mayonnaise. This serves six.

... With ... BOOK and VERSE

By "John O'Dreams"

Jottings

STARTING with "Tom Brown," we have gone on down the years, reading innumerable school stories, hoping to discover another masterpiece. "Early Closing," by D. Wynne Wilson, is perhaps not that masterpiece, but is a delightfully told tale of the ways and works of the inhabitants of a large English public school.

Once upon a time, the book tells us, there was a house-master called William, who feared God, mistrusted the Government, and moulded other men's sons to the best of his ability. And this house-master looms large in the story, for he is comprehending of spirit, witty of tongue, and sometimes very wise. The tale also concerns Nigel and Johnny Bentley, and their sister Lavender, who rather wistfully was aware she was no more to them than "a facetious creature who met them and saw them off, wrote exaggerated accounts of trivial home doings, and took an annoying interest in their affairs."

Also skilfully portrayed are diverse interests and personalities of the microcosm, and lesser tragedies and triumphs of masters and boys, with hovering femininity encompassing them around and about. There is the real authentic note in this vivacious chronicle of schoolboy life, with its audacities, deceptions, jealously preserved code, and gimlet-eyed perception of what is done and what isn't. From study to pantry each group of characters is sketched with the incisiveness of etched portraiture, including denizens of the servants' hall, ruled by Mrs. Turvey, who was "a throw-back to pre-Renaissance times, with a sackcloth-and-ashes strain in her mutterings and vale-of-tears outlook: her intelligence has petered out, but her cooking remained."

The book is a record of wild and shining and happy days, when plots were hatched, rough justice dispensed, and an occasional dream cherished in secret spiritual recess. Over all seems to blow a strong wind, clean, invigorating and gay—"Shelley's wind, deep and reverberating"—and a sense of spaciousness, the beauty beyond. "He looked up through the leaves, and his confidence was not in himself, but a shining certainty of the renaissance of life. Shedding his personality, he was part of life present and future, all lit with an eternal loveliness. . . . In that moment there was no time, and sin and death were irrelevant."

A very good story, with recurring patches of quite beautiful writing.

THE Arnold Bennet Omnibus Book will be sought after by those who like to have their authors under one cover, so to speak. It runs to over a thousand pages, includes "Accident,"

Prize Poem Competition

THE prize of half a guinea in the current competition is awarded to K.M.N. for "Farewell, My Friend." The winning contribution falls into the category of love poetry, of which, for some obscure reason, our New Zealand writers appear somewhat shy. Two poems, commemorative of the Holy season, are commended. Both of these unfortunately arrived too late for consideration for the Christmas issue, as "copy" for that number had to be in earlier than usual. "The Star of Peace," by "Merrie," is arresting by reason of its devotional spirit and apt phraseology. "Noel," by M.F.P., is a very lovely poem, in which skill in verse form and another-world beauty are apparent.

R.M.B. (Riccarton): Your work shows certain facility, and is pleasant verse of the obvious variety. In reply to your query, we are afraid there is little reward, beyond honour and glory (and not much of that) for aspiring and accomplished poets of this Dominion.

"To Our Empire": An ambitious effort, unfortunately falling short of the height possible to scale with so gallant an inspiration.

"Marianne" sends a ditty about may and hay, dawn and lawn, fair and dare. Alas, those rhymes!

"White Monkey": Your work, with its touch of the macabre, has a touch of originality, but lacks poetic vision.

"Fair Play": We quite agree.

"Peace on Earth": We think Tennyson said something like it.

Farewell, my friend

Not very far away is that dark hour
When you will turn and go from me.
Soon, ah very soon, my speeding feet,
Unthinkingly and swift, will run to meet
Your care-free call, and you will slowly bend
And kiss my hands and say "Farewell, my friend."
And there will be an end of love for me.
Do you remember our first fleeting day?
Why do I ask, who know you have forgot?
We watched the fairy flecks of blue that shone
Between the trees that gave their benison
Of shade—the blue no deeper than your eyes.
A lark was singing in that Paradise.
Oh, I remember, though you have forgot!
The parting hour will come; I cannot stay
Its course, nor would I, for it has to be.
It will be hard, so bitter hard to bear.
And yet I will be brave, if God will bring
To me the answering of one little prayer;
That at the last, grave, sorrowing good-bye
Dark mists will hide the blueness of the sky,
And let there be not any birds to sing.
O grant the gentle rain may veil your eyes.
My friend, lest as you turn to go, you see
The tears that would betray the heart of me.

—K.M.N.

"Elsie and the Child," "Riccyman Steps," and that great study of a modern politician, his domesticity and great amour, "Lord Raingo." All the tales are in the brilliant author's most characteristic vein, and many will be glad to renew acquaintance with his inimitable creations.

ANOTHER "thriller" and a good one. "The Eye of Nemesis" is in Mrs. Philip Champion de Crespigny's best manner. Mr. Selwyn is murdered in his office, and no one knows who did it, but strong suspicion falls upon his private secretary, a nice young man, who obstinately refuses to disclose his doings on the fatal date. A nimble-witted girl, the young man's fiancée, takes a hand in the elucidation of the mystery, and with the help of an inspector in whom one thoroughly believes, and the film of a national pageant, light is thrown on dark doings and, as ever, all ends well.

MR. GERALD GOULD'S very delightful and amusing style is exemplified in "All About Women," a somewhat misleading title, as there is much diverse matter in this entertaining volume. Mr. Gould apparently knows all there is to be known concerning the enigma which once was known as the weaker sex, and sets down the fruits of his observation and intuition with a nice sense of the dignity and charm of his perennially interesting topic. But he also discourses on how to write fiction, and there are pen-and-ink portraits which are arrestingly true to type. His essays are discursive and catholic in scope, and to those who know how fascinating a companion Mr. Gould can be, the book does not need a recommendation.

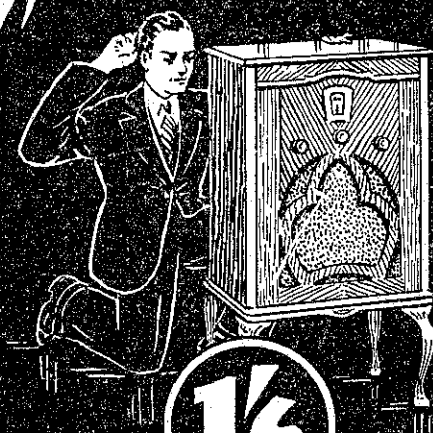
IN "Puppets in Yorkshire," Mr. Walter Wilkinson records a tour of the broad country of the title with his puppet show. His book covers a wide scope, ranging, in humorous description and adventure, from Gainsborough over the Lincolnshire border, and by way of Marston Moor into the Pennine country and Wharfedale. With his puppet show he did good business, and sampled Yorkshire in the most comprehensive and original way. The story of his wanderings is set down for all and sundry to enjoy, and a delightful chronicle it is.

"THE World Against Mary" has been translated from the German of J. M. Frank by Dr. Otto Frommer. This novel caused a great deal of interest in Germany and on the Continent generally, and repays translation. It is the story, told with power and pathos, of a girl, essentially noble-minded, whom fate dedicates to sorrow and suffering. The tale is told with a dramatic inevitability, and it is felt that, given the circumstances, no other ending is possible. The gods decreed that it should be so, and Mary is the victim of their grim jest.

COMPREHENSIVE—INEXPENSIVE

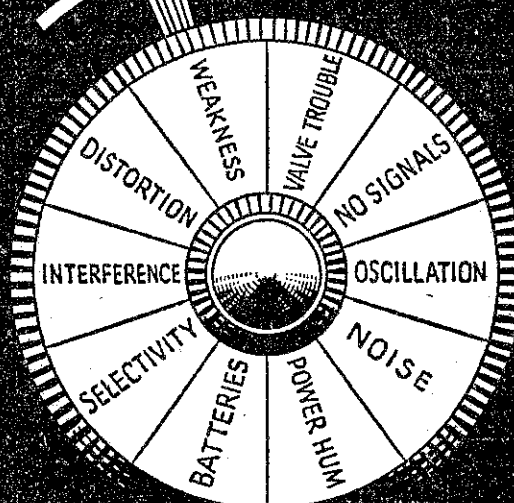
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