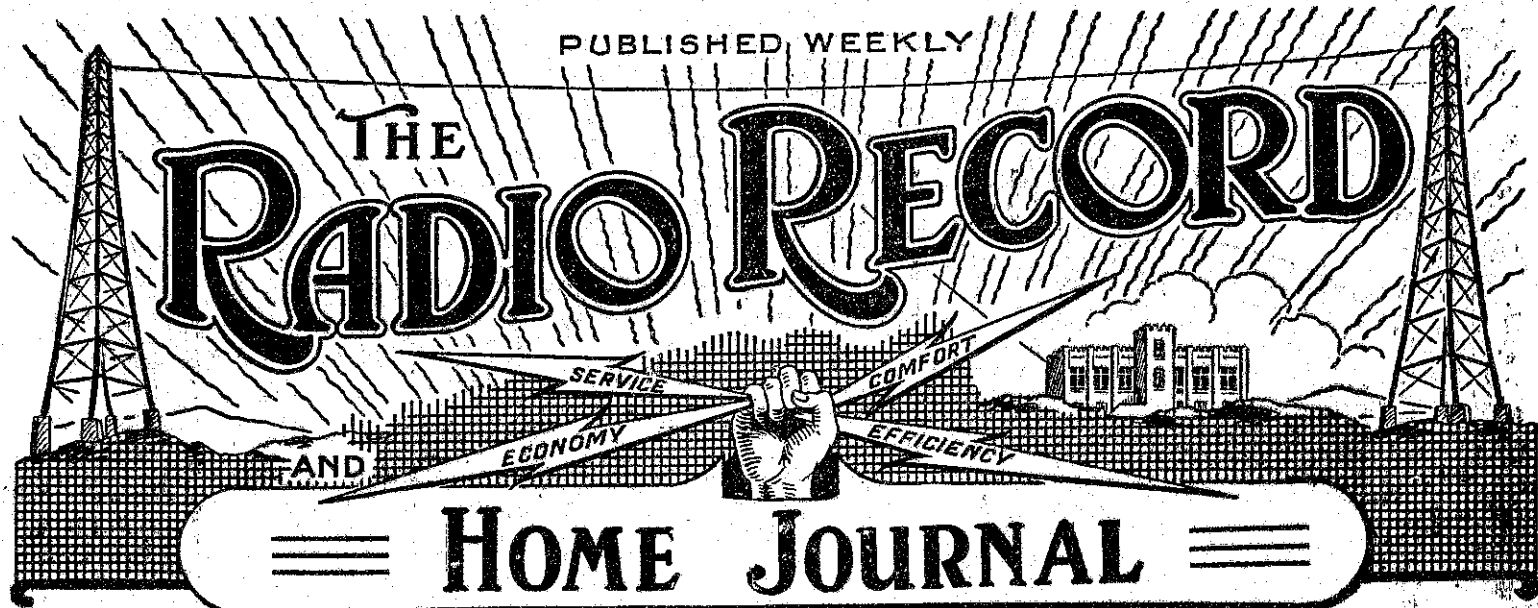


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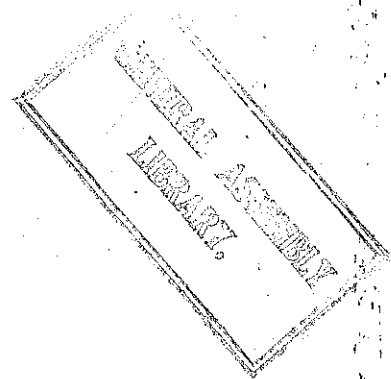
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Vol. IV., No. 34.

WELLINGTON, FRIDAY, MARCH 6, 1931.

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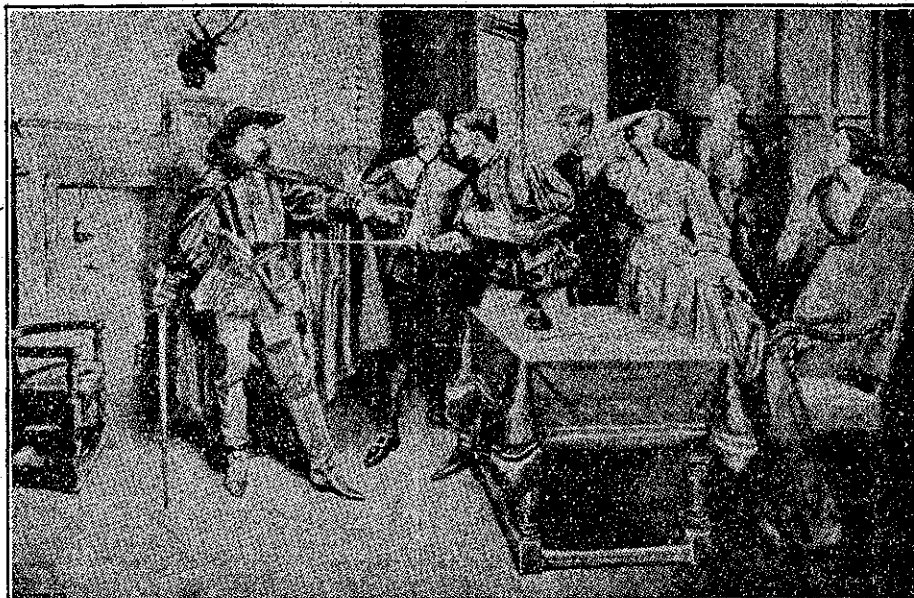
OVERS of grand opera will be delighted to learn that included in the studio concert to be presented by Signor Lucien

Cesaroni and his operatic company from 2YA on March 8 will be three scenes from Donizetti's famous "Lucia di Lammermoor."

One of the scenes to be produced introduces what is possibly the greatest ensemble of all opera—the "Sextette." Many music lovers who are not acquainted with the opera nevertheless know the beautiful melody and soaring climax of "Chi mi frena"

(What strange power o'er me prevailing"), which reveals the supreme heights reached by the genius of Donizetti.

The story of "Lucia di Lammermoor" is a simple one, though ending tragically. Donizetti, who, strange though it may seem, was a Scotsman, adapted it from Sir Walter Scott's novel "Lucy of Lammermoor."



The Sextette.

A STRANGER is seen lurking about the grounds of Lammermoor. This is disquieting, for Sir Henry Ashton, who through black treachery has recently acquired the neighbouring Ravenswood estates, has many enemies, not least of them Sir Edgar Ravenswood.

Norman, Sir Henry Ashton's Captain of the Guard, directs his men to search the vaults beneath the ruins of old Ravenswood Tower. Hardly have the men gone than Sir Henry himself appears, followed by the chaplain, Raymond. He is troubled over the strange visitant, troubled over his own fate, and troubled over his sister Lucy, who has been behaving curiously since her mother's death, and who has formed the habit of going daily to visit her grave.

From Norman, Sir Henry learns that on these visits Lucy has been meeting the stranger and, furthermore, that this mysterious personage has rescued her from an angry bull by shooting the beast. As they speak of these things, the retainers come back, telling of a man

who has met them near the ruined tower, "Pale and mute, with aspect daring," clad in black and mounted upon a black charger. This is Edgar of Ravenswood.

AT the daily trysting place near a fountain in the Park Lucy waits for Edgar. She is accompanied by her maid, Alice. Lucy is pale and distraught.

She looks with dread at the fountain, and she tells Alice a gruesome legend of a Ravenswood who stabbed his sweetheart beside it. She vows that she herself has seen, in the dark waters, an apparition of the murdered woman, who

has warned her against her present lover.

Then Edgar arrives, a sombre figure with his melancholy attire, his black-plumed cavalier hat, his cloak of sable. It is to tell her that this is their last meeting, for he has been ordered to France. He begs permission to go to her brother, to volunteer to forget and forgive, and to claim her hand in marriage; but Lucy knows this is impossible. And why? he asks, answering himself; because her brother still nourishes hatred in his bosom, even though he has killed Edgar's father and usurped his estates.

Lucy's lover is inflamed with passion, and she tries vainly to check it; but he tells how his love for her has made him give up all dreams of vengeance. He tears himself from Lucy's arms, leaving the half-fainting girl to be consoled by the sympathetic Alice.

In supposing that Henry Ashton's opposition is a matter of hatred, Edgar is wrong. As a matter of fact, Henry Ashton is in desperate straits because of the part he has taken in a rebellion against King William I. His only chance of escape is to wed Lucy to Lord Arthur Bucklaw, beneath whose domination he now lives.

To make Lucy break off her connection with Ravenswood, he has resorted to guile. He reads all the correspondence that passed between the lovers, and he now has a letter forged in Ravenswood's hand-writing which seems to prove beyond doubt that Lucy is betrayed, her lover having deserted her. The girl is almost dumb-stricken (Ctd. page 2)



Signor Lucien Cesaroni.

Three Scenes from LUCIA DI LAMMERMOOR

will be presented
in English by

Signor

LUCIEN CESARONI

and his

Operatic Company

From 2YA

on

Sunday, March 8.

Lucia di Lammermoor

(Continued from page 1.)

wed Lord Arthur.

The unequal struggle between them is the more unequal because with Henry Ashton haste is necessary. Preparations for the wedding ceremony are already made, Lord Arthur approaching while Lucy is kept helpless by reason of the forged note. She miserably consents to the sacrifice.

In a great hall of the castle, where the walls are hung with the trophies of hunt and battle, a great concourse of people is assembled to witness the wedding of Lucy of Lammermoor with Lord Arthur Bucklaw.

The knights and ladies sing a gay chorus of welcome, but the bride is so pale and agitated that their gaily rings false. Sir Henry excuses her conduct to Lord Arthur on the ground that she still mourns for her mother. Lucy is escorted to a table where a notary is preparing the marriage papers.

Pale to the lips and almost fainting, she is supported by her maid, Alice, and the chaplain, Raymond. With trembling hand she signs the document which makes her Lady Arthur Bucklaw. No sooner has she set down the pen than a stranger enters the room. All eyes are turned upon him, in fear and amazement. Edgar of Ravenswood, sword in hand, pistol in belt, stalks boldly toward the table.

Such a dramatic moment might have inspired a far less powerful composer than Donizetti to produce a masterpiece, but he has made it ever-memorable with his immortal sextet, "Chi me frena" ("What Restrains Me?").

After it reaches its climax and dies out in lingering tones, others find voice and many bid the stranger begone.

But Henry Ashton faces his enemy with drawn sword, and the two are ready for life or death. Raymond restrains them, bidding both in Heaven's name sheath their weapons. Coldly Ashton asks Ravenswood the

reason of the visit, and he displays the marriage contract.

Ravenswood, refusing to believe his senses, then turns to Lucy for confirmation. With her eyes fixed upon him she tremblingly nods her head in assent. In a furious rage, Edgar of Ravenswood seizes the paper, tears it to pieces, flings it at the horror-stricken girl and rushes from the castle. Lucy stares after him with unseeing eyes. What is left the girl?

THAT night, as poor Ravenswood broods over his misfortunes, a horseman rides up, dismounts and enters the tower. It proves to be

MEANWHILE at the castle the lights burn in the windows and the peasants and domestics make merry.

Suddenly the laughter ceases and the song dies upon their lips. Raymond tells them that Lucy has gone insane and that she stands in the bridal chamber with a bloody sword above the corpse of her husband. "Oh! dire misfortune," sing they.

Scarcely has the full story been heard by the guests than Lucy herself appears, pale and lovely, robed in white, her hair loose upon her shoulders. In her eyes there is seen a strange unnatural light, and her face wears the tender half-puzzled ex-

pression of one who strives to recall a dream. Exactly as the nerves become paralysed when pain is inflicted beyond the bearing point, so, too, the tortured brain refuses to suffer an agony too prolonged. Lucy is mad indeed, but she is happy in her madness, for she believes herself with her lover. Then comes the famous "Mad Scene" at the conclusion of which she falls insensible and is carried to her room by Alice and Raymond as the curtain descends.

Scenes for Presentation

THE three scenes from "Lucia di Lammermoor" to be presented are:

The first depicts the assemblage in the castle hall witnessing the marriage of Lucy of Lammermoor with Lord Arthur Bucklaw. "Hail to the Bridal Day" will be sung by Mr. R. Trewn, tenor soloist, and the company.

The next portrays the peasants and domestics making merry, and their consternation and dismay when Raymond tells them that Lucy has gone insane and stabbed her husband. "O Dire Misfortune" will be sung by Signor Cesaroni and company.

The third and final scene opens when Lucy, pale and almost fainting, signs the document making her Lady Arthur Bucklaw, a stranger enters, sword in hand. It is Edgar of Ravenswood. Then follows the sextet — "Chi me frena" (What Restrains Me) which will be sung by Mesdames D. Ardrey and H. Maplesden, Messrs. R. Porteous, R. Trewn, G. Gray and Signor Lucien Cesaroni. To attempt to describe this sextet is superfluous; only music may express music. Its flowing melody, majestic rhythm, and gorgeous harmonies and climax are known to all; but few realise how magnificently it expresses in sound the conflicting emotions of this dramatic scene.

Life of Donizetti

A SCOTSMAN named Izett, wandering afield in search of fortune, discovered it in Italy, where he took to himself the prefix of "Don," thus acquiring for his children the name "Donizetti."

Such was the ancestry, according to report, of Gaetano Donizetti, composer of "Lucia di Lammermoor," and some sixty-two other operas. Donizetti was born at Bergamo, November 25, 1797, and he died there April 8, 1848, much taking place in the intervening half-century. His father intended he should become a teacher, and to avoid this he enlisted in the army, where, if history serves, he spent most of this time writing music—which art he had studied in Naples and Bologna.

His first opera, "Enrico di Borgogna," was produced in Venice, 1818, while he was quartered there, and two others followed. But his "Nosse in Villa," 1822, won military exemption with honours, for he was carried through the streets in triumph and crowned at the citadel.

From that time on he devoted himself to music, more particularly to opera. He was a prolific and a rapid worker. In 1836, while he was in Naples, a certain theatre was in imminent risk of bankruptcy, and the prima donna came to him for help. He had no libretto, but one was gotten somehow, and in nine days, it is said, "the libretto was written, the music composed" (Concluded on page 28.)

"The Eight O'Clock Revue"

A New Series from 2YA

2YA listeners who so thoroughly enjoyed the series of "Eight O'Clock Revues" broadcast a few months ago will be pleased to note from the programmes that the first of a new edition will be on the air on Saturday, March 14. The revues are from the facile experienced pen of Mr. Will Bishop, and he also directs their production in the studio.

The performers on this occasion will be the Etude Quartet (Miss Gretta Stark, Mr. and Mrs. Ray Kemp, Mr. Will Hancock), Miss Elsie Croft, and Mr. Will Bishop. This hour "for grown-up children" will be from 8 till 9 p.m.

Sir Henry, who brings a challenge. They agree to fight to the death when morning arrives. Henry Ashton departs and Ravenswood wanders to the burial ground of his ancestors, where, beside the grave of his murdered father, he finds consolation in the thought that death on the morrow may claim him.

pression of one who strives to recall a dream. Exactly as the nerves become paralysed when pain is inflicted beyond the bearing point, so, too, the tortured brain refuses to suffer an agony too prolonged. Lucy is mad indeed, but she is happy in her madness, for she believes herself with her lover. Then comes the famous "Mad Scene" at the conclusion of which she falls insensible and is carried to her room by Alice and Raymond as the curtain descends.

BUT as the night wears on, the lights still winking gaily from the castle at Lammermoor, convey to the watcher who stands amid the graves of the Ravenswoods no knowledge of these tragic events. Edgar's only desire is to find peace in the grave, and he calls upon "that faithless woman" to give it a thought as she passes by leaning on the arm of her husband. Yet even as he, in self-pity, heaps reproaches upon the absent Lucy, he remarks a train of mourners coming from the castle.

His intention had been to cast himself upon his adversary's sword, but he soon learns that Henry, filled with remorse, has left Scotland never to set foot again upon its unhappy shores. Then he is told of Lucy's madness and of her love for himself. She lies, they tell him, in the castle at the point of death. And even as they rehearse the story the sound of a tolling bell brings word that Lucy's gentle soul has passed.

As the dawn comes Edgar of Ravenswood sings his own dying prayer—that his soul may join that of his beloved in realms remote from the gloomy halls of Lammermoor. There

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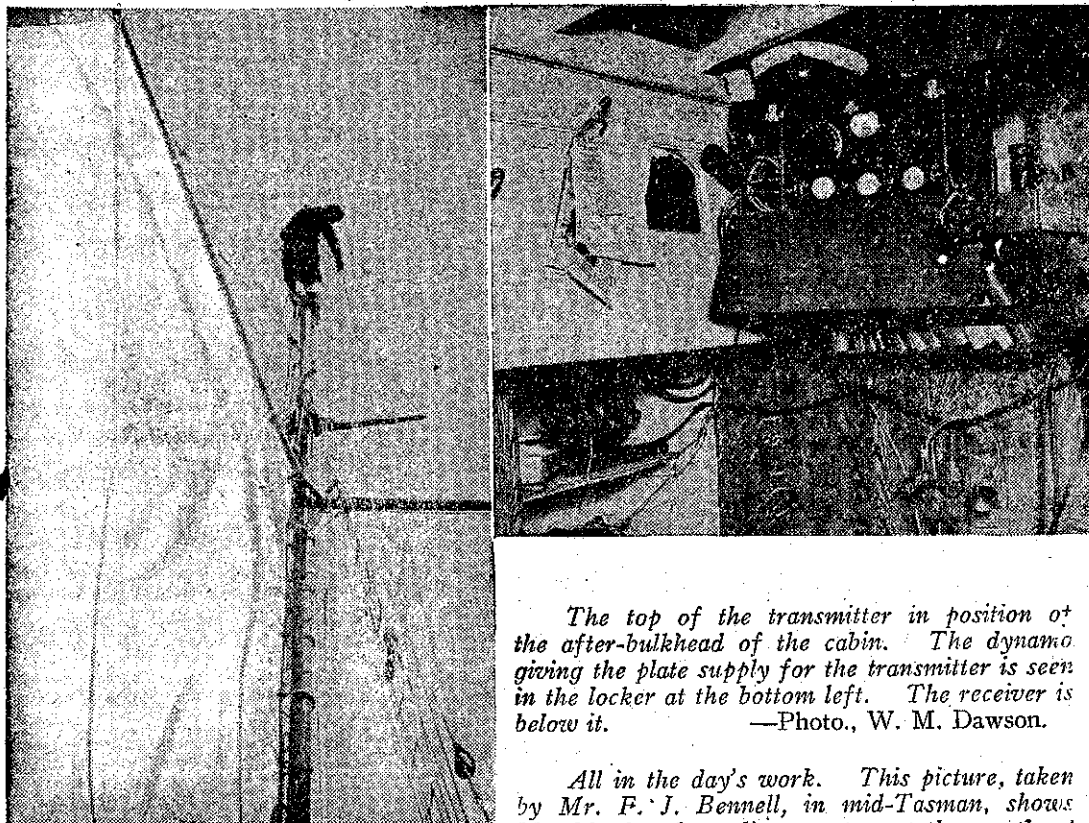
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The top of the transmitter in position of the after-bulkhead of the cabin. The dynamo giving the plate supply for the transmitter is seen in the locker at the bottom left. The receiver is below it.

—Photo., W. M. Dawson.

All in the day's work. This picture, taken by Mr. F. J. Bennell, in mid-Tasman, shows Mr. Monks, the radio operator, at the masthead making adjustments to the aerial.



FRESH proof that British hearts still throb with that spirit of adventure which spurred on the Vikings of old is still forthcoming. May we, as sea-bound isles, be duly thankful that this spirit still lives—even to the extent that mature business men voluntarily forsake the comforts and luxuries of home life for the tang of the salt-sea breeze, the cramped quarters, buffeting, and other discomforts of an ocean voyage in a tiny sailing craft.

The modern adventurer wisely enlists the aid of practical science, and so it is that practically every soundly-planned venture of this description nowadays counts in radio as an indispensable adjunct.

It is evidence of prudent preparation, therefore, that the Melbourne yacht Oimara, which with its crew of five has just completed the outward leg of a visit to New Zealand, was equipped for the voyage with complete radio transmitting and receiving plant.

The Oimara is a ketch-rigged craft of some 43ft. length, and being of beamy and sturdy build is well fitted to come through the stormy Tasman Sea to Wellington with flying colours, and all ship-shape.

Divided by two bulkheads into three sections, the forecabin or foremost of these provides sleeping accommodation for two members of the crew. Amidships is the cabin with bunks for three more, and numerous racks and lockers for the crockery and the multifarious items needed to satisfy the cravings of five apparently very healthy appetites, over a period of three months.

IN the clear, the cabin must approximate 12ft. x 7ft. 6in., with ample head room for even a tall man to stand upright.

Aft of the cabin is a comparatively spacious engine-room which houses a 20 horse-power Diesel engine, used as an auxiliary means of propulsion.

We return again to the cabin, however, for it is here that our main interest lies—namely, the radio equipment.

The transmitter is a two-valve crystal-controlled job, built up by VK3GT of the Technical Staff of the "Listener In," an Australian contemporary.

Modern Vikings enlist the aid of Modern Science

A small suitcase houses all the gear, while the transmitting key is secured to the inside of the lid, so that when the transmitter is lifted down from its shelf on to the operator's bunk, and the lid of the case opened, the key is in a convenient operating position—the set may, however, be operated in its position on the bulkhead, so that it is always ready for use.

The transmitter power supply is from a bank of 12-volt lead-acid batteries packed in wooden boxes next the operator's bunk and partly under the cabin table.

Filament current comes direct from the batteries through heavy cabtyre flex, while for high-voltage plate supply the 12-volt current is led in at one end of a "dynamotor" to emerge at the other end of the machine as direct current of some 500 volts potential; this high voltage being led to the transmitter in rubber cabtyre.

THE crystal control feature keeps the transmitted frequency constant, even though the yacht be tossing heavily in a seaway. Just out of the picture is an equally important item in any radio installation—the receiver—this being a Philips type 2802 all-wave model, with plug-in coils covering all wavelengths from 10 to 2100 metres.

Four valves are provided, the first being a screened grid radio frequency amplifier, followed by a regenerative detector, one of straight audio-frequency and a pentode. The latter valve was not used, though a loudspeaker is fitted, as reception was so good that all traffic was worked on three valves while many distant short-wave broadcast stations all over the world were heard on the trip.

In addition to personal messages, a considerable amount of Press traffic was transmitted via the Sydney station, VIS, to the "Herald," the Melbourne newspaper which had loaned the transmitter for the voyage.

Mr. Bennell stated that some Dunedin amateurs had been of assistance to the yacht's crew in transmitting weather reports to the Oimara. Mr. S. Perkins, ZL2GK, had also sent out weather reports to the yacht. In the case of the Dunedin station, a stiff blow was being experienced at the time, and the boat would probably have been hove-to for a period had not the weather report indicated that they had just crossed the centre of the depression, and accordingly the yacht carried on to take full advantage of the favourable winds while they lasted.

All on board conceded that their radio results had been very much worth while. The call-sign VJNY was allotted, and the radio installation thus placed on a commercial basis.

In addition to the owner and radio operator (Mr. Monks) and the owner (Mr. F. J. Bennell), the Oimara carried other interesting personalities, the skipper being Captain H. J. Symonds, a professional seaman of long experience in sail (*Continued on page 29*).

The New Zealand Radio Record

—AND—

Home Journal

(Incorporating the "Canterbury Radio Journal.")

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WELLINGTON, FRIDAY, MARCH 6, 1931.

POPULAR INTEREST IN SHORT-WAVE RECEPTION.

THE interest in the short-wave side of radio is steadily expanding, and at the present time there are literally hundreds of enthusiasts in this field throughout the Dominion who habitually search the ether for direct contact with the short-wave broadcasting stations in the United States, the Continent of Europe and Britain. At the moment the best reception is naturally recorded from the United States, with PCJ (of Holland) a good second. In the summer months the present British station is not heard with sufficient clarity and volume to make reception attractive, but improvement is always effected in the winter months. The growing interest in this field indicates that a very hearty welcome will be accorded the big British short-wave broadcasting station that is contemplated, when it does come on the air. Plans are in prospect for this station to be made of outstanding character and quality. It will be quite in accordance with British tradition to be perhaps a little late in entering the field, but listeners can be assured that when the station does appear it will take first rank for service in the fields of power, quality and nature of transmission.

IT is pleasing to see this growing interest in overseas reception. This is the one field in which radio can render a most distinct service. Internal broadcasts of a musical and entertaining character are, of course, highly valuable, and popular. At the same time New Zealand, because of its very isolation, feels the need of contact with overseas countries, and the lure of direct contact by radio is very real. The enthusiasts now in the field derive a very great deal of enjoyment, entertainment and culture from their pursuit of short-wave radio reception. Time undoubtedly carries in its bosom the certainty of steady improvement in the services to be made available, and in accordance with our close family contact with Great Britain the joy derivable from short-wave reception will be intensified when the British broadcasting station comes into being. Under present conditions the benefit is individual rather than collective, but as the power put into overseas stations increases and the quality of reception improves, it may be taken for certain that an increasing number of broadcasts of important occasions will be picked up by the main YA

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stations and rebroadcast for the general body of listeners in the Dominion. At the last Imperial Conference, plans were discussed for the proposed big station in Britain. It was candidly stated, of course, that prosecution of those plans was dependent upon the economic position. That is understandable, but with the lightening of the general depression, progress in this field will be rapid.

2YA Children's Session Grand Opera From Committee 2YA

Picnic Postponed

A MEETING of the 2YA Children's Sessions Advisory Committee was held on Tuesday, February 10, Pastor W. G. Carpenter (Uncle George) presiding. There were also present:— Mrs. L. Sommerville (Federation of University Women), Mrs. Chatfield (University Women), Mrs. Chatfield (Society for the Protection of Women and Children), Mr. G. W. Morgan (Radio Children), Mr. W. E. Howe (Sunday Schools' Union), Brigadier Grey (Salvation Army), Mrs. D. Basham (Aunt Daisy), Mrs. D. Evans (children's organiser), and Mr. J. Ball.

The principal subject discussed was the proposed picnic, and it was decided, owing to the untoward happenings recently and the widespread concern occasioned by the earthquake, that it should be postponed.

The committee approved of Uncle George substituting a special Anzac Day service for the ordinary sessions.

Referring to the earthquake, Brigadier Grey said he was commissioned to voice the Salvation Army's warm appreciation of the service rendered by 2YA. The officers at the station had given their fullest co-operation and radio had been of the greatest possible assistance to the Army, while the spontaneity of the people's response to broadcast appeals had been wonderfully generous.

Other speakers also eulogised the tremendous part radio had played in this time of emergency.

Special Programme Features

From 1YA

SOME outstanding programmes will be available to 1YA listeners next week.

On Monday evening, Miss Kate Campion (late prima donna of the Carl Rosa Opera Company) and Mr. Ralph Eskrigge (eminent New Zealand tenor, late of Sydney) are each giving a half-hour recital.

On Wednesday a concert is to be given by the Auckland Artillery Band.

On Thursday there will be an old time nigger minstrel show, which will be "true to type," and really good.

An evening of play, story and song, under Mrs. Zoe Bartley-Baxter's direction, is scheduled for Friday.

Saturday will see a week-end variety programme.

LOVERS of grand opera will be pleased to learn that arrangements have been made for a series of recitals to be given by Signor Lucien Cesaroni and his company at 2YA. The first, "Lucy of Lammermoor," will take place on Sunday, March 8.

Salon Orchestral Performances

THE 2YA Salon Orchestra, which performs regularly under the conductorship of Mr. Mat Dixon, will broadcast some outstanding numbers in the near future. On March 7 will be heard the selection "Lilac Time," based on some of Schubert's immortal melodies and a serenade specially composed for the violin.

On March 14 one of the most interesting personalities in the musical world, namely, Coleridge-Taylor, will be represented on this date by his "Petite Suite de Concert," an extremely melodious example of his work.

The composer, who died only a few months ago, was probably one of the most famous composers of the day, this being the more interesting when it is considered that he was of negro extraction.

St. David's Day

Traditional Music

MANY special concerts and commemorative services are being arranged for St. David's Day. The music of Wales contains musical fragments which are probably of greater antiquity than any found elsewhere in the British Isles, for "Wild Wales," as one of the English bards calls it, was the last stronghold of the original inhabitants of Britain.

The music does not have the element of humour like that of the Irish, but is of a serious and frequently of a martial character. Many of the Welsh folk songs are vocal melodies of a stirring quality, which were evidently used as battle songs in the days gone by.

That the Welsh, however, are not entirely given to the expression of rugged and heroic emotions in their music is evidenced by such a tender poetic song as "All Through the Night." This is a fine traditional Welsh melody of great age; simple, dignified, and expressive, and it is the most popular Welsh air in England.

Boxing Relay

Donovan-Blay Fight

At approximately 8.45 p.m. last Saturday evening 2YA broadcast a surprise relay of the Blay-Donovan fight held in the open air at Weston Park, New Plymouth.

Several weeks ago, Blay, one of Australia's most brilliant featherweights, gained a decisive victory over Donovan, featherweight champion of New Zealand, in the Wellington Town Hall, but their second meeting proved a much closer affair. It resulted in a draw, after, as the commentator remarked, one of the most thrilling bouts he had ever witnessed. Despite the fact that the pace, especially over the first few rounds, was terrific. Mr. Gordon Hutter, of Auckland, who described the fight, was never at a loss. Though he seemed scarcely to have time to draw breath, his clear and crisp comments conveyed a vivid word-picture of the entire fight.

Technically, also, the relay was excellent. Though line noises were apparent a few minutes before the contest began, they disappeared entirely with the opening round.

2ZF and Copyright

Satisfactory Solution

As previously announced, the Manawatu Radio Club (2ZF) has made a contract with the Australasian Performing Rights Association for the year 1931. The club were members of the original "B" class Stations Association, and left the negotiations of the matter of copyright in the hands of the association in order that 2ZF would join in the proposed comprehensive scheme of a contract for all New Zealand "B" stations. The A.P.R.A. originally fixed the fee at £200 for the 19 "B" class stations then operating, but as is well known this comprehensive scheme fell through, and the offer of A.P.R.A. was withdrawn.

The Manawatu Radio Club's Sunday night announcer (Mr. A. G. Roe) was in Sydney last November, and interviewed the A.P.R.A. on behalf of the club, with the result that the local club was thoroughly conversant with the whole position, and trend of developments.

In January, when it was known that the comprehensive scheme for all "B" stations had fallen through, the Manawatu Radio Club, knowing the legal position involved, immediately ceased transmitting and cabled the A.P.R.A. Sydney, for a separate contract. A reply was received by cable and 2ZF resumed its regular schedule after missing only two transmissions. The contract is now on its way for signature by the club at a fee of £10/10/-, to use the repertoire of the Australasian Performing Rights Association for the year 1931.

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Zoe Bartley Baxter and Company

Recital—"Orphaned by the Sea." Zoe Bartley Baxter

Musical Fantasy—"Nightingale and the Rose"

Argd. Zoe Bartley Baxter

Of Topical Interest

(By "Switch.")

SHORTLY after midnight, Thursday,

February 26, 6WF, Perth, could be heard all over the writer's house. Choruses of "John Brown," "Blighy," the "Stein Song," etc., were coming through. Shortly afterwards "Switch" noticed that some strange station was heterodyning with 2FC, Sydney. Here is a problem for some of our super DX listeners: What station is tangled up with 2FC?

OCCASIONALLY a pathetic appeal is heard from the Australian broadcast stations. On Thursday night, February 26, 2FC, Sydney, broadcast a request for information of the whereabouts of a certain woman, giving her name and original address, and stating that her son was seriously ill in hospital and was constantly calling for her.

THE call-sign of the Melbourne yacht Oimara, which will soon be leaving Auckland on her return voyage

across the Tasman, is VJNY, and the wavelength used is 42.6 metres. Those who have heard the yacht's transmitting wave state that it is remarkably steady; this is due to the fact that it is crystal controlled. The Oimara's wireless operator left the yacht at Wellington, and caught the first steamer for Sydney.

Miss Cicely Audibert

To Appear from 2YA

CONTINUING her New Zealand tour, under engagement to the Radio Broadcasting Company, Miss Cicely Audibert will be heard from 2YA, Wellington, next week. She is scheduled to broadcast on Monday, Tuesday, and Friday, March 9, 10, and 13 respectively. This talented soprano and versatile entertainer will present a variety of songs from her very extensive repertoire.

New Wireless Telephony Device

To Prevent Eavesdropping

INVENTORS are still busy trying to find a way to prevent confidential messages sent by wireless telephony from being intercepted by unauthorized listeners.

The vice-president of the Bell Telephone Laboratories has recently described a method for "scrambling" speech before it reaches the ether, so that anyone who succeeded in picking up the signals en route would hear no more than an unintelligible jumble of sounds.

For instance, the words "telephone company" are transposed into "play-o-fine crink-a-rope," so long as they are travelling through space. In order to convert them into their original form a special "unscrambling" device is necessary, and this is, of course, installed only at the authorized receiving station.

Some time ago it was proposed to use "secret" wireless for broadcasting special items of particular interest to a limited number of subscribers, who would each be provided with the necessary equipment for reconvert-ing the "jumbled" message into clear language.

The project has not yet been carried into practice, although it has certain possibilities which may cause it to be revived in some form or other in the future.

Airway Radio Chain

Imperial Airways Route

THE most comprehensive airway wireless system ever evolved will, it is stated, be in operation with the opening by Imperial Airways during 1931, of the 8000 miles air line between England and South Africa.

During the whole of the eleven days spent on the journey between London and Cape Town passengers will be in wireless touch with ground stations. Long and shore wave communication will be employed, and messages will be both by telegraph and telephone. Wireless bearings will be available to pilots throughout the flight over seas, rivers, forests, and jungles.

It is expected that a transmission range of 300 miles will be attained. During flight power will be derived from a dynamo driven by a small air screw.

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THE Broadcasting Company brought happiness to several thousand city children on the afternoon of Saturday, February 21, when a public picnic was held under its auspices. It is estimated that four to five thousand children, parents and friends were present.

It has been the practice of the Broadcasting Company to entertain each year the young performers who help at the children's session, but this year the picnic was thrown open free for all. Notwithstanding the fact that the outing had been postponed from the previous Saturday, the children of Christchurch responded to an extent that exceeded expectations and picnicers came from as far south as Rakaiia.

The picnic was a remarkable success, not only from the attendance point of view, but also from the manner in which the children enjoyed themselves. It had been splendidly organised, the weather was ideal, and nowhere could a better site for such a picnic be found than the pretty grounds at the Addington trotting course.

From the day that the 3YA Children's Session Advisory Committee, under Mr. D. E. Parton's chairmanship, considered Mr. Harris's suggestion that the picnic should be open to all, everyone worked whole-heartedly, and Saturday's picnic was the result. To Miss Maynard Hall, organiser of the 3YA Children's Sessions, well known as "Aunt Pat," too much credit cannot be given for the success of the day's outing.

Side-shows and amusements there were in plenty and all were free. No child had a dull moment.

Throughout the whole afternoon a miniature railway carried packed loads of children up and down a hundred yards of track. There was keen competition for seats, but the Broadcasting Company officials saw that all children were fairly treated. It was no easy matter regulating this traffic, for "boys will be boys," and the stronger would have monopolised the railway. But the hard-taxed officials enjoyed it all equally as much as did the young folk. At the end of the day one re-

Christchurch Children Spend Happy Day

Huge Attendance at Radio Picnic

marked: "I've had a wonderful time. I must have put at least a thousand tiny children on that train." The train was certainly a great draw. Every time the little engine whistled everyone at the picnic knew that it pulled a full load of ecstatic young passengers.

The whirling merry-go-round was patronised to its limits; so were the ponies and the donkey and an old Cobb and Co.'s coach. The Punch and Judy man and the Jack and the Beanstalk man performed to admiring audiences crowded round their stalls. The sports and races were many and the competitors were innumerable. In some classes the wide racing field was congested, in other events as many as eight heats of twelve competitors each had to be run. Children from every school in the city vied with one another, and hundreds of prizes were won. The sports alone would have ensured the success of the picnic.

Every now and then there was a mixing-up of the children. Like the Pied Piper, an official, throwing handfuls of lollies from a large tin, would go round the ground followed by an ever-increasing swarm of children who left the various side shows to try their luck in the scramble for sweets.

The skittle alley was in much demand, and the balloon-hitting competition produced a vigorous bombardment until ammunition failed. As a consequence, quite a number of boys now have tennis balls as souvenirs of the Radio picnic.

White rats, black Pomeranians, brown Pomeranians, Angora rabbits, kittens and cats, a puppy Alsatian, dogs of all kinds, even four wide-eyed young frogs seeing the world from a floating piece of wood inside a pre-

serving jar, were among the pets brought by children to the picnic. The parade and judging took place on a raised platform. The pets had never met before, so it was a memorable day for them, particularly for one white rabbit which was chased by a dog and was rescued with difficulty. It was an unrehearsed incident which provided much diversion.

During the afternoon, 3YA's announcer, Mr. A. L. Curry, broadcast from the ground a description of the proceedings, and listeners realised that it was one of the happiest outings of the year. In the background of the announcer's description they heard the New Brighton Band playing lively music, the whistle of the miniature engine and the laughing and shrieking of the children. Then, as the parade of pets was on at that moment, the young owners were engaged in conversation before the microphone, and some diverting entertainment was provided. "Aunt Pat" also joined in a dialogue. The result of this broadcast was to increase considerably the number of people at the picnic.

One of the attractions during the afternoon was dancing by junior pupils of the Scottish Society.

A great many people attended the picnic for the purpose of seeing the popular "aunts" and "uncles" heard over the air from 3YA. This they had the opportunity of doing during the Children's Session from 5 p.m. to 6 p.m., which took place on the platform in front of the crowd.

It is safe to say that the Christchurch Radio Picnic given by the Radio Broadcasting Company will be a red-letter day to all who were present at the Trotting Grounds at Addington last Saturday afternoon.

Radio Concert Earthquake Relief Fund

THE sum of £47/7/6 has been handed to the Mayor's Fund for Earthquake Relief as a result of the concert given in the Town Hall on Monday, February 23, by a number of leading Wellington professional and amateur musicians and entertainers. The gross proceeds were £72/10/-, and expenses £25/2/6. Of the expenses, advertising in two daily newspapers accounted for £23/5/-.

In response to the appeal made by Miss Worship the Mayor at the concert, and broadcast by 2YA, the following sums have been received by the "Radio Record" and handed to the Mayor's Fund:—

S.P. 2G 6/-, Mrs. Beaurefaire 5/-, Mrs. H. G. L. Gray 10/-, Mr. A. Baker 10/6, E.M.E. 10/-, C. Hunger £2 6d., T.J.H. 2/6, S. W. Strong 5/-, E. Grove 5/-, "A Family of Listeners" £1, J. Fair 10/-, D. Cody £1/1/-, W. S. Wauchop £1/1/-, F. Ashley 2/6, K. A. Dixon 2/6, "Listener-in" 2/6, A. L. Kirk £1, G. Kirk 10/-, Freda Goodall 3/-, Lily Kana 5/-, Collected by Mrs. F. Chase £2, "Listener-in" Waihiat 15/-, The "L" Family 10/-, "Listener" £1, F. T. Clarke 5/-, Mrs. Russell 2/6. Total, £15/4/6.

In addition to the foregoing, donations were made to the funds of the concert as follows:—

Two Listeners 7/6, Anonymous 5/-, H. Henry 5/-, D.N.K. 1/-, Listener-in, Northland 6/-, Northcote Church 2/6, J. Fletcher 6/-, A Radio Family 11/6, Khandallah List 10/-, Mr. and Mrs. J. C. Meule £1, W. M. Dawson £1/1/-, J. M. E. Hott £1/1/-, Chas. Proctor £1 1/-, A. D. Paisley £1/1/-, Listener-in 7/-, Mrs. P. Fleming 5/-, C.W.R. 8/-.

IN forwarding contributions to this fund some listeners wrote very interestingly. Probably the most interesting letter was from Mrs. F. Chase, Ruatuhuna. She wrote that she has a tea and luncheon room half way between Rotorna and Wairoa, and also has the only radio set in the settlement, which consists almost entirely of Maoris, there being only three school-teachers, two missionaries and herself in the total of white people. An open invitation was given to the settlement to listen to the transmission of the concert from the Town Hall for the Relief Fund, and there was quite a good attendance. As a result of passing round the hat, she was able to forward £2. "The Maoris here," Mrs. Chase writes, "are very poor, but they gave what they could, in many cases only a penny, but it was given with a good spirit." Mrs. Chase mentioned that she had daughters in Wairoa who suffered heavy losses in the earthquake, so that she felt she must help as much as she could.

An old-time Stage-coach which proved immensely popular with the children.



Part of the picnic ground. Miniature train in the foreground, round-a-bout on the left. Loud-speakers are attached to the post on the right.

Aunt Pat starts the "Dreamland Train," but hides behind the steam of the whistle, as she was shy of the photographer.

THE Dornier X, Germany's monster twelve-engined flying-boat, is equipped with the latest wireless apparatus covering a wide range of frequencies. The principal novelty is in the aerial arrangement. Owing to the enormous span of wing it has been found possible to attach a permanent aerial along the wing, thus obviating the necessity for a trailing aerial, which must be drawn in when a machine lands. The Dornier X also carries the latest in direction-finding equipment.

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Please find enclosed P.N. for 2/10, being payment and postage for one "Radio Guide and Call Book." It is to be dispatched to me immediately upon publication.

Name

Address

6/3/31

A WELLINGTON shortwave enthusiast has shown "Switch" a statement in a leading American radio journal to the effect that for short-wave reception battery sets are preferred to the A.C. sets by the United States Army, Navy and commercial companies. The reason given is that on shortwave reception battery sets are free from noises that creep in from the A.C. supply. The trouble incidental to battery maintenance does not count with the navy, army and commercial companies.

THE broadcasting of the late Dame Melba's singing of "Home, Sweet Home," by 2YA, Wellington, just after the announcement of the sad news of the diva's death, was thoroughly appropriate. "Home, Sweet Home" always gave Melba pleasure, and on many notable occasions she sang it in public. There was a tremendous rush for Melba's gramophone items when her death was announced. One large Wellington dealer completely sold out of "Home, Sweet Home."

"T.B.J." (Dunedin) writes to say that he finds the audibility of the Australian stations varies considerably with the table compiled by "Switch." His table reads as follows (with "Switch's" figures in parentheses): 2BL, Sydney, 10 (9½); 3LO, Melbourne, 7½ (7); 2FC, Sydney, 7 (10); 4QG, Brisbane, 7 (8); 3UZ, Melbourne, 5 (5½); 2GB, Sydney, 4 (6½); 3AR, Melbourne, 3½ (4). As previously stated by "Switch," locality is an important factor in long-distance reception. There are also "distance zones" in which a given station is

heard at its maximum, while a few miles nearer or further it loses in volume.

A NENT the foregoing paragraph, it is well-known that many receiving sets have a "peak" on their tuning dials, and a number of sets "Switch" has tested seemed to have maximum sensitivity about the wavelength of 2BL. In the writer's set there is a device which the makers choose to designate an "inductor," the function of which is to maintain peak efficiency on all wavelengths.

"A MATEUR" (Marton Junction) asks whether on an ordinary broadcast receiving set it would be possible to pick up a short-wave transmitting station. If the receiving set were in the vicinity of a short-wave transmitter it would be possible to hear the latter. "Switch" has heard on his ordinary broadcast receiver a

short-wave amateur transmitter at a distance of about 2½ miles. The station mentioned by "Amateur" generally broadcasts on 240 metres and occasionally on 30 metres.

"R.B. (Wellington) sends a list of stations which he has picked up on his eight-valve a.c. receiving set. His list comprises 17 verified stations and 26 unverified stations. Considering that "R.B." has had his set for

Reception Table for Australian Stations

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

2FC, Sydney	10
2BL, Sydney	9½
2NC, Newcastle	9
4QG, Brisbane	8
3LO, Melbourne	7½
7LA, Launceston	6
3DB, Melbourne	6
2GB, Sydney	6½
2UE, Sydney	5½
3AR, Melbourne	5
3UZ, Melbourne	5
7ZL, Hobart	3
5CL, Adelaide	2½
6WF, Perth	2
2KY, Sydney	1½

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

only 16 months and he has been DX-ing for only eight months his performance is exceptionally good seeing that he is located in Wright Street.

THOSE who tuned in 3LO, Melbourne, on the night of February 24 heard a superb presentation of the well-known musical comedy "Gipsy Love." The piece was produced by the Australian Broadcasting Company, and it is entitled to the fullest praise for its success. The performers were selected for their radio voices, and they gave a highly meritorious interpretation. The orchestra, too, was magnificent. 3LO, Melbourne, will broadcast "The Merry Widow" on March 25 and 31.

"BEAU GESTE," broadcast as a radio play, was most realistically put on the air by 2FC, Sydney, on Thursday, February 26. The defence

of the fort by the Foreign Legion against the desert Arabs was excitingly vivid. Rifle fire, the war songs of the Arabs, and the animated dialogue of the English brothers came across like the real thing. "Switch" held 2FC, Sydney, at good loudspeaker strength as steady as a rock.

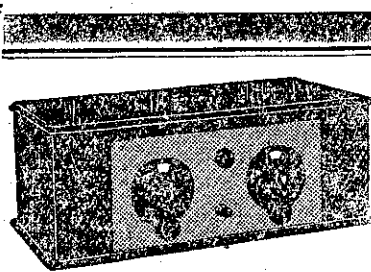
THAT wonderful old melodrama, "The Silver King," by Henry A. Jones and Henry Herman, will be presented from 3LO, Melbourne, on Wednesday, March 4, and will be relayed to 2FC, Sydney, and 2NC, Newcastle. The play belongs to another generation, but it should find a wide popularity to-day. Maurice Dudley, the well-known Melbourne announcer, will take the part of Jaikes, the faithful old family servant.

MR. CHARLES D. MACLURCAN, one of Australia's first successful amateur short-wave transmitters, recently returned to Sydney from a visit to England. About seven years ago Mr. MacLurcan passed through Wellington with a short-wave transmitter specially fitted on a 'Frisco mail-steamer to carry out a series of tests on the run up to the Californian port, under engagement to Amalgamated Wireless. His report convinced the big Australian company of the effectiveness of short-wave transmission in the Pacific.

THERE is one Australian station that has not performed up to its former standard for some months past, and that is 4QG, Brisbane. This station has now a confirmed habit of fading frequently with consequent distortion. One would not mind if this peculiarity of 4QG were restricted to those nights when the other Commonwealth stations are similarly afflicted, but on other nights when they show little fading 4QG maintains its vagaries most consistently.

DURING the latter half of last week long-distance reception increased wonderfully, and the Australian and Japanese stations came in with rare volume. Owners of efficient sets had an enormous variety of entertainment. A pleasant surprise on the Thursday night was to hear Miss Jessie Shmish, who sang at the "YA" stations a few months ago, contributing from 3LO, Melbourne. Her rich contralto voice sounded as well as ever across the 1400 miles of ocean. Miss Shmish is one of 3LO's "star" performers.

A WELLINGTON radiotrician impressed "Switch" the other day with the rapid spread of interest in short-wave reception. He showed him a large bundle of letters received recently from all parts of New Zealand, written on the subject of short-wave reception. The promised big British short-wave broadcast station, when it eventually goes on the air, will be sought for by some thousands of new short-wave enthusiasts in New Zealand, if one can judge by the steady increase of interest in short-wave reception.



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Modern Neros.

RE an article in a recent issue of the "Radio Record" entitled "Where's Our Dance Music?" It is with feelings of uttermost disgust and indignation that I read of persons who have rung up the YA studios and interrupted a list of earthquake inquiries with demands for dance music. Evidently these frivolous-minded people have not yet heard that we have had a disaster which has spread death and desolation over a large tract of country, and sorrow from one end of the Dominion to the other.

It seems incredible that at a time like this there are people in our land who have no time for serious thoughts or feelings of sympathy, and whose sole aim seems to be the satisfying of their own desires for pleasure. As far as I know I have not a single relative in the earthquake area, and yet I am prepared to go without whole evenings of entertainment if necessary in order that the anxieties and fears of these unfortunate people may be relieved. I have no doubt that the great majority of my fellow listeners are prepared to do the same. To the YA stations I would say, "Go ahead with the good work," for by so doing you are earning the thanks and appreciation of thousands, even though they may never be put in writing.—"Nine-Valve" (North Auckland).

[All correspondence must be signed, though a nom-de-plume may be employed for publication purposes.—Ed.]

Radio Demonstrations.

SINCE the class "B" stations ceased to operate, radio dealers have been seriously inconvenienced. "If the restriction is not removed then some arrangement should be made so that there should always be one station on the air all day. Is there any movement on foot to improve the service?" Yours etc., E. Dixon and Coy. Ltd. (Hawera).

2YA Fading.

I HAVE followed with interest the broadcast by station 4YA of the Sanders Cup boat races. I congratulate the announcer on his description of the event; it was a pleasure to listen to his clear and pleasant voice. I should like to know if 2YA has been fading badly the last two or three weeks with other listeners, as it is an unusual thing for 2YA. I have always had it in without a sign of fading.—T.V. (Invercargill).

Wednesday Programme.

THE programme put on the air on Wednesday evenings for the past three weeks will do me. In the first trial night a month ago several items were not up to what we have been accustomed to from our own artists,

ARE YOUR HANDS TIED?

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

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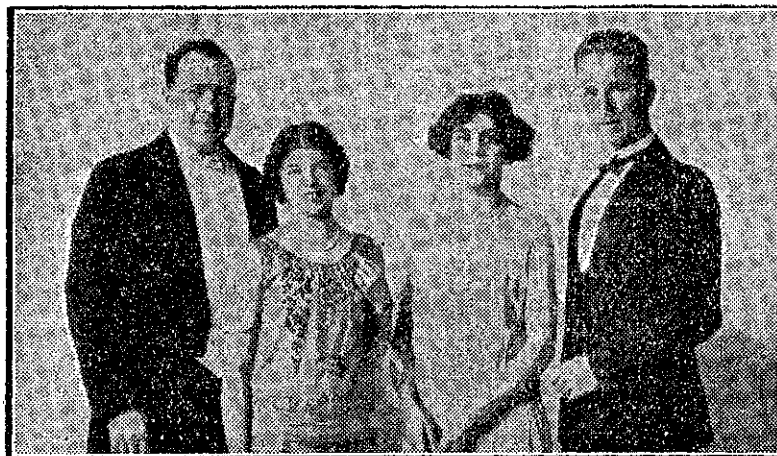
1822 WAKEFIELD ST., WELLINGTON

Our Mail Bag

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

but if anyone is not pleased with last night's programme they are indeed hard to please. The twang, or accent, to which some people take exception, is mostly imaginary, as, if we stop to think, we will find greater differences in different counties in Britain, or even in New Zealand. Make no mistake, the English spoken in Bos-

joy hearing the type of programmes which are given to the people of the States. If we do not wish to listen to them, then there's a very simple way of picking up a more suitable programme. If the angel Gabriel were to organise a programme it would not please everybody, for there is no accounting for tastes. How-



The Etude Quartet, who are taking part in the new series of reviews from 2YA. From left to right they are: Will Hancock, Gretta Stark, Rita Kemp, Ray Kemp.

—S. P. Andrew, photo.

ton will compare favourably with that spoken in Dublin, Inverness or Edinburgh, and, after all, variety is God's pleasure, and much of the American accent is pleasing and not at all objectionable.—I am, Sir, Yan Kee (Wanganui).

International Programmes.

THE old English conservatism shows itself again with the coming of the International Programmes. Some people cannot bear to have any form of enterprise introduced into the quiet running (or perhaps otherwise) of their affairs. Our friends who have so loudly condemned the American programmes take far too serious a view of these broadcasts. What are the odds if the Americans do not use the same accent as we do? Why get exasperated about it if the New Zealand stations choose to introduce a novelty programme once a week? The objectors should remember that there are other people in the Dominion with radio sets who no doubt en-

ever, the world is made up of all classes of people and there is no doubt that those who fly to their pens immediately any alteration is made in the ordinary run of things afford the more balanced-minded people no little amusement.—Te Koutu (Cambridge).

ON page 6 of the last issue of the "Record" there is a resume of the fallacious opinions expressed by three Wellington amateur transmitters regarding the work of the amateurs during the quake. Now, Sir, no amount of talk can controvert the fact that the amateur transmitting brotherhood rendered a service of incalculable value to the community, and the omission of the authorities and the Press to recognise this great service is more than passing strange.

With the collapse of the telegraph wires and the destruction of the post offices, the authorities were, naturally, helpless for a while, and all the P. and T. Department could do was to lend the amateur stations some operators.

This they did, but it was the "Ham" who kept the stations going. Any interference could have been obviated by authorising the amateurs working earthquake traffic to work slightly outside their bands.

The lesson to be learned is, not that more stringent regulations are needed, but that the amateur experimenter be given more encouragement. All he asks for is a reasonable share of the available transmitting channels. For instance, there is a big space from 50 to 75 metres practically empty, most of it "reserved" for the United States, but seldom used, and our Government could, as a mark of appreciation, allot portion of this space to the New Zealand amateurs.

For years the amateur has been working under severe restrictions, but nevertheless he was ready when the call came, and will be again; therefore it behoves the New Zealand public to see that the Government secures to the amateur adequate facilities for carrying on.

In passing, it is worthy of mention that the daily papers generally omitted to inform their readers that practically all the quake news passed over the amateur radio network. The P. and T. Department may possibly have "evolved order out of chaos" on the Wednesday at Napier, but the fact remains that for the previous 24 hours the amateur stations at Hastings, Napier, Gisborne and Wairoa had been doing invaluable work at top speed without any "chaos." The amateur is given more to work than talk and even those men who stuck to their sets in the devastated area with the ground heaving under them have been heard to say "It was all in the day's work"; but, nonetheless, a fair thing is a fair thing, and those who decry this great work must not be surprised if their motives are ascribed to the "little green god".—J. S. Lynch (ZL-IBL).

Not a Laboratory Test

AN interesting letter has been received from a prominent Napier man by Spedding, Limited, Auckland. When his house was wrecked in the earthquake a "Majestic" model 91 was on the premises. It was thrown completely across the living room and dragged the power pack behind it by the leads. When found all the caps were off and the set was full of bricks. On being connected to the temporary supply some time later, it immediately functioned. The valves, which are all of the same make, were not in the least damaged.

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Addresses and Addresses Wanted

"AIR BOY" (Timaru): 2AY, Charles Rice, Radio House, 610 Dean Street, Albany.
Would "Dink" (Helensville) please forward his address?
"Cockney" (Inglewood): 7LA, Wills and Co., Ltd., 7 Quadrant, Launceston.

Identification Wanted

ON Feb. 22 at 8 p.m., an American station heard almost on 2NC, Newcastle's, frequency. He announced "Telephone number 6988, neutral, Los Angeles, California." Newcastle then came in very strongly, and I could not get the call—"Doris" (Dunedin).

AT 12.45 a.m. on Feb. 4 I tuned in a station broadcasting two vocal items, and then the announcer said he would commence the morning session. I could only catch "—, Shenandoah," when he faded out and was lost. He came in directly on 1YA's frequency.—T.R.T. (Dunedin).

STATION, I think an American, operating on 950 k.c. (316 metres) heard at 8.15 p.m., N.Z. time. He remarked that it was two minutes past 12, Pacific time, and that they were signing off.—A.M.H. (Tirau).

STATION on 680 k.c. (441 metres) heard on Feb. 21 at 8 p.m. on orchestral items. Announcer then remarked: "You will now hear —." Another on 640 k.c. (468 metres) heard on the 21st. Announcer speaking, but 4YA's 8 p.m. chimes came in and prevented my hearing any announcements.—"Oscar" (Marton).

STATION operating on 315 metres (950 k.c.), heard at 9 p.m. on Feb. 23. I held him for 15 minutes, but no announcements were heard. At 9.5 p.m., "Invitation to the Waltz," by Weber, played by the Philadelphia Symphony Orchestra, followed by a chorus of sea shanties.—"Scion" (Timaru).

[Address required is KRLD, Inc., Dallas, Texas.—Ed.]

STATION heard about 8.30 p.m., Feb. 22, operating practically on 3ZC's frequency. Items included "Turn on the Heat." "Broadway Melody,"

and other hits from the "Broadway Melody" talkie.—"Big Bill" (Timaru).

ON February 27, between 8 p.m. and 8.30 p.m., foreigner on KGB's wavelength (approximately 222 metres, 1350 k.c.), which I took to be a Jap. No call was heard.—"Ocol" (Hawke's Bay).

AMERICAN station heard on February 23, at about 7.55 p.m. Volume fair, but static was too bad to decipher the exact call, and all I heard was "K, New York, on frequency 1320 k.c."—"Civic" (Cambridge).

STATION heard at midnight on February 23, on about 500 metres (600 k.c.). Two men were speaking in a foreign language, and after a pause of about



T. G. ROGERS
Whose Teatightful Tenor Voice will be heard from 3YA on March 13.
—Steffano Webb, photo.

three minutes at 12.15, one man continued. Static and the language prevented by picking up a call.—A.N. (N. Otago).

A. B. (Gisborne).—WJDX is listed as Jackson, Mississippi, not Missouri.—D.N.A. (Timaru).

STATION heard at 7.55 p.m. on the 7th, operating at 454 metres (660 k.c.). He closed down at 8 p.m. Would this be WEAF?—"Squeak" (Chch.).

JAPANESE station broadcasting on approximately 500 metres (600 k.c.) on the night of February 23. After listening to him for an hour at R7, speaker strength, he closed down, giving a call JOAK. Evidently he was relaying this latter station. Would this be one of the new stations Mr. Ellis mentions?—H. Walker (Bluff).

THE Melbourne "B" class station was the call 8—, Melbourne, heard below 2HD, Newcastle, is quite audible at times, but the announcer appears to be always in a hurry. California station on 2UW's frequency heard until late on February 22 on the following items: (1) "I Surrender, Dear," and a request from F. J. Wood for "Choo-choo, Bound for Better

News and Views of the D.X. CLUB

Times." 2UW's carrier on 267 metres (1120 k.c.) spoilt it.—"SG.V.4" (Otago).

HAS anyone heard a station giving the call 6AY (or perhaps 6KY) on 2KY's frequency? I heard announcements three times, but could not get locality. They closed down at 12 p.m., our time, and while on the air they were strongly heterodyned by presumably 2KY.—E.C. (Chch.).

STATION heard at 8 p.m., Monday, Feb. 23, on about 1340 k.c. (224m.). Bevis Williams and his orchestra played the "Blues." This was a gramophone record. Following this, "Song of the Islands" was played. Programme for the next day was then outlined, and station closed down. Another on about 1070 k.c. (280m.) was picked up at 7.25 p.m., surging badly. It was relaying the Athletic Clubs' Exhibition from the Washington Hall.—"Uncle Sam" (Hastings).

Stations Identified

W.R.D. (Morrinsville): Station which sounded like KEP, Santiago, California, was KGB, San Diego, California, on 225 metres (1330 k.c.). H.F.A. (Masterton): Call which you took to be WBEN was probably WEBM Chicago, operating on 389 metres (770 k.c.).—G.R.M. (Cleveland, S.).

"SCOTSMAN" (Whangarei): Station on 2ZP's frequency is probably KOA, Denver, Colorado, whose frequency is 830 k.c. (361 metres).—"Wireless Bug" (Raetihi).

"CANDIDAS" (Timaru): Station heard advertising International Oil Burner was WLW, Cincinnati, Ohio. The band heard is called the International Orchestra. On the 15th I also heard KRLD, Dallas, Texas, testing. Volume was excellent, but the carrier wave seemed to have a peculiar bubbling sound. Did anyone else notice this?—W.B. (Linwood).

"YANKEE" (N.P.): Station on 250 metres (1200 k.c.) was WOAI relaying KRLD. I heard him the same night and tried both stations, who were transmitting the same programme.—H. Walker (Bluff).

B.W. (Stratford): On two separate nights now I have heard a Jap on 590 k.c. (508 m.), closing down, announcing JOAK very slowly and distinctly. I have written asking why.—J.P.C. (P.N.).

"CANDIDAS" (Timaru).—WEVA, Richmond, Virginia, is on 270 metres (1110 k.c.). You have heard WOR, Newark, on 422 metres (710 k.c.). WSK (Nelson), WBZ, Springfield, and WBZA, Boston, both owned by the Westinghouse

E. and N. Co.), operate on 303 metres (990 k.c.). You must have heard the Springfield station relaying the Boston one. "Dink" (Helensville).—KHJ, Los Angeles, 333 metres (900 k.c.), is usually on organ sessions on other nights to 8.30 p.m., or thereabouts. He then closes down until 7 p.m. the next morning. N.J. (Masterton), WSUI, not WSAL.—R.J.R. (P.N.).

A.F. (Waverley).—Station heard on Jan. 21 was quite possibly JOFK, Hiroshima, who operate on 850 k.c. (353 metres).—Time in Japan would then be about 7.25 p.m., and you evidently tuned in during their talks and music session.—"Cockney" (Inglewood).

DX Topics

Jap Relays.

AT 12.30 a.m. on Feb. 23 I heard a lady singing from station JOAK. Some station must have been relaying the latter's programme, for I received him on 370 metres (810 kc.) and JOAK is on 345 metres (870 kc.).—"Red Bird" (Wellington).

Australian "B's."

THERE are 28 Australian "B" class stations at present in operation, and five more, namely, 2WG Wagga, 4CH Charleville, 4MK Mackay, 4TO Townsville, and 3BO Bendigo, are not on the air yet. Stations 2CA Canberra, on 285 metres (1055 kc.), 2MO on 226 metres (1325 kc.), and 2GN Goulburn, on 201 metres (1490 kc.), are only testing as yet at unscheduled times.—"Ketjo" (Invercargill).

THE following results were achieved on a short-wave two-valve set without using an aerial or earth. No screen grid valve is incorporated in the circuit. On Feb. 12, at 7 a.m. N.Z.T., station G5SW was heard announcing, "Good evening, everyone, this is G5SW, the short-wave transmitting station at Chelmsford, England, transmitting on a wavelength of 25.53 metres. We are now going over to London for our evening's transmission." The clock chimes and strikes 7 at 7 a.m. N.Z.T. Programme was then announced. Other stations received under similar conditions are W8XAL, W3XAL, 2ME, and "Radio Roma." On Feb. 16 from 8 to 8.30 a.m., using an aerial but no earth, I received WOO calling GLSQ.—N.C.G. (Oamaru).

An Error Acknowledged.

I STAND corrected before the multitude, "Dancing Lessons" it must be, so my little joke has crashed! (Sorry, "Radio Bug.") It would appear, in the light of later developments, to be quite an achievement to bring in WLW under the recent favourable conditions. Now we're getting personal.—H.M.S. (Dunedin).

ON Feb. 24 I received verification from 3GL Malop Street, Geelong, Victoria. They operate on 214.2 m. (1400 k.c.), and use 50 watts aerial output. They would appreciate any reception reports from New Zealand listeners. Although it is a pity that many

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of the New Zealand "B" stations have now closed down, it has somewhat cleared the air for those that desire to listen to overseas stations. On the 24th KGO California came in at about 8.5, and was held from 7.20 p.m. until 8 p.m., when he stated that it was 2 minutes past 12 S.P.T., and signed off.—"Wireless Bug" (Raetihi).

Second Doubting Thomas.

PLEASE allow me to reply to "W.B." Linwood. Writing under the heading "The Biter Bit" in your issue of 20th inst., "H.M.S.", Dunedin, is quite correct in correcting "Radio Bug" re dancing lessons from WLW, as this will also serve to correct "W.B." I receive this station regularly at excellent loudspeaker strength, and references are always made to the early morning exercises. Not dancing lessons. I hold a verification from WLW, in which Mr. J. L. Clark, of the Crosley Radio Corporation, verifies the remarks I made re their early morning exercises. If you cannot be convinced, call on me some time and listen to WLW on a real radio set. A/d waiting. G.F. (Port Chalmers).

A Powerful Russian.

I READ with interest a letter Mr. W. Peters received from Czechoslovakia. I wrote to a Russian station, RA14, operating on 820 k.c. (366 m.), 4000 watts, during November, but have no answer as yet. There is a Moscow station operating on 1450 k.c. (207 m.), with a power of 40 kw., which should be easily heard during this winter. The call is RA1. Did any DX-er hear CNRV recently on a special programme of dance music for overseas DX listeners? I logged this station in at 8.6 and found it very hard to separate from KTHS. CNRV, signed off at 7.25, New Zealand time. "Candidus" (Timaru): There is no such station as KRLD in Washington. It may be KRSC, Seattle, Washington, on 1120 k.c. (268 m.), but this station is on only in the daytime, with a power of 50 watts.—S. Ellis (Okato).

Logging Honolulu.

STATION 42P is operated by R. T. Parsons. Hours of operation: Mondays and Tuesdays, from 7-10 p.m.; Fridays, 7-11 p.m.; Saturdays, 6.30 to 7 p.m.; and Sundays, 4-6 p.m. and 6.30 to 9 p.m. Power, 50/100 watts. In the 1930 "Guide," KWK, St. Louis, Missouri, is marked as having not yet been heard in New Zealand. Surely someone has heard this station since then. I picked them up on the 22nd at about 8 p.m. KGR was received about the same time. [KGR now operates on a power of 1 kw.—Ed.] Is there a station KCMG, Honolulu? I picked this station upon the same night. At the time a Hawaiian troupe were playing several items prior to passing over to some hall to relay a dance session. Has anyone the address of this station?—"Inquisitive" (Motueka).

[Probably station KGMB, Honolulu Broadcasting Coy., Honolulu, Hawaii, operating on 1320 kc. (227m.), with a power of 500 watts.—Ed.]

I HAVE also just received a verification from JOAK, who sent me a photograph of their station together with a complete list of broadcasting stations in Japan. At 6.30 p.m. (Tokyo standard time) they hold a language course. DX-ers will stand more chance of obtaining verifications if they tune in at that time, for they will probably be able to understand what they are talking about.—"Cockney" (Inglewood).

New Loggings.

RECENT verifications include WKBH, WTIC, WCCO, and WFAA—J.P.C. (P.N.). I also received a verification from 12S on Feb. 4. This station shows a tendency to distort and fading is bad. New loggings include WABC, New York, 860 kc. (349m.), and KRFB, Columbia, 630 kc. (476 metres). Congratulations, Mr. Ellis.—R.J.R. (P.N.).

Particulars of KSCJ.

KSCJ, one of the associate stations on the Columbia broadcasting system, is operated by the "Sioux City Journal." It uses crystal control with 100 per cent. modulation and 2.5 kw. output power. It operates on 225 metres (1330 kc.). Congratulations to the DX Cup winner.—"Sioux" (Gore).

Multi-Valve DX Sets.

ON the 26th I logged KHJ, Don Lee, Los Angeles, California, on a frequency of about 900 kc. (333 metres). He signed off at 12 p.m. S.P.T., which is 8 p.m. here. Although static was prevalent, I managed to secure enough items for verification. I have read the DX competition with interest, but am impressed that the owner with seven or more valves to his set gets the "bun." Is this any encouragement to owners of sets with less valves?—"Wireless Bug" (Raetihi).

[As a matter of fact the competitor who came third with a log of 70 verified stations operated a five-valve B.D. It was also decided that at the commencement of the competition a small receiver handled well when using headphones was capable of quite as good DX work as the multi-valve a.c. receivers, which are sometimes rather noisy on distant stations. Your suggestion, quite a good one, was noted, and will probably be attended to after the publication of the "Radio Guide and Call Book."—Ed.]

Securing Jap. Verifications.

RECENT additions to my log are:—WJAK, Jacksonville, Florida; WOAL, San Antonio, Texas; TLA, Launceston; 2AY Albury; 3GL, Geelong; and 3KZ, Melbourne. Would any DX-er who has written to the Japs. please inform me if they take down items of interest when the announcer speaks in English, and at what time this language is used.—"Uncle Sam" (Hastings).

[Your log of over 50 verified stations in six months is quite a good one.]

Logging the Australian "B's."

MY heartiest congratulations to Mr. Ellis. Now we are off on the next competition, and it should make us all keen. I think that the Australian "B" class stations should be allowed to remain in the competition. I listened for two hours the other night to get the call of one station, and finally found it was 4BC Brisbane, who had shifted his frequency to 1140 kc. (263m.). I listened also to 6ML Perth, the following night, and heard his call once. It was the same with 3BA Ballarat, so if logging these stations is so difficult on a powerful set what must it be for the DX-er who is not so fortunate? I notice several reporting KRLD, Dallas, testing on the 15th, but nobody mentions the one thing which I thought was unusual. This was that the "Ambassadors of Melody Land," as broadcast from 2YA on Wednesdays, were performing. Re WTIC, Hartford, Connecticut, I heard him testing on his allotted frequency 1060 kc. (283 metres) and two or three times he remarked that they would change over to 650 kc. (461 metres). I followed him on both frequencies. Two nights after they were celebrating their sixth birthday. On the 27th I heard WMAQ, Chicago, on a test programme.—J.P.C. (P.N.).

From Japanese Stations.

SEVERAL listeners appear to be undecided as to the correct call of the Jap. operating on 610 k.c. (492 metres). He sometimes operates on 595 k.c. (505 metres). The first time I received him on the latter frequency was on November 1, 1930, when he gave the call JOAK. I have just received a verified report dated January 15 from the latter station, stating that the station I heard is a twin of JOAK. On 610 k.c. (492m.), I also received KGW, SAR, and KXRM. My latest American loggings are KJR, WMAQ, KVOO, KELW, and WOI and KMBC. The last three mentioned were testing.

I would like to thank Mr. Ellis for the description of his set, aerial and earth. Mine is similar.—R.A.S. (Manakan).

Congratulations, Mr. Ellis.

RECEPTION from American stations lately has been good. My latest are KGB, KDIN, and KDGX, the latter being listed as a 15-watt station. Congratulations to Mr. Ellis on winning that fine cup. He will have to look to his laurels, for all DXers will be keen to hold that for six months.—D.N.A. (Timaru).

American Radio Publications.

THROUGH the courtesy of the American Consul-General I have been advised of the following American official publications: "Amateur Radio Stations of U.S.A." current edition, 25 cents. "Commercial and Government Radio Stations of U.S.A." 15 cents. "Radio Service Bulletin" (yearly), 40 cents. The last named is the supplement to the list of commercial stations and contains many new calls, changes of power, wavelengths, etc. It is published monthly, while the main list is published annually. These lists may be obtained by application to the Superintendent of Public Documents, Government Printing Office, Washington, U.S.A. Remittances must



MR. S. ELLIS.

Who, because of his splendid log of 89 verified stations, has won the DX Cup. Mr. Ellis installed the Pierce Earth system some three years ago.

accompany applications, and except for the "Service Bulletin," one-third must be added to cover postage. Roughly, 1 dollar (4/2d), will cover the three.—"Cromdale" (Otago).

New Experimental Station.

D.W.H. (Masterton): A recent letter from ZL2XY, operating on 1120 kc. (268 metres), states that it is purely an experimental station at present. Aerial power 500 watts, 100 per cent.

modulation, 4 stage rack and panel type transmitter with two 250 watt valves in the last stage. They were coming in very well on the 17th and 18th. Address is Collier and Beale, 70 Ghuznee Street, Wellington. On Feb. 22 I picked up KDYL for the first time. I have received a copy of the book mentioned by "Screen Grid" Opanake, from WBBM, Chicago (389.4m.), and it was well worth having.—S.G.V.4 (Otago).

Mystery Station Identified.

"SWITCHES" identification of the mystery station on SAR's frequency is correct. After 2½ hours' patient waiting from 12.30 a.m. until 3.5 a.m. on Feb. 27, I definitely logged him as KZRM, Radio, Manila. Prior to SAR closing down the two stations were interfering badly. I am writing for verification. Can you give me his address?—D.McL. (Wellington).

[Station KZRM, Manila, would no doubt be sufficient.—Ed.]

Frequency Changes.

"CANDIDAS" (Timaru): The American station I mentioned recently should have read KRLD, Dallas, Texas, not KRLB. It comes in one deg. above 2ZF, Palmerston. M.S.'s (Ohura) set must be almost the same dial reading as my own, as I also received 2KY on 31 and 2YB on 17. I notice 7HO, Hobart, is now on 1YA's frequency; 3AR, Melbourne, has also reduced its wavelength by about 15 metres. 2MO is listed as being on 200 metres, but I receive him just above 3KZ.—E.C. (Christchurch).

3ZR, Greymouth.

THE following particulars were taken from the official card received from station 3ZR, Greymouth (using the amateur call ZL3CW). The transmitter used is a Hartley with a power of 50 watts. Australia has been worked on phones. Address is c/o M. E. Spiers, Secretary, 5 Cowper Street, Greymouth.

European Stations.

I AM by no means convinced that the European station on 279 metres (1080 kc.), has been correctly identified. There are far too many English names mentioned for a station operated in a foreign-speaking country. It must have a large English community around it. These morning stations are coming in strongly again and can be heard here best about half an hour before sunrise.—A.E.B. (Tangiteroa).

K.P.O. at Good Volume.

AMONG five Americans received at good strength on February 25, KPO was outstanding in volume. I also added KHJ to my log. Congratulations to Mr. Ellis. He deserves his win.—"Squeak" (Christchurch).

Answer to Correspondent.

"Ray Dio" (Shannon): Undue publicity of the wavelengths of the short-wave stations you inquire about is not encouraged by the P. and T. Department.

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Sitting in a sound-proof cab at the front of this moving sound projector, Frank Hetzel, the inventor, rode through the streets of New York City recently and spoke into a microphone. His voice was clearly understood by people thirty-five floors above him in the surrounding tall office buildings!

The device which enabled him to address the world in such stentorian tones is a powerful speech-amplifier unit, coupled to a new type of loud-speaker which imitates the action of the human throat and larynx, thus giving the same quality that enables a tenor to fill a large auditorium with a round, robust tone, yet without the least strain on the part of the singer.

Designers of the exponential type of loudspeaker are familiar with the fact that the action of the loud-speaker diaphragm sets up a standing wave in the horn, and that the horn must be quite long in order to compare favourably with the wavelength of the low bass notes. The action of the ordinary horn may indeed be compared to that of a man whispering.

The air, set in vibration by the vocal cords, transfers the sound through the throat and the mouth, and the quality of tone is controlled by the placement of the mouth and tongue.

But to produce a large robust tone capable of filling a large room, the words must be voiced—more air must be forced out by the pressure of the diaphragm, so that the air all about is set in motion.

This principle is the secret of this loudspeaker's huge volume. The air, set in motion by a powerful air compressor, is controlled by a set of "vocal cords," which impress upon the moving air column the vibrations of the sound impulses originating in the speech amplifier.

The sound is thus literally blown out of the loudspeaker, instead of merely setting up standing waves in the horn, and the resulting disturbance in the air carries over great distances.

The huge instrument, built at a cost of £3000, by Hetzel Brothers, automobile brake engineers, of Los Angeles, California, was intended for use in publicising their business. However, a flood of inquiries from interested business men make it seem probable that eventually the device will be commercialised.

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Pierce Earth System Effectiveness Questioned

A GREAT amount of attention has been focused on the Pierce earth lately. In fact, Mr. Pierce is quite a personality of importance in New Zealand radio matters. Many of the older readers will recall the first description of his earthing system published in our issue of March 30, 1928. Since that time it has been applied by numerous enthusiasts with varying results.

Following the publication of the original article there was such a wave of interest that the "Radio Record" sponsored a competition to find out if the earth was really having an effect on reception. The result has had its sequel in the recent DX competition, for the prize was won by Mr. Ellis, of Okato, who only last week carried off the DX Club honours and was accorded the position of DX king.

In his letter describing the improvement brought about by the system, Mr. Ellis remarked: "Before installing this earth I could get 2FC's carrier wave only at mid-day, and now I can bring it in quite clearly on the phones. I could not get an American station till I adopted this earth, and now they come in one after another when conditions are good." Mr. Ellis was allowed 69 American stations in the DX competition.

On the story of the original installation we shall not dwell. It will be sufficient to say that it was first used by an American enthusiast, Pierce, who achieved great results with it in the early days of radio. His experiences were published in many journals and aroused tremendous interest. Later measurements were made to justify or disprove the statements, and we shall refer to their findings later.

The essence of the system is shown in the accompanying illustration. Outside the window the wire from the set joins a binding post from which twelve wires lead to twelve pipes driven in the ground. Pierce said that each new pipe added to the volume, increased the selectivity and reduced the body capacity effect. So he added one after another. A leaky motor

radiator was sunk in the ground, at the end of the row of pipes, with its cap just above the surface of the earth, so that water could be poured into it. The ground clamps on the pipes were kept bright, and Pierce added that he put new ones on every few weeks.

That, in brief, is an account of the Pierce earth system. As we remarked earlier, many have tried it and found that reception improved. Others have probably installed it to no purpose.

We referred a few moments earlier to measurements. They showed fairly conclusively that a system of multiple earths was of little use unless the pipes were well separated. The following is an extract from a paper read before the American Bureau of Standards:—

"The diameter of the pipe employed for an earth tube is of no importance. Neither is it of any benefit to drive a number of pipes in close proximity.

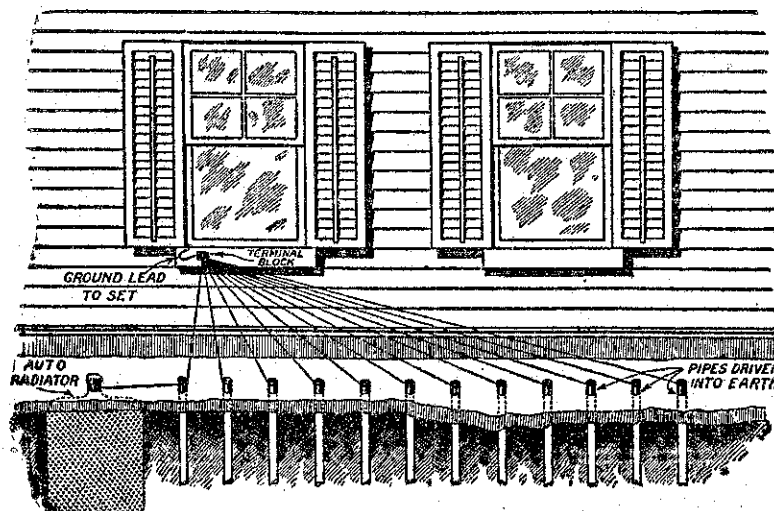
"If two or more pipes are driven 6 to 10 feet distant from one another, however, the resistance decreases almost in proportion to the number of pipes.

"This practice is only worth while, though, where an unusually low earth-contact resistance is required or where the soil is dry, sandy, or gravelly.

"The necessity for separating the two or more pipes forming the earth contact arises from the fact that the earth in immediate proximity to the first pipe driven is already carrying a dense current.

"If another pipe is driven into the field of this current, the immediately adjacent earth can obviously not pass appreciably more current and distribute it further afield. The second pipe must be driven outside the dense field from the first pipe, and it will then be able to play its proper part in the distribution of the current over a large cross-sectional area of the earth."

Here we are again, the old controversy of theory and practice. Let us reopen it. What do listeners think and what is their experience?



The Pierce Earth System.

Laboratory Jottings

The Jensen Speaker

MESSRS. Fear and Company have sent a concert model Jensen Dynamic Speaker for test. It is smaller and lighter than the usual dynamic speaker, but it is nevertheless thoroughly efficient. A ten-inch cone is employed, and this is fastened to a supporting ring of moulded one-piece construction. The flexible material allows for ample movement and yet holds the cone firmly. The centring device is of a design which is robust enough to stand up to fairly hard work without sagging to cause rattling.

The pot magnet has been reduced to very small dimensions on account of the new material being used. The model we tested was worked directly from the A.C. mains, and used with a 280 Arcturus rectifier. The concert model is designed for ordinary power output supplied by 245's single or in push-pull or in the Loftin-White. It supplies an undistorted output sufficient for the average large room, and might even be used in a very small hall, although it is not designed for this purpose.

Our tests were carried out with the Loftin-White amplifier and constant frequency records, the speaker being used behind a fairly large baffle. We found that the response from 75 to 7000 cycles was fairly constant—slightly more so than our standard. At the extremes there was a fairly sharp cut-off, but actually we could get notes of 45 and 8000 cycles through fairly clearly. Tested on ordinary records the added brilliance due to the strong treble reproduction was apparent. It is very pleasing after to find that this speaker reproduces music with some semblance of upper register fidelity. The speaker when used with a standard amplifier, such as we have previously mentioned can be relied upon to give really first-class reproduction.

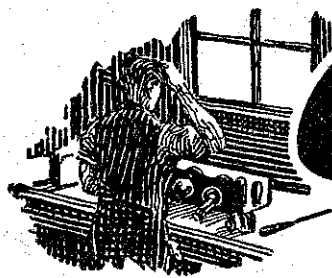
This speaker has been used in quite a number of the American and British receivers we have tested.

Useful Hints

WHEN joining up a flexible wire to the terminal on the top of the bulb of a screened grid valve, remember that the thread on the nut should not be strained by tightening with pliers, as a good finger-tight connection is quite satisfactory.

DO not destroy the leaflets and instruction charts which you may get from time to time when purchasing components. Use a drawing-pin to hold them all inside the lid of the set, where they will always be easy to find and may prove invaluable if you decide to alter the circuit in some way.

WHEN a fixed condenser is connected in series with a variable condenser used for tuning, to reduce the tuning range, the law of the tuning scale will be altered and a "straight-line" condenser will be thrown out of the straight line condition by such a connection.



Questions and Answers



O.I. (Christchurch): What are the capacity of the following midgeet condensers; one with seven plates and the other with eleven?

A.: Probably .000025 and .000035.

ELECTRODE (Invercargill): I have a B.D. set which has lately developed rough tone. I have tested valves, speaker, batteries, etc., but the set continues to behave the same. I am using two PM4's in the audio stages, with 45 volts on the first audio and $4\frac{1}{2}$ volts grid bias.

A.: You say the roughness has developed only lately. This is hard to understand because from the combination of valves you have it should have been rough always. You should not use a power valve such as PM4 in the first audio. Use PM3 or PM4DX. The bias of 45 volts should be only $1\frac{1}{2}$, but why put the full 90 volts on the first audio biasing it with three volts. This would be ample for the first audio stage. Where was your coupon?

FAD. (Turua): I have a five valve American receiver, and would like to know the correct valve combination.

A.: You could use four 221A or 201A valves. The former are the better, but they are rather difficult to obtain. As for the power valve you can use one of the 171A or B605 type.

MARSITE (Te Aroha): I have constructed a powerpack with a core of 1.5/8 square. I designed it for 250 volts, rectified and smoothed, for it has 2200 secondary turn centre tapped. My voltage seems rather high.

A.: Yes, we think it would be about 800.

2. Is the low number of primary turns (720) accountable for the hum?

A.: No, you are using the correct number of turns for the sized core.

3. When testing the transformer without load, hum was inaudible until the right ear was placed within a few inches, but when placed in a metal case

with the rectifier and smoothing choke the hum can be heard all over a large room.

A.: It seems as though there is a loose lamination or some loose metal about the transformer. How does it go when on load? It should not be operated in anything but a low condition.

4. Will you be bringing out an all-wave electric set in the "Guide"?

A.: There is a shortwave all electric set, but specifications will be given for broadcast coils.

5. When will the "Guide" be out?

A.: The middle of March.

6. Could the L.W. Three be converted to an all-wave set?

A.: As far as we know, no. It is not suitable for high frequency work.

7. What adjustments do you think necessary to change my powerpack over to the L.W.?

A.: It would be suitable if used with half-wave rectification.

C.H.W. (Invercargill): When will you publish details of the Differential Four?

A.: It will be a few weeks before we can find space for it. Our programme, as far as we can see for the present, is: Next week, the conclusion of the "Pendote" article; the week following, the "Kestrel Three"; then some more crystal circuits, with probably the powerpack for the Home and Country Portable or the Differential Four the following week.

2. Do you think it worth while scrapping the B.D. to build the Differential Four?

A.: It is very questionable. The Differential Four would, of course, give you all-wave reception and would not need neutralising on account of the screen grid. Furthermore, it employs a smoother control of reaction and has the advantage of the lift given by the s.g. valve.

3. What method of coupling will be employed between detector and r.f.?

A.: In all probability air-core transformer.

4. Will the set radiate?—No.

RECORDITE (New Plymouth): Can you tell me how to neutralise the "King" neodyne model 25?

A.: In the centre of the chassis are two cartridge-like condensers. On these is a seal which you must break and then adjust the handles until the set is neutralised. Actually, to carry out the neutralisation process, you must tune to a strong station and then shut off the element current to the r.f. valve nearest the detector. Move the neutralising condenser nearest this until the signals are weakest, then re-light the filament and dim the filament of the first r.f. valve, repeating the process with the neutralisation condenser nearest it.

NOTE.—Would correspondents, when referring to previous correspondence, kindly re-state their problems. In this case we are not quite sure if the question asked was the method of neutralisation. If there are any others, would the correspondent please communicate with us again?

W.D.A. (Inglewood).—My dynamic speaker has recently developed a serious rattle.

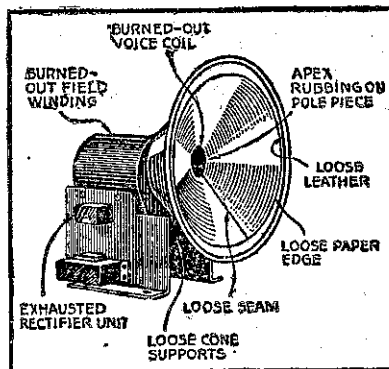
A.: It appears that the centring device has become limp or out of alignment, and the voice coil is touching the permanent magnets. You probably will not be able to rectify the trouble yourself. The diagram shows some of the points in which trouble may occur.

2. My aerial is 70ft. high and 150ft. long. Would I get better results by shortening it?

A.: In all probability, yes. It is too long. Try the effect of a .0001 fixed condenser in series with it.

3. My set is an all-wave four-valver, using C603 as a power valve. Could I obtain a better combination?

A.: B405 would give you a greater lift and handle all the volume you require.



MISTIFIED (N.P.): Is it possible that an all-wave set may work well on broadcast and very poorly on short wave?

A.: Yes, quite possible. An all-wave set is either designed for maximum efficiency on either short or long wave and rarely gives maximum efficiency in both directions.

2. Do you think locality would have this effect?

A.: Locality has a big influence in reception of both short and long waves, but whether this is your trouble is another question.

3. Can you tell me if my make of receiver is suitable in New Zealand, and do you think the Differential Four would be better?

A.: From what we have heard your set should give quite good results, but we are inclined to favour the Differential Four.

CAMERA (Hastings): I took my commercial receiver apart and constructed the Night Hawk Two. Is it necessary to have my license changed to that name?

A.: Not until you renew your license. 2. There is a very pronounced buzz in the phones.

A.: We suspect your transformer, for though it is brand new it is of an unusual make.

3. The transformer has the following markings: Pl.P2. secondary, and Pl.P2 primary.

A.: That does not give us a great deal of indication. The secondary terminals are G and GB, while the primary are P and B+, but which is which we do not know. Connect them up and reverse them if results are not quite as they should be.

N.D.B. (Tolaga Bay): Are the secondaries of the r.f. transformers wound with 26 or 24 gauge wire?

A.: Either, but 26 is the more usual. 2. The sketch of the regeneration coil places some terminals on top, the article on the bottom. Which is correct?

A.: It has been shown on the top in the sketch merely for clearness. We would have had a fine old jumble had they all been put at the bottom and half the bottom broken away to show the primary coil. You could quite easily leave them on top and carry the leads down to go underneath the set.

3. Can 32 gauge wire be used for both primaries and tickler?—Yes.

4. What diameter and height are the coil shields?

A.: $4\frac{1}{2}$ in. diameter and $4\frac{1}{2}$ to 5 in. high.

5. I suggest building my set mounting the valves horizontally and using inter-stage screens. Will it be necessary to shield the coils?

A.: No, unless oscillation trouble is encountered.

6. Is the L.W. still king of amplifiers and how is it that it is not more used on commercial sets?

A.: It is still the best amplifier. It is not used on commercial sets because of patent rights and secondly because it is fairly solid on the output valve. This valve is called upon to operate for some seconds without grid bias.

7. I have two 222 valves and am doubtful about their efficiency. What is the usual test?

A.: Connect them up with grid bias, and see if the plate current is as specified by the manufacturers. The application and shorting-out of the grid-bias battery would cause a swing over several

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

Name of set

Number of Valves

Name

Address

.....

.....

Nom de plume

To be kept in subsequent inquiries.

Date

Please Note:—

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

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

Are You in Difficulties?

50 per cent. of Radio Troubles are due to defective components and further trouble is brought on by inexperience.

If your set is not satisfying you, send it for overhaul. We pay carriage one way.

Higher postage rates do not affect our terms. We pay postage or railage in the case of heavy parcels.

—THE—

C.A.S.

(Country Accessories Supply)

29 VENTNOR STREET, SEATOUN, WELLINGTON.

milliamps. The exact number can only be obtained from the valve curves, but they are not easily obtained for your type of valve. Connect the screen voltage as shown on the valve maker's specifications.

8. What would be the total plate consumption of the Tongariro Portable using two volt valves? Would the efficiency and plate consumption be increased greatly by using four or six volt valves?

A.: Neither efficiency nor plate consumption would be greatly increased by using higher voltage valves. The total plate consumption is about 10 m/as., but you could check this up for yourself quite easily.

9. Which superhet. short-wave converter is the best to construct, your own, "Radio News," July, or Q.S.T., July?

A.: We do not know anything about those described in the overseas magazine, but their circuits are, of course, quite sound and there is no doubt that they will work well. We have tried the "Radio Record" one and there are no complaints to make, so we presume you would be safer to follow our directions.

A.J.J. (Ongarue): When I was buying the components for my set I was told that amperites were not necessary.

A.: If the voltage of your "A" supply is equal to that of the valve you are using, an amperite is not necessary; otherwise it is. Sometimes it is used to provide bias for a s.g. valve.

2. On some evenings there is a gurgle

in the speaker like a man with a bad cold. Can this be put right?

A.: It is difficult to explain why it should be present some nights and absent others. We suggest that you test your battery, your valves, or it may possibly be due to a defective grid-leak.

3. I connected two coils of my crystal set in parallel. One had 40 turns and the other 80. This quite doubled the volume.

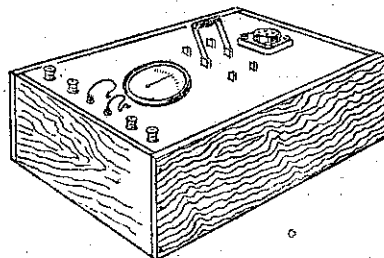
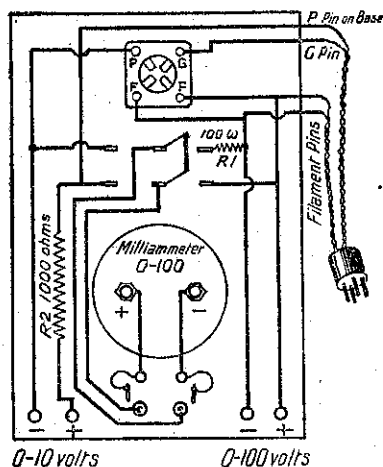
A.: It is not that you have come across a new circuit, but your first coil did not have the right number of turns, and the addition of the other one brought the total inductance to what it should be, or thereabouts. You would get the same result if you removed the 40-turn coil and varied the tapping to the crystal until you got good results.

4. Could I turn my all-wave set into a screen-grid one or would it be better to rebuild it?

A.: It would be better to rebuild it along the lines suggested in last week's "Radio Record," or to the design of the "Kestrel Three" which will appear shortly.

P.T.W. (Dunedin): I have a 0 to 100 milliammeter and wish to make a valve tester.

A.: This was fully described in the "Radio Record" of February 1, 1929. We reproduced a sketch of the hook-up to



Valve Tester—1.

the milliammeter showing how this is accomplished. The second sketch shows a suitable connection when not using the set supply. Test the valve by switching in and out the grid-bias and check up the difference by the valve maker's curve.

2. Would a six-volt accumulator be of any use?—A.: Yes.

3. In what leads should I place the milliammeter?

A.: As shown in the second sketch. 0-100 is a little too big, however, for this test, and you cannot get a true indication of a valve's efficiency with so small a scale. The valve is tested by duplicating the conditions set out in the makers' list or in tables and comparing the milliamperage with the anode current shown for the particular voltages used.

T.F.P. (Lower Hutt): Where can I obtain particulars for valve base coils for my Cossor Melody Maker?

A.: You can make up the coils described for the "Differential One," but omit the primary coil and wind the sec-

ondary and tickler upon an English base, watching that you bring the wires out to the correct pins. You will have to check up on your circuit for this.

2. The aerial has 50 turns and the secondary 60.

A.: In the case of the screen-grid valve you will need a primary and secondary as described in the "Radio Record" without tickler. Use a .0001 mfd. condenser in series with the tuning condenser to reduce the capacity to a suitable value.

"TWENTY-FIVE" (Wellington): Does a wave-trap decrease signal strength?

A.: Not if it is well designed. An up-to-date one appears in the "Radio Guide" to be published shortly.

2. What valve should I use for my five-valve neutrodyne?

A.: Four 201A type or 22's and a 605 type power valve.

3. How long should the earth wire be for efficiency?

A.: It should be as short as possible and in any case not longer than 6ft.

WIRELESS (Dunedin):—Is the one-valve set in the "Guide" superior to the differential one?

A.: No; the differential one is the best we have yet brought out.

2. Is it possible to make it into a two-valver?

A.: Yes, by using a transformer and another valve.

3. When I have the tuning condenser full out and the reaction condenser in, the set howls. Why?—A.: It is oscillating.

4. Would a fixed condenser across the phones make any difference to reception? Yes. If the condenser is large enough, it will cut off some of the higher frequency and give a lower, weaker tone.

5. Is it possible to incorporate a filter condenser in the set?

A.: Is it not worth while, when running a two-valve set.

SNEDDO (Whangarei):—Where can I procure the necessary transformers for a Bremmer Telly set?

A.: You could use good 3½ to 1 transformers, as you will probably have considerable difficulty in obtaining the ones you mention. You would need to use good transformers with an AF5 in the 1st stage. You are, however, taking a big risk in using three transformers, as it is very difficult to get them working correctly. Are you quite certain your transformers are not impedance-capacity units?

2. Is it possible to design a stage of r.f. to give a constant gain over 200 to 500. metreband?

A.: A relatively constant gain has been achieved by some of the better commercial receivers, though it is almost impossible for a home constructor to do this.

3. Which gives a better coupling over the whole musical scale—a choke condenser output filter, or an output transformer of a 1-1 ratio?

A.: The transformer is generally considered to be the best, but it should be matched to the speaker in use and not chosen haphazardly. Look out for our article on matching in the 1931 "Guide."

IMPROVEMENTS (Pahiatua): Is it worth while to convert my factory-built set into the Outspan Five?

A.: The Outspan Five would give a far greater pickup than your own set. You would probably have to purchase a large number of extra parts. Take stock of your own set before you pull it to pieces, and then you can decide if it is worth while making the alteration.

2. What is the method of neutralisation employed in the accompanying circuit? Has it any advantages?

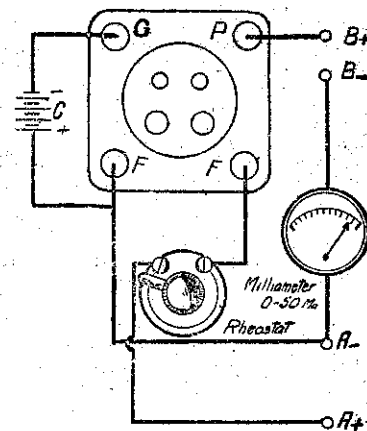
A.: It is not a standard measure, and we have not encountered it before.

3. What is the capacity of a variable condenser with 21 plates?

A.: If the plates are large it is a .0005, if they are smaller, it is a .00035. Probably it will be a .0005.

4. Could I employ differential reaction on the set as it is?

A.: In all probability, yes. Wind the 25 turns on a 2½in. former, using 30-gauge d.s.c. wire, and slip it inside the 3in. former of your detector coil so that the turns are under those at the grid end. Then make the connections shown in our diagrams.



A Simple Valve Tester.

Valve Tester—2.

5. What value rheostat must I use to control the volume by dimming the filaments of the first two r.f. valves, which are 221's?—30 ohms.

6. Is there a better method of controlling volume?

A.: For your set, no.

7. What is the output of B605?—37 watts.

8. What is a suitable screen grid valve for use with the Outspan Five?

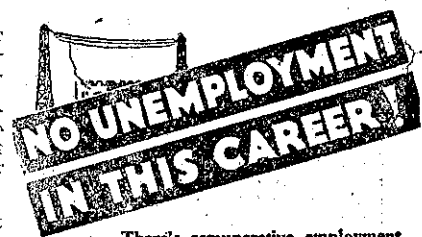
A.: There are several which will do quite well. We noticed that those firms who advertised with the article quoted several valves which are quite to be recommended.

A.B. (Petone): Can I use .0005 variable condensers for the Night Hawk?

A.: Yes. Wind about 10 turns less on the broadcast secondary coil, five turns less on the primary, and leave the tickler the same. The short-wave coils need not be altered.

NOLLITE (Pio Pio): I intend to build a foundation set, but I do not wish to spend too much at the present time.

A.: Try the Differential Two or Three laying it out as described by "Cathode" in the recent series so that a fourth stage



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LOOK AT THIS LIST:—

- "Practical Radio Construction and Repairing," by Moyer and Westral, 15/6.
- "Sound Pictures and Trouble Shooters' Manual," by Cameron and Rider, 33/6.
- "Radio Times" (English weekly), 4d. per copy.
- "Radio Retailing" (U.S.A.) monthly, 1/9 per copy.
- "Radio Manual," by Sterling and Kruse, 26/.
- "Practical Testing Systems," by Rider, 6/3.
- "Worked Examples of Electrical Technology," by Peasgood and Boyland, 18/.
- "Radio Physics Course," by Ghirardi, 14/.
- "Radio News Handbook, 1930," 2/9.
- "Radio News 1001 Radio Questions and Answers, 1930," 2/9.
- "Radio News 101 Hook-ups," 1/9.
- "How to Electrify Your Set," by Osgood (U.S.A.), 1/9.
- "The All-Electric Receiver," by "Listener-In" Publishing Co., 3/6.
- "Radio: A Study in First Principles," by Burns, 11/.
- "Mathematics of Radio," by Rider, 10/6.
- "Radio Operating Questions and Answers," by Nilson and Hornung, 14/.
- "Radio Amateur Handbook" (Handy's) latest edition, 5/3.
- "Radio Amateur Call Book" quarterly, December, 1930, 5/3.
- "Theory of Radio Communication," by Filgate, 12/.
- "Principles of Radio Communication," by Morecroft, 41/6.
- "Elements of Radio Communication," by Morecroft, 19/.
- "Direction Finding," by Keen, 27/.
- "Radio Data Charts," by Beatty, 7/9.
- "Seeing by Wireless" (Television), by Ralph Stranger, 1/6.
- "Collins's Wireless Diary, 1931," 4/.
- "Thermionic Vacuum Tubes," by Van der Bijl, 26/.
- "Radio Receiving Tubes," by Moyer and Westral, 14/.
- "How Radio Receivers Work," by Roberts, 8/.
- "Radio Design," 1/- per copy.
- "Radio Engineering" (a monthly issue), 21/- per annum.
- "Projection Engineering" (monthly) 21/- per annum.
- "Wireless, the Modern Magic Carpet," by Ralph Stranger, 4/9 (favourably reviewed by Editor "Radio Record").
- "Radio Citizen's Call Book," quarterly, latest, January, 1931, 2/9.

Write us Now.

TE ARO BOOK DEPOT,
64 Courtenay Place, Wellington.

can be added later on. The three valves would probably give the main Australian stations on the speaker.

L. D. (Te Awamutu): My set howled loudly when tuned to a station, and when the volume was tuned, passed beyond a certain point.

A.: This is a case for a serviceman. It is probably a defective bias resistance in one of the radio stages. This might be a soft detector valve or a defective screen grid valve. These things can be determined only by testing.

2. When the pickup is attached it will not bring out the high notes of the record.

A.: This is due to the design of your set, and it can be overcome only by a special transformer used with the pickup.

3. How could I improve the selectivity of my set?

A.: Use a wave trap as is described in the R.R. this week.

CURIOUS (Timaru): Is a driving rod of a cone speaker made of brass or steel?—Usually brass.

2. How many turns for a 20 Henry choke?

A.: On a $\frac{1}{2}$ in. square core, 10,000 turns, a gap of .03 in., and 36 gauge wire.

3. Why must I have a laminated core?

A.: Undesirable magnetic effects are set up when the core is solid. These are reduced to a minimum by the use of a laminated core.

4. My aluminium panel is corroded—what can it be coated with to prevent this?

A.: Clean it with Brasso.

5. What gauge wire is used in loud-speaker coils?—40.

VALVES (Whangarei): What valves would give the best results in an American five-valve neutrodyne?

A.: Four 221's or, failing these, 201A's, and a medium power valve.

G. T. (Ngalo): Would a 66 R. unit or an inductor dynamic speaker be the better with the L.W.?—The latter.

2. Which is, in your opinion, the better of the two inductor dynamic speakers I mention?

A.: We do not know anything about them, having tested only the Farrand.

3. Is the Loftin Three selective?—No.

4. Can a 30 Henry choke be used for the output instead of a 1-1 transformer?—Yes.

5. I have some 36 wire. What would be the resistance of a choke?

A.: If you are using a 1-1 core with about 6000 turns the resistance will be approximately 350 ohms.

6. Can R3 in the tuner be entirely eliminated if B plus is taken from the centre tap of the 245?

A.: As far as the voltage is concerned, yes, though it may be necessary to incorporate a high frequency choke in this lead to prevent radio frequency current getting into the power valve.

HOOK UP (Mata Mata): Would copper shield cans be satisfactory for the coils of the Outspan?—Yes.

2. If 32 gauge wire is used for the primary, how many turns will be required?—The same.

3. Is there any advantage in using a larger differential condenser?

A.: A .0002 or .00025 are the best sizes for the Outspan.

4. What ratio output transformer should be used with a magnetic speaker?

A.: Usually a 1-1, though we give this subject full consideration in the 1931 "Guide."

5. Were Lotus Vernier dials used on the original?—No.

6. Is the following valve combination satisfactory: Two 8610, two 1610, and two M266 in push-pull?—Yes.

E. H. (Karori): Can the specifications for the 250 valve power pack described in the "Radio Record" some time ago be adapted for all-wave rectification?

A.: Yes, the 280 may be used by connecting the high voltage secondary one end to each plate and the centre tap of the filament winding (5 volts) as high tension positive.

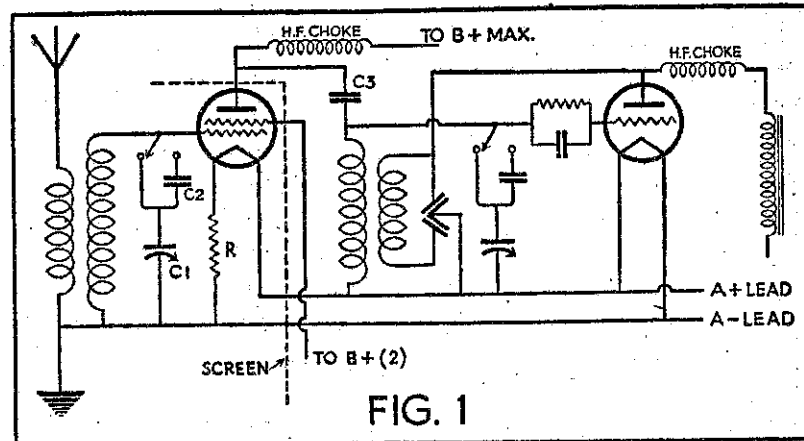
2. Can I use the 7.5 volt winding by taking off suitable tappings?

A.: Yes, the best plan is to use one centre tap for both and make the limits of the 5 and 7.5 windings on either side of this. This would not take away the efficiency of the pack.

3. What initial voltage would be necessary to obtain 250 volts rectified?—About 300.

4. Is a former $1\frac{1}{2}$ by $1\frac{1}{2}$ equal to a former 1 3-8 square?—Yes.

5. How many turns would be necessary on this former to give 2.5 and 7.5 volts?—12, 24 and 36 respectively.



Theoretical circuit of the "Differential Three." This was inadvertently omitted last week.

"ELECTRODE" (Ponsonby): Can I work a screen-grid valve with power detection straight into a push-pull stage? What is the value of the resonating condenser?

A.: About .25. The system should work quite satisfactorily.

2. Can I use a centre tap speaker direct into the output?

A.: It is not wise, especially with the big drain of 60 mills.

HAROLD (Dunedin): (1) Could you give full details as regards the Pierce earthing system?

A.: See elsewhere in this issue.

2. The shortest and most direct earth is the best. Is this correct?—Yes.

3. Is the size of earth immaterial? Will 7/18 insulated do?

A.: The bigger the actual contacting surface with the earth the better; 7/18 will do splendidly.

4. At what height must an aerial cross an iron roof so as not to be weakened by it?

A.: It has little effect above 20 feet.

5. At a distance of about $1\frac{1}{2}$ miles from 4YA, Dunedin, should a long aerial (say 130 feet) bring 4YA in the background of all stations received?

A.: No, with a selective set it should interfere only over twenty degrees, and be heard weakly over thirty or perhaps forty.

6. Will a microphonic valve always give trouble, no matter what stage it is used in?

A.: Rarely. It must be a bad valve to do this.

COUNTERPOISE (Christchurch):—I cannot place my hand on the "R.R." relating to the counterpoise earth. Would you repeat the information?

A.: A counterpoise is really a second aerial erected just far enough from the ground to be clear of all objects that are likely to encounter it. It must be carefully insulated as the aerial itself, and must be connected with the ground

Locating Interference Sources

NEW ZEALAND listeners whose reception is marred by interference will be interested to learn that an instrument which takes the guess out of trouble-hunting and accurately measures the quantity of electrical interference in micro-volts per meter has been developed by the General Electric Company of New York.

The new instrument is called a radio noise meter, and is not to be confused with meters made to measure noises audible to the human ear. This meter

the test results of different investigators; it gives manufacturers of electrical apparatus a means for measuring the amount of radio noise created by the apparatus. In addition, an invaluable method of obtaining data upon which fair and reasonable rules and ordinances may be based is provided.

Many municipalities, anxious to protect radio listeners from excessive electrical interference, have passed ordinances limiting "permissible" interference. The trouble, heretofore, has been to define "permissible."

The radio noise meter consists of two parts, a receiver unit to detect and indicate radio noise, and a calibrating unit to measure the intensity of the noise in micro-volts per meter, which is the customary unit of measurement of radio signals.

The receiver is enclosed in an aluminium box, and weighs thirty pounds. Six valves are used. The pick-up is obtained with a rod antenna, two meters long. Using the meter a radio noise corresponding to a field intensity of three micro-volts per meter may be measured. With the headphones it is possible to measure still lower noise levels. A search coil may be used to investigate noises around motor brushes, transformer ground leads, etc.

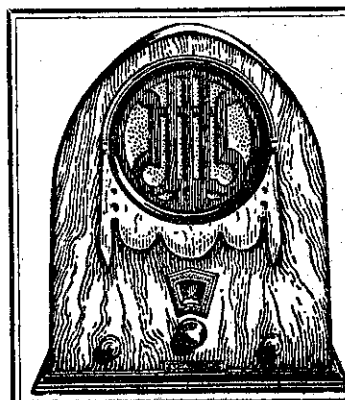
The calibrating unit is also enclosed in an aluminium box which is fastened to the side of the receiver, and it is so designed that the radio noise may be measured with any antenna that may be used with the receiver. The output of the calibrating unit may be varied from zero to 10,000 micro-volts per meter.

A feature of the instrument is the standard noise created, by means of which it becomes possible to measure the intensity of the interfering noise. Operation of the instrument consists in adjusting the intensity dial until the standard noise reads the same on the meter as the radio noise. The intensity in micro-volts per meter is then read from a curve. Switching from standard to radio noise is accomplished by depressing and releasing a key switch. The standard noise is obtained by alternately charging a network of small condensers from a dry battery and discharging into the antenna in such a way as to produce a noise that closely imitates the usual transmission line noise.

The portability of the instrument makes it readily applicable to tests in the field, in the home, or wherever the radio noise may occur. It is especially useful to measure radio noise on transmission lines, house-wiring, around distribution points, or electrical apparatus of any description.

RAGS (Cambridge):—I can tune Wellington at two places on my dial. Why?

A.: This second place is what is known as a harmonic—it is a wavelength half as long again as the original one, and is sent out by every transmitter. It is heard only from powerful transmitters, such as 2YA or one nearby.



LYRATONE 230 Volt A.C. Midget Radio.

Many quite good Midget Sets are imported into New Zealand—but how many have FOUR Screen Grid Tubes? and a total of SIX A.C. Valves? This is the secret of the great reception LYRATONE has attained. The secret too of its wonderful selectivity. Its price, complete with 230-volt internal transformer, and including all exchange risks, is still only £22/15/-. Order yours NOW.

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The Five Way Valve

The Pentode in Action

by

W. M. DAWSON

A.M.I.C.E., A.M.I.W.T.



NE of the greatest radio inventions is certainly the pentode valve, the appearance of which revolutionises receiver construction, and sets a new standard for quality of radio reproduction.

Being a special type, intended primarily for use as a power valve in radio sets and amplifiers, the pentode presents many advantages over normal valves. It was first designed and developed during 1926-1927 in the huge research laboratories of Philips Radio, where further outstanding improvements to it have since been evolved.

The Name.

THE word pentode is derived from the Greek word penta, five, hodos way, so its significance—five-way valve. The word "way" should be understood as an electrical term, being synonymous with "circuit." In fact, with a pentode valve there are five actual circuits associated with the valve. Not infrequently the word is spelt "pentode."

In a normal thermionic valve, there are three fundamental circuits with three different elements; the filament, the grid, and the plate. When the filament is heated electrically (by

means of an "A" battery or heating transformer) electrons are emitted, which being negative, are attracted by the positively charged plate or anode, and moved toward it, forming in this way the plate current. As the grid is placed between filament and plate, the stream of electrons must pass through its meshes, making it possible to control the electronic current by applying electric charges to the grid.

In common with the normal valve, the pentode has the usual filament, which is surrounded by the control grid on which is impressed the input signal voltage variations. Surrounding this normal control grid is another called the screen grid.

If the valve then contained only one more electrode (an anode or plate) it would be similar to the normal 4 electrode valve commonly known as the "screen grid valve."

The pentode does contain this anode or plate, but in addition it contains yet another element—a third grid, which is situated between the screen grid and the anode.

Before discussing in detail the advantages of the pentode, it is necessary to have an understanding of basic operating principles.

A clear conception should be had of the real difference between the func-

tions of the normal 1st stage A.F. amplifier, and those of the power valve.

The First Stage A.F. Amplifier.

THE first is purely a voltage amplifier, which raises the applied grid voltage, such as a step-up transformer does. However, a transformer, having a sufficiently high ratio to function without a valve would by no means give uniform or pleasing amplification. The normal first stage a.f. amplifier is then necessitated purely by the fact that the l.f. voltage supplied by the detector valve is insufficient to operate the power valve.

The Power Valve.

THE whole purpose of this valve is to translate the applied grid voltages into adequate anode current variations, so that the requisite amount of energy may be applied to operate the loudspeaker.

As modern usage decrees a relatively high volume of sound from the loudspeaker, it follows that the input to the power valve must be sufficient to produce this.

Fidelity of Reproduction.

THIS is an extremely important point, and put broadly means that all note frequencies occurring in speech and music (say, from 50 to 10,000 cycles per second) should be amplified equally, that there should be no distortion of the waveform, and that relative amplitudes are preserved at all signal levels.

It will be shown later how the pentode obtains its outstanding fidelity characteristics.

The Operating Principle of the Pentode.

IN the case of the normal three electrode valve, the electrons, liberated from the heated filament, are attracted at great velocity toward the anode, eventually striking it. Assuming no grid current to flow, the thermionic current equals the anode current.

Now, suppose the anode is of mesh construction; consequently its attractive effect is not large enough to gather all the available electrons on its surface, and a number of them shoot through the meshes into the space beyond.

If now there is in this particular space a positively charged plate connected to the same anode voltage, this anode will then collect the electrons which have passed through the meshes.

As the meshed element (actually the screen grid) is closer to the filament than the real anode, its effect upon

the thermionic current is much greater than that of the anode, and by special construction of the screening grid the influence of the anode on the thermionic current can be reduced to a negligible value.

As the amplification factor value is a measure of the relative (plate current controlling) effects of the control grid and anode, it follows that if the effect of plate voltage on plate current is negligible the valve must have a very high amplification factor.

Now Read Bob Horrobin's Bargains

2 only Pilot Tuned Radio Frequency Kits, 17/6 each. 1 set Binocular Coils, 9/- set. 27 Engraved Terminals at 4d. each. 1 Carter 2000 ohms Variable Resistance, 5/-. 1 Carter 10000 ohms Variable Resistance 5/-. 1 Centralab 2000 ohms Variable Resistance, 5/-. 15 only Potentiometers and Rheostats, 1/8 each. 8 only Pilot UX Sockets, 1/- each. 3 only Buffalo Phone Plugs, 9d. each. 100 Assorted Crystals, Hertzite and Galina, 3d. each. 2 Pilot Midget Condensers, 2/9 each. 1 Pilot 2 mfd. Condensers, 3/9 each. Assorted Pilot Gridleaks, 10d. each. 4 Coils, each 25ft. Celatsite Wire, 1/8 each. 2 Snap Terminal strips, marked, 9d. each. 17 Lissen Gridleaks, 10d. each. 7 only Muter S.P.D.T. Switches, mounted ebonite, 10d. each. 3 Balancing Condensers, 1/- each. Ebonite Cord Connectors, 9d. each. Ebonite Former, 3in. dia. 5in. length, 1/8 each. Pilot Variable Condensers, .0005, 4/6 each. other sizes, 3/6 each. .001 Variable Condensers, 2/6 each. Plain Dials, Black, 3in. dia., 3d. each. 3 Variable Gridleaks, 1/3 each. Red Diamond Detectors, 2/6 each. Royal 45-volt B Batteries, tested before you buy, 7/6 each. Bond 45-volt Upright B Batteries, 12/6 each. Royal 4½-volt C Batteries, tapped, tested before you buy, 8d. each. 4½-volt Flat Torch Batteries, 8d. each. 12 Plate Dual Ganged Variable Condensers, 3/6 each. Bakelite Valve Sockets, 8d. each. 5 Wire, braided, assorted colour Battery Cable, 9d. yd. 2 only 3 Gang 13 Plate Condensers, 8/6 each. 2 only Short-wave Coil Kits, 7/6 each. 1 only 5-Valve Regent Set, Philips Valves, 2 B and 1 C Battery, new, £7. 1 only 5-Valve Regent Set, bare, £4/10/-. De Luxe Battery Cables, 5 wire with large clips, 2/9 each. Carter and Pilot 6 ohm Rheostats at 1/3 each. Valve Cushions, protect your valves from vibration, 3d. pair. 1 Short-wave Adapter, 35/-. 60-Volt Vee Cee Triple Capacity B Batteries, 20/- each. Blue Spot 66 R unit with Dup. Chassis, 52/6 each. Postage free on orders of 15/-. Such low prices are only from

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Advantage of High Amplification Factor.

WITH three element valves, the energy supplied to the loudspeaker depends upon the plate voltage, and, in general, the higher this voltage, the greater the valve output.

It must be realised that the D.C. voltage on the anode of a power-valve is not equal to the battery or power-pack voltage, nor does it remain constant during operation, as there is invariably a "load" in the anode circuit of the power-valve.

When, therefore, under the influence of grid voltage variation, the anode current increases, the voltage generated across this "load" increases (voltage equals current multiplied by resistance) and it is of such phase relationship that it acts against the supply voltage, and the actual anode voltage is decreased.

Conversely, if the anode current decreases (control grid made more negative), the voltage drop across the load decreases, thereby increasing the effective anode voltage, and counteracting the decrease in anode current.

It will immediately be clear that this must have a very unfavourable effect upon the speaker energy supplied by the power valve, and that if this influence of the varying anode voltage on the anode current could be eliminated a much larger useful output would be obtained.

The Third Grid.

SO far the operation of the penthode is comparatively simple—there is, however, an important and unfavourable effect known as secondary emission, which must be taken care of, or the high quality of reproduction would be ruined.

This secondary emission is caused by the high velocity with which the electrons pass through the grids, and strike the anode.

There the greater part of their kinetic energy is converted into heat, but due to collision with the metal anode, other electrons (called secondary electrons) are "knocked off."

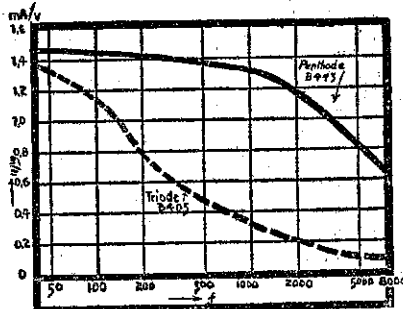
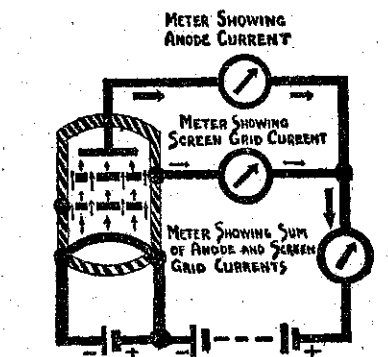
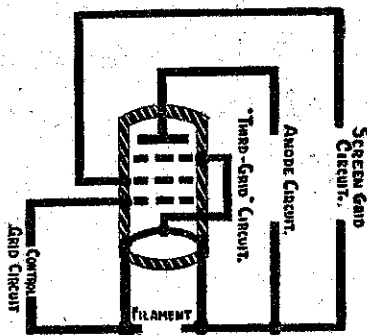
This secondary emission—which occurs also in normal valves—would not be troublesome were it not for the fact that at certain instants the screen grid is at higher potential than the anode, and as such times a stream of secondary electrons would flow from anode to screen grid, completely upsetting the normal operation.

In normal valves the grid is always at a potential so much lower than the anode that this does not occur.

In the penthode this secondary emission current is eliminated by inserting yet another grid (the third) between the screen grid and the anode. This third grid naturally is connected to the point of the lowest potential in the valve, i.e., the filament, and it thus screens the screen grid from the anode. Due to the fact that the triode difficulty of wastefully opposing voltages has thus been eliminated, it is seen that the penthode supplies a larger quantity of energy than a triode operating under similar conditions. This, however, is by no means its only advantage, for, in addition to increasing the quantity of energy, it equally improves the quality of reproduction, as will be evident from the following explanation.

High Internal Resistance.

THE sound volume produced by the loudspeaker is dependent upon the



Upper—Showing the five different circuits of the penthode valve. Middle—Some of the electrons are claimed by the Screen-grid, but the majority get through the meshes to the anode. Lower—Showing the advantage of the penthode. The steepness of the characteristic curve remains for various frequencies much more constant than that of the ordinary valve.

intensity of the alternating speech currents circulating through its coil.

The value of these circulating currents is determined by Ohm's Law (which states that current is proportional to voltage divided by resistance) applied to the anode circuit of the power valve.

As the total A.C. resistance in this anode circuit is composed of the internal resistance (impedance) of the valve, and the impedance of the loudspeaker, it will be understood that if one of these is variable as a function of the frequency (of the a.c. passing through it) the intensity of the speech currents will obey the changes in circuit impedance.

This is the case with loudspeaker impedance, which is low at low note frequencies, and may reach very high values at the highest audio frequencies.

If, therefore, the valve impedance is comparatively low, the varying loudspeaker impedance will cause large

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An Ejector for any Circuit

Some Amendments

A SLIGHT error occurred in the text of the original description of this very efficient wave trap and, although it was apparent to those who were conversant with circuits, it probably gave trouble to others. The corrected description should read:—

"On a good cardboard former which made from 2½ in. to 2½ in. in diameter and about 3 in. long, fix with glue, matchsticks without their heads. These should be from ½ in. to ¾ in. apart. Over this wind on closely and tightly about forty feet of 22 DCC. copper wire. This amounts to roughly 50 turns. Leave some 6 in. slack at each end after anchoring the ends to the holes in the former as shown. These ends will ultimately connect with the moving condenser marked "S" in the diagram. This is the secondary coil. Over the centre of the coil fix a band of tissue paper about an inch broad, and over this wind ten turns of 18 DCC. wire in the same direction as the secondary was wound. Anchor these turns as shown in the diagram and leave about 6 in. slack at the end. This is the primary coil marked "P" in the diagram. One end connects with the aerial and the other with the terminal of the set. The condenser should be fastened to a formica panel, the coils being placed in an oblique position to it when completed. Efficient soldering must be

variations in the total circuit impedance, so that at the higher note frequencies the current intensity is much weaker than in the middle or lower register.

This high note loss may seriously impair the quality of the reproduction, particularly as many transmitters and many receivers have already a marked tendency to suppress the higher note frequencies.

For real quality reproduction it is essential to faithfully reproduce the note frequencies from 3000 per second upwards, as the intelligibility of speech and the "colour" of music is so largely dependent upon their presence.

If we make the impedance of the valve very high compared with the loudspeaker at medium frequencies, the varying loudspeaker impedance will be a smaller fraction of the total impedance and thus exercise a relatively small effect upon the alternating current flowing through the circuit.

This is achieved in the penthode, where the internal impedance is of the order of 50,000 ohms.

(To be concluded next week.)

effected wherever possible, even to the set terminal if the ejector is to be a permanent connection.

In tuning, use both dials until signals are at the loudest. The interfering signal can be then trapped out; or again, trap out the interfering signals and tune in those desired with the dial on the set. A little practice may be necessary as this apparatus, if well made, is somewhat critical in using. By running X through a crystal detector, thence through phones and on to connection Y, or, better still, con-

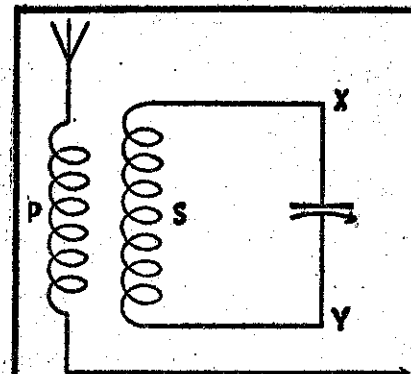


FIG. 1. To Aerial Terminal of Set

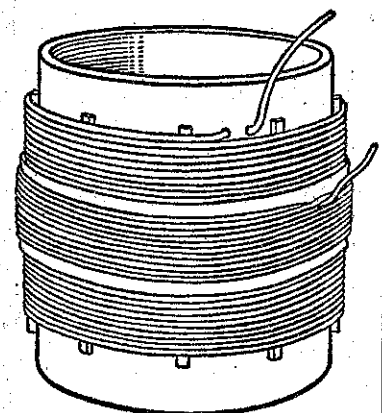


FIG. 2.

necting X and Y to a double point switch and wiring them as just said, reception can be had by either valve or crystal receiver at will. In this case the arrow point goes to earth. The trap will also smooth out rough signals, reduce static, and it also has improved both tonal and tuning qualities often enough. It does not diminish volume and the writer knows quite well it will solve many of the complaints from listeners that appear from time to time. This circuit does not assist short-wave reception.

For crystal work connect arrow point to earth.

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FEATURE PEEPS

... at ...

FUTURE PROGRAMMES

SUNDAY

Auckland Notes

THE divine service in St. David's Presbyterian Church will be broadcast. A studio concert will follow.

From Wellington

THE Rev. T. W. Vealie will be the preacher at Trinity Methodist Church, Wellington South, when the service will be broadcast.

A studio concert to be provided by Signor Lucien Cesaroni's Operatic Company will follow. The soloists will include the great virtuoso himself. The programme will comprise trios, quartets, and choruses, besides solos. One of three scenes from "Lucia di Lammermoor" to be presented will be the celebrated "Sextet."

Singers taking part in the programme will be Miss E. Standen, Miss Eileen Higgins, Mesdames D. Ardrey and H. Maplesden, Messrs. R. Trewern, R. Porteous, and G. Gray. Misses Mavis and Sheila Dillon (pianistes) will also be appearing.

Christchurch Features

THE service in the Holy Trinity Church, Avonside, will be broadcast. The Rev. O. Fitzgerald will be the preacher, with Mr. Arthur Lilly as organist and choirmaster.

The broadcast of an open-air concert to be given by the Woolston Band, under Conductor J. Estall, with Mr. David McGill (tenor) and Mr. E. A. Dowell (baritone) will follow.

From Dunedin

THE service in St. Paul's Cathedral will be broadcast. Canon E. R. Nevill will be the preacher.

A studio programme, to be given by the Kaikorai Band and 4YA artists, will follow. Mr. T. J. Kirk-Burnand, the conductor, has arranged a fine programme. "Lead, Kindly Light," will be played by Mr. Ira Coughlan as a cornet solo with band accompaniment.

MONDAY

Wellington Notes

The chief feature of this evening's programme will be the singing of Miss Cicely Audibert, who has been specially engaged to appear at all four stations. Her songs will be accompanied by the Orchestra, and will include "Wild Geese" (by De Leath) and "Messagero Amoroso" (by Buzzi Peccati).

The Ariel Singers have prepared a remarkably fine programme of quartets, trios, duets, and solos. The quartets will include "Vocal Pavan" and "The Keel Row," the trios, "A Song of Rest," and "Serenade." There will be two duets, "Il Bacio" and "The Mountain Lovers," and among the solos will be three fine Scottish songs sung by Mr. J. M. Caldwell. Mr. Gordon Short, pianist, will play "The Brook" and "The Musical Box," two intriguing numbers by Sauer. The orchestra will play a charming arrangement of "Russian Folk Songs" and other tune-ful numbers.

Christchurch Features

THE first of a series of talks on "Treatment and Care of the Feet" will be given by Mr. Frank N. Bird, an authority on the question.

The last of the Monday evening open-air concerts will be broadcast to-night. Next Sunday, the last day of Summer Time, will mark the last of the open-air concerts this year.

For to-night's concert the New Brighton Municipal Band has been engaged and will present one of their usual bright programmes.

Dunedin Notes

THE arrival of Lord and Lady Baden-Powell in Dunedin and the civic reception which followed at 12.30 p.m. will be broadcast.

A combination, known as "The Ambassadors," consisting of nine exceptionally fine artists will perform during the evening, playing ballads and the latest popular songs.

Miss Constance Poole, a well-known contralto in Dunedin, is to sing "The Poet's Life," by Sir Edward Elgar. Other numbers by this singer will be "All Through the Night" and "On the Banks of Allan Water." An artist appearing on the same programme is Mr. James Paterson, who will present Scottish humour. Supporting the Ambassadors on the instrumental side of the programme will be a piano novelty by Mr. Moore-Wilson and a saxophone solo by Mr. H. Aburn, a member of the band.

TUESDAY

From Auckland

MRS. LES. CRANE will continue her afternoon talk on "Beauty of Mind in Relation to Diet."

The concert programme will feature three half-hour recitals, the first being by Mr. Ralph Eskrigge (tenor), the second by the Orchestral Octet, and the third by Miss Kate Campion, late prima donna of the Carl Rosa Opera Company. From these two vocalists, who have not previously been heard from 1YA, listeners can rely on a musical treat.

Mr. Eskrigge is an eminent New Zealand artist, who has just returned from his successes in Sydney. He has a very extensive repertoire, and in his recital this evening he will give a selection covering ballads, operatic and classical numbers. The Orchestral Octet under Mr. Harold Baxter will also present a choice programme.



JEANNETTE BRIGGS

Who will sing in several Duets from Auckland this week.

—S. P. Andrew, photo.

MILDRED KENNEDY.

Well known at 2YA as the leader of a delightful Mandolin Band.

—S. P. Andrew, photo.

FEATURETTES

"Lucia di Lammermoor"

2YA, Sunday.

Cicely Audibert, Soprano

2YA, Monday.

Operatic Recital

1YA, Tuesday.

Nigger Minstrel Show

1YA, Thursday.

"The Price"

1YA, Friday.

"Tom Brown's Schooldays"

4YA, Dunedin.

"Eight O'clock Revue"

2YA, Saturday.

Wellington Notes

THERE will be the weekly talk by a representative of the Agricultural Department for the man on the land.

The studio concert will be of the popular type and of a very high standard. Featured on the programme again will be a recital of soprano songs to be given by Miss Audibert with orchestral accompaniment. Her numbers will include "Cherie, I Love You" (by Goodman), "Love's Cigarette" (by Fraser-Simson), "Where is the Song of Songs for Me?" (by Berlin), and "Farewell, My Love" (by Lehar). Mr. and Mrs. Ransom Myers will be heard in humorous duets, "Our Furnished Flat" and "Try to Make the Best of It."

The Salon Orchestra, under Mr. M. T. Dixon, will be heard in a number of interesting items, including the overture "If I Were King" (by Adam), a selection, "The Snow Maiden" (by Korsakov), a suite for piano and strings, "Ballet Piquant" (by Parker), "Bal de Noces" (by Burgin), "Canzonetta" (by Herbert), cello solo with orchestra, "La Cloche" (by Saint Saens), played by Mr. Stanley Chapman, "Morceau Wiegand" (by Burmester), "Serenade" (by Ern), and the latest dance novelties. Novelty instrumental items will be played by Mrs. Mildred Kenny's Mandolin Orchestra, and suitable records will intersperse the programme.

From Dunedin

MR. WM. WRIGHT, of the Otago Motor Club, will give one of the series of motoring talks. A reception to the Chief Guide, Lady Baden-Powell, by the Girl Guides of Dunedin, will be broadcast at 8 o'clock.

The Dunedin Tramways Band, under the direction of Mr. Chas. Morgan, will broadcast a programme not one item of which has yet been performed before the New Zealand public. Chief among them are "The Golden Age" fantasia by Greenwood, and a new arrangement by Rimmer, entitled "Classical Moments." Of additional interest will be a novelty entitled "Fairytale Parade," by the well-known Dunedin composer, Mr. Sharpe.



MR. CLIVE DRUMMOND
The Popular 2YA Announcer.

This little novelty is written somewhat in the form of the popular "Doll Dance" and "Flapperette," and will certainly become popular. There will be a cornet duet by two members of the band.

WEDNESDAY

From Auckland

"PHYSICAL CULTURE" will be the subject of a talk by Mr. Norman Kerr.

The Auckland Artillery Band, under Mr. Wynne Smith, will give a concert. Bandsman C. H. Bye will contribute a cornet solo, Bandsman F. Smyth a baritone solo, and Bandsman S. Fullerton a bass-trombone solo.

Wellington Notes

THE next of the series of overseas programmes will be broadcast. Dr. Guy H. Scholefield, O.B.E., will give a talk on "Matters of International Interest."

Christchurch Features

A VOCAL recital by Mr. Harold Prescott, tenor, will form part of the evening's programme. Mr. Prescott is one of the leading tenors of Christchurch and has sung for many musical societies throughout New Zealand. There will be orchestral accompaniment to his four songs: "Serenade" (Schubert), "Kashmiri Song," "Macushla," and "A Little Irish Girl."

Listeners will also welcome Mr. Rudie Petersen, well known in theatrical circles. He will contribute a humorous song and two old favourites, "Is Your Mother in, Molly Malone?" and "In the Pale Moonlight."

Dunedin Notes

AT 2.30 p.m. a relay of the Boy Scouts' and Girl Guides' rally on the occasion of the visit of Lord and Lady Baden-Powell will be conducted from Carisbrook ground.

THIS evening's concert programme is to be provided by the choir of the Trinity Methodist Church, under the conductorship of Mr. James Simpson. The choir, which will sing compositions by Schubert, Handel, Gregory, Sullivan and German, is one of the

best balanced combinations in Dunedin and is specially fortunate in possessing several fine soloists.

The Studio Trio will present selections from Donizetti, Godard, Chamade, Rubenstein and Haydn. Mr. P. J. Palmer, cellist, will contribute "Melodie," by Purcell.

THURSDAY

Auckland Features

A TALK on "Flour, Oatmeal and Other Cereal Products" will be given under the auspices of the New Zealand Manufacturers' Association.

An old-time nigger minstrel show will be featured by the 1YA Broadcasting Choir, and the following artists, Mr. J. M. Clark (interlocutor) and Messrs. Elton Black, Stan Asquith, Eric Waters, and Len Barnes (corner-men). Soloists will be Miss Audrey McDonagh and Mrs. A. M. Smith, with Mr. C. Thomas as banjo accompanist.

From Wellington

MISS I. F. MEADOWS will be the speaker for the afternoon talk.



C. L. RICHARDS
A Popular Christchurch Baritone.
—Steffano Webb Photo.

The studio programme will be given by the Wellington Artillery Band, under Captain T. Herd, and 2YA artists. The band will include in their programme the overture "Veronica" (by Greenwood); waltz, "Queen of Emeralds" (Greenwood); serenade, "Love Light" (Adams); fantasia, "In Cooland" (arr. Biddood); Irish ragtime, "Hooligan" (Beyer); selection, "Musical Snapshots" (Trenchard); waltz, "Wildflower" (Rimmer); and the march, "Prince of Smiles" (Louka).

The vocalists for the evening will be the Lyric Quartet and Miss Blanche Godier (contralto), a new-comer to 2YA. She will sing "This is the Island of Gardens" (Coleridge-Taylor), "A Blackbird Singing" (Head), and will also be heard in a concerted number with the Lyric Quartet.

From Christchurch

A TALK to farmers on "Some Aspects of Accounts," will be given at 7.30 p.m. by Dr. I. Weston, of Lincoln College.

The evening programme will be essentially of an operatic-classical nature, followed at 9.30 by a dance

session. Four of the studio violinists will play Tolhurst's "Anne Boleyn Gavotte."

The afternoon home science talk from 1YA, 2YA and 3YA will be on "Boys' and Girls' Clubs."

FRIDAY

Auckland Notes

AN entertainment in which will be included a short play, two stories by O'Henry and a musical fantasy will be provided this evening. The whole of the evening's performance will be given under the direction of Mrs. Zoe Bartley-Baxter. The O'Henry stories, which have been dramatised and arranged by Mrs. Baxter, will be "The Gift of the Magi" and "The Third Ingredient." The musical fantasy is based on a fairy tale by Oscar Wilde, arranged by Mrs. Baxter. The one-act play is entitled "The Price," and is from the pen of George de Olive Lowe.

From Wellington

MISS CICELY AUDIBERT will give her third recital this evening, singing to orchestral accompaniment the following songs: "Boat Song" (Ware), "Nymphs and Fauns" (Bemberg), and "The Dreary Steppe" (Grechanihoff), and "Robin's Song" (White).

The Orchestra, under Signor A. P. Truda, will supply the instrumental music for the programme. Mr. Eric Harrison (baritone) will be heard in four songs: "The Nightingale and the Rose," "Love's Sorrow," "Serenade," and "The Pine Tree." Mr. Stan Williamson, banjo virtuoso, will be heard in a number of solos, and Mr. William J. McKeon (humorist) will amuse listeners with: "Anecdotes—Original and Otherwise," "Peace and Riot," and "Pity the Architect."

Christchurch Features

A TALK on "Cross Country Running" will be broadcast by Mr. C. F. Jones, of the Baptist Harriers.

The concert programme will be light and bright, and of a varied nature. Miss Lucy Fullwood will sing "Break o' Day," "Comin' Thro' the Rye," while Miss Jean Johnson's contralto solos will be Bemberg's "Hindoo Song" and Sanderson's "Harbour Night Song." Miss Maisie Ottey, a clever pianiste, will give novelty numbers on the piano.

Dunedin Notes

FEATURED on this evening's programme will be the enactment of scenes from "Tom Brown's Schooldays." The occasion is the anniversary of the death of Thomas Hughes, the author of that fine and famous English literary classic. Scenes such as the departure of Tom Brown from London and his arrival at school, speeches by Brookes, the head prefect, and the soliloquy by Tom Brown upon his return to the old school, after an absence at Oxford, will be presented by Mr. McConnell and Mr. Lester Moller and Mr. D. E. Dall.

This book, which is to be found in almost every household in New Zealand, and also in nearly every household throughout the English-speaking world, is a book which can be read and re-read. The fine character Hughes presents in Dr. Arnold, the headmaster, is an inspiration to all. The recital will bring to memory others such as East, Arthur, Brookes, and Flashman. The vocalists on the supporting programme will be Miss Irene Hornblow (contralto) and Mr. Wilfrid Kershaw, a very fine bass. Instrumental numbers will be given by a trio, Misses Fraser, Moffatt, and Judd.

SATURDAY

Auckland Features

TWO new artists will be heard this evening—Miss Eileen Smithson (singer of popular songs) and Mr. Morris T. Schroeder (baritone, who will sing "Shipmates O' Mine," "North Wind," "Thora," and "An Emblem").

Mr. Robert McKnight, an exponent of the English concertina, will contribute several items. Miss Dorothea Ryan, pianiste, will play Rubinstein's "Valse Caprice," to orchestral accompaniment. A bright programme will be provided by the Orchestral Octet.

From Wellington

STATION 2YA will be on the air at noon, to broadcast results of the Wellington Racing Club's meeting.

This evening will see the welcome reappearance of Mr. Will Bishop's "Eight O'Clock Reves." This will be the first performance of the second series of grown-up children's hours, specially written and arranged by Mr. Will Bishop.

(Concluded on page 29.)

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Full Programmes for Next

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Sunday, March 8

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

- 3.0 : Selected recordings.
 3.30 : Literary selection, and further selected recordings.
 6.0 : Children's session, conducted by "Uncle Bert."
 6.55 : Relay of Divine Service from St. David's Presbyterian Church.
 8.30 : Selection—State Opera Orchestra, Berlin, "Der Rosenkavalier."
 Soprano—Mrs. Laetitia Parry, (a) "Ave Maria" (Schubert); (b) "Faith in Spring" (Schubert); (c) "The Young Nun" (Schubert).
 Instrumental—The Whisker Quartet, (a) "Menuet" (Boccherini); (b) "Serenade" (Schubert).
 Evening weather forecast and announcements.
 Piano—Mr. Cyril Towsey, (a) "La Plus Que Lente" (Debussy); (b) "Danse" (Debussy).
 Selection—National Military Band, "The Flying Dutchman."
 Baritone—Mr. A. B. Thompson, (a) "Nature's Music" (Montague Phillips); (b) "Old English Love Song" (Allitsen); (c) "John-
 een" (Stanford); (d) "The Bold Unbliddable Child" (Stanford).
 Instrumental—The Whisker Quartet, (a) "Norwegian Dance" (Grieg); (b) "Salut D'Amour" (Elgar).
 Choral—Marise Beaujon, M. Borden and Chorus, "Church Scene" (from "Faust") (Gounod).
 Instrumental—The Whisker Quartet, (a) "Le Cygne" (Saint-Saens); (b) "Barcarolle" (Palladino); (c) "Cavatina" (Raff).
 10.0 : God save the King.

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

- 8.0 to 4.30 : Afternoon session of selected gramophone recordings.
 8.0 : Children's song service, conducted by "Uncle George," assisted by the Children's Choir from the Roseneath Presbyterian Church.
 7.0 : Relay of Evening Service from the Trinity Methodist Church, Wellington South. Preacher: Rev. T. W. Veale. Organist: Miss Lillian Thawley, L.A.B. Choirmaster: Mr. W. McLellan.
 8.15 (approx.): Studio Concert by Signor Lucien Cesaroni's Operatic Company.
 8.15 : Selection—Columbia Symphony Orchestra, "Maritana" (Wallace).
 8.23 : Bass—Signor Lucien Cesaroni, "The Lute Player" (Allitsen).
 8.30 : Bass and chorus—Signor Lucien Cesaroni and Company, "Solemn Night" (Beethoven).
 8.34 : Piano—Miss Mavis Dillon, "Rush Hour in Hong Kong" (Chassins).
 8.37 : Baritone—Mr. G. Gray, "The Laughing Song" (from "Keolanthie").
 8.41 : Selection—J. H. Squire's Celeste Octet, "Operatica."
 8.49 : Vocal trio—Miss E. Standen, Mr. R. Trewern and Signor Lucien Cesaroni, "Holy Angel" (from "Faust") (Gounod).
 8.54 : Cello—Lauri Kennedy, "Hungarian Rhapsody" (Popper).
 8.58 : Bass—Signor Lucien Cesaroni, "The Vulcan Song" (from "Philemon and Baucis") (Gounod).
 9.2 : Weather report and station notices.
 9.4 : Selection—Band of H.M. Coldstream Guards, "La Source Ballet."
 9.12 : Tenor—Mr. R. Trewern, "In My Heart all are Equally Cherished" (from "Rigoletto") (Verdi).
 9.15 : Quartet—Misses E. Standen and Eileen Higgins, Messrs. R. Porteous and G. Gray, "Quartet" from Act 4, "Rigoletto" (Verdi). Introductory comment by Signor Lucien Cesaroni.
 9.22 : Piano duet—Misses Mavis and Sheila Dillon, "Second Rhapsodie."
 9.29 : Bass—Signor Lucien Cesaroni, "Elegie" (Massenet).
 9.34 : Three scenes from "Lucia di Lammermoor" (Donizetti).
 Tenor and chorus—Mr. R. Trewern and Company, "Hail to the Bridal Day."
 Sextette—Mesdames D. Ardrey and H. Maplesden, Messrs. R. Porteous, R. Trewern, G. Gray and Signor Lucien Cesaroni, "The Celebrated Sextette."
 Bass and chorus—Signor Lucien Cesaroni and Company, "With Warlike Minstrelsy."
 9.52 : Selection—Lucerne Kursaal Orchestra, "Orpheus in the Underworld."
 10.0 : God save the King.

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

- 8.0 : Relay of special service from Christchurch Anglican Cathedral on the occasion of the handing over by Lord Baden-Powell of the dedicated flag, a white ensign, from the Cenotaph, Whitehall, London, and presented by the British Boy Scouts to the New Zealand Boy Scouts. Lord Baden-Powell and His Worship the Mayor (Rev. J. K. Archer) will read the lessons.
 5.30 : Children's song service by children of Anglican Sunday Schools.
 6.15 : Chimes from the Studio.
 6.30 : Musical recordings.

- 7.0 : Relay of evening service from Holy Trinity Church, Avonside (Preacher, Rev. O. Fitzgerald; Organist and Choirmaster, Mr. Arthur Lilly, A.R.C.O.).
 8.15 (approx.): Relay of open-air band programme from a city band rotunda by the Woolston Band (Conductor R. J. Estall).
 March—Band, "Washington Greys" (Trafalla); overture, "Raymond."
 8.28 : Tenor—Mr. David McGill, (a) "Heart of Gold" (Manney), (b) "Land of Long Ago" (Ray).
 8.34 : Trombone trio—Woolston Trio and Band, "A Summer's Day."
 Medley—Band, "Famous Fragments" (arr. Hawkins).
 8.44 : Baritone—Mr. E. A. Dowell, "Gipsy Love Song" from "The Fortune-Teller" (Herbert).
 8.48 : Overture—Band, "Nabucodenosor" (Verdi).
 Humorous variation—Band, "Keel Row" (Rimmer).
 9.4 : Weather forecast and station notices.
 9.6 : Foxtrot—Band, "Appy Land" (Salmon).
 9.10 : Tenor—Mr. David McGill, (a) "If You Would Love Me" (McDermid), (b) "Roses of Forgiveness" (D'Hardelot).
 9.16 : Selection—Band, "Annie Laurie" (Rimmer).
 9.22 : Baritone—Mr. E. A. Dowell, (a) "The World is Waiting for the Sunrise" (Seitz), (b) "Hine e Hine" (Te Rangi Pai).
 9.28 : March—Band, "Boulder City" (Ord Hume).
 9.32 : From the Studio:
 Selection—Berlin State Opera Orchestra, "Polonaise No. 2" (Liszt).
 9.40 : Contralto—Marguerite Carlton, "God Shall Wipe Away All Tears."
 9.44 : Cello—Felix Salmon, "Kol Nidrei" (Bruch).
 9.52 : Choral—Don Cossacks Choir, "First Psalm of David" (traditional).
 9.58 : Selection—Philadelphia Symphony Orchestra, "Choral Prelude" (Bach).
 10.0 : God save the King.

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

- 3.0 : Selected recordings.
 5.30 : Children's song service, conducted by "Big Brother Bill."
 6.15 : Instrumental recordings.
 6.30 : Relay of evening service from St. Paul's Cathedral, Octagon, Dunedin. Preacher, Canon E. R. Nevill. Organist, Mr. E. Heywood, F.R.C.O.
 7.45 (approx.): Selected recordings.
 8.15 : Studio programme by the Kaikorai Band, under the direction of Mr. Thos. J. Kirk-Burnnand, assisted by 4YA artists.
 Overture—The Band, "Jessonda" (Spohr).
 8.27 : Bass—Mr. F. E. Woods, (a) "From Oberon in Fairyland" (Slater); (b) "Crossing the Bar" (Gower); (c) "The Sea Road" (Wood).
 8.37 : Cornet with band—Mr. Ira Coughlan, "Lead, Kindly Light" (Sullivan).
 March—Band, "Stars and Cross" (Lithgow).
 8.46 : Mezzo-soprano—Miss Winnie Collier, (a) "The Flight of Ages" (Bevan); (b) "At Eventide" (Loewe); (c) "Life is a Caravan."
 8.55 : Piano—Mrs. C. Drake, "Berceuse" (Chopin).
 9.0 : Weather report and station notices.
 9.2 : Selection—Charles Ancliffe and His Orchestra, "Ancliffe Waltzes."
 9.10 : Tenor—Mr. Alfred Walmsley, (a) "A Song of Rest" (Halley); (b) "Welcome" (Halley); (c) "Silent Noon" (Vaughan-Williams).
 9.19 : Grand selection—Band, "Extracts from Schubert's Works."
 9.32 : Contralto—Mrs. Nellie G. Shrimpton, (a) "Break, Break, Break" (Cary); (b) "Life's Gifts" (Clutsam); (c) "Sink, Red Sun."
 9.42 : Selection—Madrid Symphony Orchestra, "Arabian Nights" (Arbos).
 10.2 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—SUNDAY, MARCH 8.

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

Monday, March 9

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

(SILENT DAY)

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

- 2.0 : Chimes—Selected Gramophone Recordings.
 3.30 and 4.30 : Sporting results to hand.
 5.0 : Children's Session, conducted by "Uncle Jeff."
 6.0 : Dinner Music Session.
 Royal Opera Orchestra, "Faust Ballet Music 1st—4th Movements."
 San Francisco Symphony Orchestra, "Rosamunde Entr'acte."
 National Symphony Orchestra, "Stradella" Overture (Plotow).
 Organ—Reginald Foort, "The Riff Song" (Romberg).
 Philadelphia Symphony Orchestra, "Samson and Delilah" Bacchanale.

Week-all Stations-to Mar. 15

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Victor Olof Sextet, "Cherry Ripe" (Scott).
Royal Opera Orchestra, "Faust Ballet Music, 5th—7th Movements."
Organ—Reginald Foort, "The Desert Song" (Romberg).
Philadelphia Symphony Orchestra, "Damnation of Faust" (Berlioz).
National Military Band, "Ballet Egyptian" (Luigini).
National Symphony Orchestra, "Norma" Overture (Bellini).

- 7.0 : News Session, market reports and sports results.
8.0 : Chimes—Overture—2YA Orchestra (Conductor, Signor A. P. Truda) "Undine" (Lortzing).
8.8 : Quartette—Ariel Singers, "Vocal Pavan" (Rowley).
Bass—Mr. J. M. Caldwell, (a) "The Road to the Isles" (Kennedy-Fraser); (b) "Nancy's Hair" (Kennedy-Fraser).
8.12 : Selection—Paul Godwin Quartet, "Violin Concerto No. 2 in D Minor" (Wienlawski).
8.21 : Vocal Duet—Misses Jeanette Briggs and Ngair Coster, "Il Bacio".
8.25 : Selection—Paul Godwin Quartet, "Legende D'Amour" (Beece).
8.29 : Soprano—Miss Cicely Audibert with orchestral accompaniment: (a) "Canterbury Bells" (Carew); (b) "Messagero Amoroso" (Buzzi Peccia).
8.35 : Rhapsody—2YA Orchestra, "Hungarian Rhapsody" (Liszt).
Tenor—Mr. Harry Brusey: (a) "Brittany" (Farrow); (b) "When Childer Plays" (Walford Davies).
Trio—Ariel Singers, "A Song of Rest" (Walford Davies).
8.52 : Lute and Mandolin—Prof. Calace and Maria Calace—"Canto Nostalgico, Op. 135" (Calace).
8.56 : Contralto—Miss Ngair Coster with cello obligato: (a) "Ye Who Have Yearned Alone" (Tschalkowsky); (b) "The Scarecrow" (Davies).

- 9.2 : Weather Report and Station Notices.
9.4 : Songs—Orchestra, "Russian Folk Songs" (Arr. Higgs).
9.12 : Vocal Quartette—Ariel Singers, "The Keel Row" (Dunhill).
Bass—Mr. J. M. Caldwell, "Kirkconnell Lea" (Trad'l).
Vocal Trio—Ariel Singers, "Serenade" (Moussorgsky).
9.21 : Piano—Mr. Gordon Short: (a) "The Brook" (Sauer); (b) "The Musical Box" (Sauer).
9.30 : Soprano—Miss Cicely Audibert with orchestral accompaniment: (a) "Wild Geese" (De Leath); (b) "Rosa Resurget" (Lehmann).
9.36 : Orchestra—"Invitation a La Valse" (Weber).
9.44 : Chorus—State Opera, Berlin, "Huntsmen's Chorus" (from "Der Freischutz" (Weber).
9.48 : Vocal Duet—Miss Jeanette Briggs and Mr. Harry Brusey, "Mountain Lovers" (Squire).
9.52 : Instrumental—Orchestra, "Souvenir Du Poitou" (Legendre).
10.2 : Dance programme
Foxtrots—Leo Reisman and His Orchestra, "Puttin' on the Ritz".
Jack Hylton and His Orchestra, "Punch and Judy Show."
Gus Arnheim and His Orchestra, "Dancing to Save Your Sole" (Gilbert).
Jack Hylton and His Orchestra, "Jollity Farm" (Sarony).
10.14 : Waltz—Ted Florito and His Orchestra, "Molly" (Goulding).
Foxtrots—The Rhythmic Eight, "Fairly on the Clock" (Myers).
Jack Hylton and His Orchestra, "The Kerb Step" (Young).
10.23 : Vocal Duet—Esther Coleman and Foster Richardson, "The Voyagers".
10.26 : Foxtrots—Victor Arden, Phil Ohman and Their Orchestra, "I Love You So Much" (Kaimar).
Coom-Sanders Orchestra, "Moanin' For You" (Goulding).
Victor Arden, Phil Ohman and Their Orchestra, "Dancing the Devil Away" (Harbach).
10.35 : Waltz—Arcadians' Dance Orchestra, "Melody Divine" (Ruby).
Foxtrots—Bernie Cummins and His Hotel New Yorker Orchestra, "Minnie the Mermaid" (De Sylva).
Arcadians' Dance Orchestra, "Evening Shadows" (Polla).
Ted Weems and His Orchestra, "Mysterious Mose" (Doyle).
10.47 : Vocal—Singing Sophomores, "Chloe" (Moret).
10.50 : Foxtrots—The Rhythmic Eight, "Sweethearts' Holiday" (Kahal).
Nat Shilkret's Orchestra, "Singing a Vagabond Song".
Jack Hylton and His Orchestra, "On Her Doorstep Last Night" (Hargreaves).
Gus Arnheim and His Orchestra, "All I Want is Just One".
11.2 : God Save the King.

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

- 3.0 : Gramophone recital.
4.25 : Sports results.
5.0 : Children's Hour, conducted by "Cousin Margot" and the "Mystery Man."
6.0 : Dinner music session.
Grand Symphony Orchestra, "Raymond Overture" (Thomas).
Edith Lorand Orchestra, "Wine, Woman and Song" (Strauss).
Orchestra Mascotte with Edith Lorand, "Siren Magic".
Orchestra of the Opera Comique, Paris, "Scenes Pittoresques": (a) "Marche"; (b) "Fete Boheme" (Massenet).
Dr. Ormandy's Instrumental Trio, "Barcarolle" (Offenbach).
Edith Lorand Orchestra, "Minuet" (Boccherini).
Edith Lorand Trio, "Trio" (Goldmark).
Edith Lorand Orchestra, "Tales From the Vienna Woods" (Strauss).
The Royal Music Makers, "Ah! Sweet Mystery of Life."
Orchestra Mascotte with Edith Lorand, "I'd Like to Kiss the Ladies."
Edith Lorand Orchestra, "Toreador and Andalouse" (Rubinstein);
"Roses of the South" (Strauss).
Dr. Ormandy's Instrumental Trio, "From the Land of the Sky-Blue Water" (Cadman).
The Royal Music Makers, "Kiss Me Again" (Herbert).
7.0 : News session.
7.30 : Talk by Mr. Frank N. Bird, "Treatment and Care of the Feet."
8.0 : Chimes.
Band Programme from a City Band Rotunda by the New Brighton Municipal Band (Conductor J. Nuttall) and assisting 3YA artists.
March—Band, "Le Retour" (Thornton); foxtrot, "You're in Style".
8.8 : Baritone—Mr. C. L. Richards, (a) "Nelson's Gone a' Sailing" (Lohr), (b) "Hats Off to the Stoker" (Arundale).
8.14 : Selection—Band, "Carisbrooke" (Olvert).
8.24 : Humorous Patter—Mr. L. T. J. Ryan, "Random Ramblings".
8.29 : Waltz—Band, "Always True" (Pecorini).
8.35 : Bass—Mr. R. S. H. Buchanan, "Jack Briton" (Squire).
8.39 : Foxtrots—Band, (a) "When Little Children Smile" (Gilbert), (b) "In Old Vienna" (Nicholls).
8.46 : Baritone—Mr. C. L. Richards, "The Pirate" (Maley).
8.50 : Selection—Band, "Gold Diggers of Broadway" (Burke).

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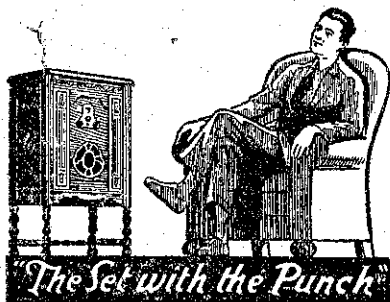
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- 9.2 : Weather forecast and station notices.
 9.4 : Foxtrots—Band, (a) "Just Plain Folk" (Gilbert), (b) "Blue Rose of Spain" (Nicholls).
 9.12: Humorous Patter—Mr. L. T. J. Ryan, "The Christening" (Gray).
 9.17: Waltz song—Band, "Sleepy Valley" (Hanley).
 9.23: Bass—Mr. R. S. H. Buchanan, (a) "Up the Hill in the Morning" (Drummond), (b) "The Skipper of the Mary Jane" (Richards).
 9.28: March—Band, "Sarah Jane" (Gilbert).
 9.31: From the studio.
 Selection—Paul Whiteman and His Concert Orchestra, "Rhapsody in Blue" (Gershwin).
 9.39: Tenor—James Liddy, "Memories" (from "The Student Prince").
 9.43: Organ—Reginald Goss Custard, (a) "The Question," (b) "The Answer" (Wolstenholme).
 9.49: Choral—Light Opera Company, Vocal Gems from (a) "Lady Luck" (Hedley), (b) "The Vagabond King" (Friml).
 9.57: Selection—Novelty Orchestra, "Midnight Bells" (Heuberger).
 10.0 : God save the King.

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

- 12.30: Relay of Civic Reception to Lord and Lady Baden-Powell in Town Hall, Dunedin.
 3.0 : Selected recordings.
 5.0 : Children's hour, conducted by "Big Brother Bill."
 6.0 : Dinner music session:
 Royal Opera Orchestra, "Carmen" Entr'acte Act 4 and Ballet No. 1.
 Piccadilly Orchestra, "My Beloved Gondolier" (Tibor).
 London Symphony Orchestra, "Chanson de Matin" (Elgar).
 National Symphony Orchestra, "Light Cavalry" Overture (Suppe).
 Royal Opera Orchestra, "Carmen" Ballet No. 2" (Bizet).
 Piccadilly Orchestra, "Souvenir di Capri" (Beccia).
 Philadelphia Symphony Orchestra, "Invitation to the Waltz" (Weber).
 New Symphony Orchestra, "Pastoral Dance" from "Nell Gwynn."
 London Symphony Orchestra, "Chanson de Nuit" (Elgar).
 Berlin State Opera Orchestra, "The Beautiful Galathea" Overture.
 New Symphony Orchestra, "Country Dance" from "Nell Gwynn."
 Berlin Philharmonic Orchestra, "Beatrice and Benedict" (Berlioz).
 7.0 : News session.
 8.0 : Chimes. Overture; Polydor-Symphonic Orchestra, "Hear You Again" Medley (Weninger).
 8.9 : Baritone—Mr. C. S. Hawes, (a) "A King's Man" (Hillman), (b) "Beating Up the Channel" (Sanderson).
 8.15: Instrumental selection—The Ambassadors, "My Baby Just Cares for Me" (Kahn).
 8.23: Novelty—Orchestra and chorus, "John Peel" (Flynn).
 8.29: Contralto—Miss Constance Poole, "A Poet's Life" (Elgar).
 8.32: Intermezzo—The Ambassadors, "Faust" (arr. Lange); foxtrot, popular melody, "I Still Get a Thrill Thinking of You" (Coots).
 8.42: Scots humour—Mr. James A. Paterson, "I'm Eighty in the Morning."
 8.46: Piano novelty—Mr. J. Moore Wilson, (a) "The Man I Love" (Gershwin), (b) "Jim Jams" (Bargg).
 8.52: Soprano—Miss Rita Holmes, "My Hero" (from "Chocolate Soldier").
 8.55: Waltz—The Ambassadors, "Walking Lovers' Lane Alone" (Ralston).
 9.0 : Weather report and station notices.
 9.2 : Selection—Classic Symphony Orchestra, "Carmen" (Bizet).
 9.10: Baritone—Mr. C. S. Hawes, "The Emperor's Charioteer" (Mornemant).
 9.13: Saxophone—Mr. H. Aburn, "La Caress" (Barroll).
 Popular hit—The Ambassadors, "Good Evening" (Seymour).
 9.21: Soprano—Miss Rita Holmes, (a) "If Those Lips Could Only Speak" (b) "Love's Old Sweet Song" (Molloy).
 9.27: Organ—Terence Casey, "Love Everlasting" (Friml).
 9.30: Waltz—The Ambassadors, (a) "When the Organ Played at Twilight" (Wallace), (b) "Heat Up Your Pace" (Weaver).
 9.33: Scots humour—Mr. James A. Paterson, (a) "Inverary Inn" (Fyffe), (b) "Twenty Thousand Scotsmen" (Western).
 9.45: Piano—Mr. J. Moore Wilson, "Automne" (Chaminade).
 9.48: Popular melody—The Ambassadors, "Here Comes the Sun" (Freed).
 9.51: Contralto—Miss Constance Poole, (a) "On the Banks of Allan Water" (Lewis), (b) "All Thro' the Night" (Maynard).
 9.57: March—Band of H.M. Grenadier Guards, "Old Panama" (Alford).
 10.0 : God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—MONDAY, MARCH 9.

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

Tuesday, March 10

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

- 3.0 : Selected recordings.
 3.15: Talk—Mrs. Les Crane, "Beauty of Body and Mind in Relation to Diet."
 3.30: Further selected recordings.
 5.0 : Children's session, conducted by "Uncle Dave."
 6.0 : Dinner music session:
 Dajos Bela Orchestra, "Pique Dame" Fantasia (Tschaiakowsky).
 Grand Symphony Orchestra, "Polonaise No. 1 in A" (Chopin).

- Dajos Bela Orchestra, "Dynamiden Waltz" (Josef Strauss).
 Grand Symphony Orchestra, "Hungarian Dances" (Brahms).
 Edith Lorand Orchestra, "Myosotis Waltz" (Waldteufel).
 Parlophone Dance Orchestra, "The Skaters" (Waldteufel).
 Brunswick Concert Orchestra, "La Danseuse" (Von Blon).
 Orchestra of the Opera Comique, Paris, "Ballet Egyptien" (Luigini).
 Cello—Gregor Platigorsky, "The Swan" (Saint-Saens).
 Edith Lorand Orchestra, "The Merry Widow" Selection (Lehar).
 Grand Symphony Orchestra, "Scherzo from 'Midsummer Night's Dream'" (Mendelssohn).
 7.0 : News and market reports.
 8.0 : Chimes. Overture—The Orchestral Octet, under the direction of Harold Baxter, "Mirella" (Gounod); selections, (a) "Nell Gwynn Dances" (German), (b) "Air de Ballet" (Drigo).
 8.16: Tenor—Mr. Ralph Eskrigge, (a) "Nightfall at Sea" (Phillips), (b) "The Star" (Rogers), (c) "I Heard You Singing" (Coates), (d) "On with the Motley" (from "Pagliacci"—Leoncavallo).
 8.31: Oriental scene—Orchestral Octet, "In the Sudan" (Sebek); Suite, (a) "Dawn" (b) "Sleepy Babe," (c) "For Thee" (Vannah); Ballet Russe" (Luigini), (a) "Valse Lente," (b) "Marche Russe."
 8.47: Mr. A. B. Chappell, M.A., "Topical Talk."
 9.2 : Evening weather forecast and announcements.
 9.4 : Tenor—Mr. Ralph Eskrigge, (a) "Musica Proibita" (Zosaldom), (b) "Black Roses" (Sibelius), (c) "Bird Songs at Eventide" (Coates), (d) "Drinking Song" from "Cavalleria Rusticana" (Mascagni).
 9.19: Morceau—Orchestral Octet, "Souvenir d'Automne" (Rudd); valse, "Valse des Alouettes" (Drigo).
 9.30: Programme of dance music:
 Foxtrots—Ben Selvin and His Orchestra, "Around the Corner."
 Gil Dech and His Syncopators, "You Can't Be Unhappy if You Sing" (Barry).
 Paul Specht and His Orchestra, "Santiago" (Stothart).
 Stellar Dance Band, "Minnie's Yoo-hoo!" (W. Stalling).
 9.42: Waltz—The Four Bright Sparks, "Eleanor" (McCarthy).
 Foxtrots—Van Phillips and His Band, "Just Like in a Story-Book."
 Gil Dech and His Syncopators, "Bridge of Our Dreams Come True" (Monk).
 9.51: Vocal duet—Sweet and Low Duetists, "By the Waters of Killarney."
 9.54: Foxtrots—Ipana Troubadours, "Cooking Breakfast for the One I Love" Columbia Photo Players, "Leave It That Way" (Fisher).
 Inana Troubadours, "Kickin' a Hole in the Sky" (Greer).
 Columbia Photo Players, "The Whole Darned Thing's for You" (Ahler).
 10.6 : Waltz—Frank Ferera's Hawaiian Trio, "Lazy Lou'siana Moon."
 Foxtrots—Paul Specht and His Orchestra, "Into My Heart" (Ahler).
 The Four Bright Sparks, "High Society Blues" (McCarthy).
 10.15: Vocal—Cavan O'Connor, "The Sunshine of Marseilles" (Gilbert).
 10.18: Foxtrots—The Columbia Photo Players, "The 'Free and Easy'."
 Frank Ferera's Hawaiian Trio, "Pale Blue Waters."
 Stellar Dance Band, "The Toy Farmyard" (Weston).
 Paul Whiteman and His Orchestra, "Livin' in the Sunlight."
 10.30: Waltzes—Stellar Dance Band, "I Feel You Near Me" (McCarthy).
 Foxtrots—The Columbia Photo Players, "It Must Be You" (Turk).
 Ben Selvin and His Orchestra, "With My Guitar and You."
 Paul Whiteman and His Orchestra, "You Brought a New Kind of Love to Me" (Fain).
 Stellar Dance Band, "A pair of Blue Eyes" (Kernell).
 10.45: Vocal duet—Sweet and Low Duetists, "Just An Old Refrain" (Wynn).
 10.48: Foxtrots—Van Phillips and His Band, "I'm in the Market for You."
 Gil Dech and His Syncopators, "Johnnie, Our Aeroplane Girl" (Lumsdaine).
 Debroy Somers Band, "Figaro" (Mitchell).
 Gil Dech and His Syncopators, "A Lone Girl Flyer."
 11.0 : God save the King.

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

- 3.0 : Chimes. Selected gramophone recordings.
 3.30 and 4.30: Sporting results to hand.
 5.0 : Children's session, conducted by "Uncle Toby" and "Jumbo."
 6.0 : Dinner music session.
 Bohemian Orchestra, "Love and Life in Vienna."
 Organ—G. T. Pattman, "Alice, Where Art Thou" (Trad'l).
 Bruno Walter and Berlin Philharmonic Orchestra, "Roses of the South" (Strauss).
 Band of H.M. Grenadier Guards, "Ivanhoe" Selection.
 Edith Lorand Orchestra, "Venetian Barcarolle" (Leoncavallo).
 Bohemian Orchestra, "Destiny Waltz" (Baynes).
 Edith Lorand Orchestra, "La Serenade" (Metra).
 Plaza Theatre Orchestra, "A La Gavotte" (Finck).
 Dajos Bela Orchestra, "Schatz Waltz" (The Gypsy Baron) (Strauss).
 J. H. Squire's Celeste Octet, "La Serenata" (Braga).
 Venetian Players, String Quintet, "Romanza" (Mozart, arr. Sear).
 Dajos Bela Orchestra, "Moonlight on the Alster" (Petras).
 Plaza Theatre Orchestra, "Minnet" (Finck).
 Organ—G. T. Pattman, "Cinderella Waltz" (Pattman).
 J. H. Squire's Celeste Octet, "Serenade" (Titl).
 7.0 : News session, market reports and sports results.
 7.40: Lecture by a Representative of the Agricultural Department, "For the Man on the Land."
 8.0 : Chimes.
 Overture—Salon Orchestra (Conductor, Mr. M. T. Dixon), (a) "If I Were King" (Adam); Selection, "The Snow Maiden."

- 8.15: Baritone—Mr. Ernest Short, (a) "I Am a Roamer" (Mendelssohn); (b) "The Two Grenadiers" (Schubert); (c) "The Ringers."
- 8.25: Suite for piano and strings—Mr. M. T. Dixon and Salon Orchestra, (a) "Ballet Piquant" (Parker); (b) "Bal de Noce" (Burgmeier).
- 8.40: Soprano—Miss Cicely Audibert with Orchestra, (a) "Cherie I Love You" (Goodman); (b) "Love's Cigarette" (Fraser-Simson); (c) "Where is the Song of Songs for Me" (Berlin); (d) "Farewell My Love" (Lehar).
- 8.55: Balalaika Orchestra Gorskaja, (a) "The Red Sarafan"; (b) "Immer Lustig" (Traditional).
- 9.1 : Weather report and station notices.
- 9.3 : Morceau—Salon Orchestra, "Canzonetta" (Herbert).
Cello—Mr. Stanley Chapman and Salon Orchestra, "La Cloche."
Morceau—Salon Orchestra, "Wiegenlied" (Burmester).
- 9.13: Humorous duets—Mr. and Mrs. E. Ransom Myers, (a) "Our Furnished Flat" (arr. Graham Squires); (b) "Try to Make the Best of It."
- 9.24: Accordeon—Michel Haling, Belgian National Champion, (a) "La Mitrailieuse" (Haling); (b) "Myra Valse" (Haling).
- 9.30: Instrumental—Mrs. Mildred Kenny's Mandolin Orchestra, (a) "Comical Coons" (Grimshaw); (b) "My White Dove" (Lehar); (c) "Palace of Palma" (Clifford); (d) "Anchors Aweigh."
- 9.45: Male choir—Ural Cossacks, (a) "Evening Bells" (Trad'l); (b) "Legend of Twelve Robbers" (Folk Song).
- 9.52: Instrumental—Salon Orchestra, "Serenade" (Ern); "Latest Dance Novelties."
- 10.3 : God save the King.

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

SILENT DAY.

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

- 3.0 : Selected recordings.
- 5.0 : Children's hour, conducted by "Big Brother Bill" and "Wendy."
- 6.0 : Dinner music session.
Military Band (of specially selected musicians), "Ever or Never."
Sir Hamilton Harty, conducting the Halle Orchestra, "An Irish Symphony Scherzo" (Sir Hamilton Harty).
New Concert Orchestra, "Life in Vienna" (Karl Komzak).
Military Band (of specially selected musicians), "The Guards' Patrol."
Dinicu and His Orchestra, "Crepuscule" Tango (Bianco).
Salon Orchestra, "Mem'ries" (Neely-Sanford).
J. H. Squire's Celeste Octet, "Traume" (Wagner, arr. Willoughby).

Gustav Holst, conducting the London Symphony Orchestra, "Marching Song" (Gustav Holst).

J. H. Squire's Celeste Octet, "Albumblatt" (Wagner, arr. Willoughby).
The Elite Dance Orchestra, "In Einer Konditorei" Tango (Raymond).
Regimental Band of H.M. Grenadier Guards, "Sylvia Ballet" (Delibes, arr. Kappey); (a) "Valse Lente"; (b) "Pizzicato"; (c) "Barcarolle"; (d) "March."

Halle Orchestra, "Londonderry Air" (Hamilton Harty).

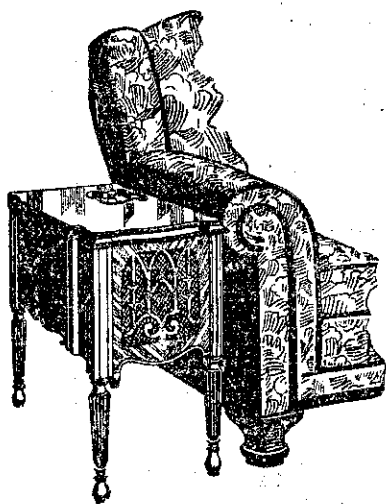
- 7.0 : News session.
- 7.40: "Motoring Talk"—Mr. William Wright, of Otago Motor Club.
- 8.0 : Chimes. Relay of Guide Reception to Chief Guide, Lady Baden-Powell, from the Girl Guide Rooms—Princes Street, Dunedin.
- 8.30: Studio programme by the Dunedin Tramways Band, under the direction of Mr. Chas. T. Morgan.
March—Band, "Majestic" (Teasdale); Fantasia, "The Golden Age" (Greenwood); Two-step, "The Dasher" (Carolas).
- 8.44: Baritone—Mr. R. Bryant, (a) "Tavern Song" (Fisher); (b) "Sincerity" (Clarke); (c) "King Solomon and King David" (Cooke).
- 8.53: Selection—London Theatre Orchestra, "A Country Girl" (Monckton).
- 9.0 : Weather report and station notices.
- 9.2 : Cornet duet—Messrs. W. Mackay and E. Reader, "Two Comrades."
Medley—Band, "Classical Moments" (Rimmer).
- 9.14: Contralto—Miss M. Stokes, (a) "Haydn's Spirit Song" (Haydn); (b) "Truth" (Booth); (c) "Come and Trip It" (Handel).
- 9.23: Novelty waltz—Band, (a) "Fairy Tale Parade" (Sharp); (b) "Chivalry" (Rimmer).
- 9.36: Tenor—Mr. J. B. Hamilton, (a) "Whatever Is, Is Best" (Lohr); (b) "Absent" (Metcalfe); (c) "Give Me the Open Road" (Ambrose).
- 9.45: Foxtrot—Band, "Cottage for Sale" (Connelly).
- 9.48: Chorus—Light Opera Company, Vocal Gems from "Maritana."
- 9.56: March—Band, "Friends of My Youth" (Pilkington).
- 10.1 : God save the King.

Wednesday, March 11

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

- 3.0 : Selected recordings.
- 3.30: Literary selection, further selected recordings.
- 5.0 : Children's session, conducted by "Uncle Reg."
- 6.0 : Dinner music session.
The Paul Godwin Orchestra, "From Heidelberg to Barcelona."
Paul Godwin Quintet, "Minuetto" (Bolzoni).

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COUNTRY TOWNS

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- Paul Godwin Orchestra, "Hearts and Flowers" (Tobani).
 Marek Weber and His Hotel Adlon Orchestra, "Under the Old Lime Tree" (Hugo Felix).
 Paul Godwin and Kunstler Ensemble, "Pot-pourri of German Folk Songs" (arrgd. Hannemann).
 Paul Godwin Quintet, "Dolls' Minuet" (Blon).
 Paul Godwin Orchestra, "The Merry Peasant" (Fall-Leon).
 Marek Weber and His Hotel Adlon Orchestra, "Extase" (Ganne).
 Paul Godwin Orchestra, "Sleeping Beauty's Bridal Trip" (Max Rhode); "The Count of Luxembourg" (Lehar).
7.0 : News and market reports.
7.40 : Talk—Mr. Norman Kerr, "Physical Culture."
8.0 : Chimes.
 Studio Concert by the Auckland Artillery Band, Conducted by W. O. Wynne Smith, assisted by IYA artists.
 March—Band, "B.B. and C.F." (Hume).
8.5 : Contralto—Miss Winifred Johnson, (a) "Achal by the Sea" (Lawrence), (b) "I Will Await Thee" (Coningsby Clarke).
8.12 : Cornet—Bandsman C. H. Eye, "Thuringer Wald" (Hock).
8.19 : Tenor—Mr. Ian H. Burry, (a) "Vieni" (Denza), (b) "The Garland."
8.25 : Piano—Mr. Cyril Towsey, "The Wanderer" (Schubert-Liszt).
8.31 : Soprano—Mrs. Arthur Osborne, (a) "The Flowers All Are Sleeping" (Liza Lehmann), (b) "Thou Of My Tender Heart."
8.35 : Instrumental baritone—Bandsman F. Smyth, "An Elegy" (Hume); Hymn—Band, "Fierce Raged the Tempest" (arr. Wynne Smith).
8.46 : Contralto—Miss Winifred Johnson, (a) "If Any Little Song of Mine" (Del Riego), (b) "Vanity Fair" (Clutsam).
8.52 : Selection—Band, "Mastersingers" (Wagner).
9.4 : Evening weather forecast and announcements.
9.6 : Tenor—Mr. Ian H. Burry, (a) "Greeting" (Hawley), (b) "Once."
9.12 : Bass-trombone—Bandsman S. Fullerton, "The Village Blacksmith."
 March—Band, "Stars and Stripes" (Sousa).
9.23 : Soprano—Mrs. Arthur Osborne, (a) "Sing Joyous Bird" (Phillips), (b) "Dawn Gentle Flower" (Lehmann).
9.31 : Gramophone Lecture-Recital—Mr. Karl Atkinson, "History in Music."
10.0 : God save the King.

4YA, WELLINGTON (720 KILOCYCLES)—WEDNESDAY, MARCH 11.

- 8.0** : Chimes. Selected gramophone recordings.
8.30 and 4.30 : Sporting results to hand.
5.0 : Children's session, conducted by "Aunt Daisy."
6.0 : Dinner music session.
 Paul Godwin's Orchestra, "The Czarewitsch" (Lehar); "Liliputian's Wedding" (Translauteur).
 Paul Godwin's Orchestra, with organ, "Adoration" (Filipucci).
 Great Symphony Orchestra, "The Gipsy Princess" (Kalman).
 Paul Godwin's Orchestra, with organ, "Invocation" (Ganne).
 Paul Godwin Quintet, "Vision" (Drdla).
 Opera Orchestra Berlin-Charlottenburg, "Si J'etais Roi" (Adam).
 Paul Godwin's Dance Orchestra, "Little Butterflies" (Steinke).
 Paul Godwin's Quintet, "Chant D'Amour" (Franz Drdla).
 Paul Godwin's Jazz Symphonians, "Lots of Fun" (Morena).
7.0 : News session, Market reports and sports results.
8.0 : Chimes.
 Specially recorded overseas programme.
 Dr. Eugene Ormandy and His Salon Orchestra.
 The International Singers.
 The Ambassadors of Melody Land.
 Abroad with the Lockharts.
 International Talk—Dr. Guy H. Scholesfield, O.B.E.
 Hy-Wide and Handsome.
 International Dance Programme.

4YA, CHRISTCHURCH (980 KILOCYCLES)—WEDNESDAY, MARCH 11.

- 8.0** : Gramophone recital.
4.25 : Sports results.
5.0 : Children's hour, "Uncle John."
6.0 : Dinner music session.
 New Mayfair Orchestra, "Lilac Time" (Schubert; arr. Clutsam).
 San Francisco Symphony Orchestra, (a) "Serenade" (Moszkowski); (b) "Anade" (Auber).
 Createore's Band, "Semiramide" Overture (Rossini).
 New Light Symphony Orchestra, "Spanish Serenade" (Bizet); "Narcissus" (Nevin).
 Trio—De Groot-Pacey-Gibilaro, "O Sole Mio" (Di Capua).
 San Francisco Symphony Orchestra, "Liebeslied" (Kreisler); "Valse de Concert" (Glazounov).
 New Light Symphony Orchestra, "Spring Song" (Mendelssohn).
 National Symphony Orchestra, "William Tell" Overture (Rossini).
 New Light Symphony Orchestra, "Spanish Dance No. 1" (Moszkowski).
7.0 : News session.
7.30 : Addington stock market reports.
8.0 : Chimes.
 Overture—Marek Weber's Orchestra, "Vienna by Night" (Komzak).
8.9 : Soprano—Miss Gladys Brooks, (a) "May Dew" (Bennett); (b) "Daffodils A' Blowing" (German).
8.15 : Choral—The Sieber Choir, "Faust" Waltz (Gounod).
8.19 : March—Studio Instrumental Octet (Conductor, Harold Beck), "The London Scottish" (Haines); Overture, "Comrades in Arms."
8.31 : Humorous song—Mr. Rudie Petersen, "My Inquisitive Kiddle."
8.34 : Cornet—Mr. R. Ohlsen, "The Lost Chord" (Sullivan).

- 8.38** : Descriptive ballad—Stuart Hibbard and Francis Russell, "The Death of Nelson" (arr. Batten).
8.48 : Piano—Miss Beatrice Claridge, "Deux Alouettes" (Leschetitzky).
8.53 : Studio Octet, (a) "Waiata Poi" (Hill); (b) "La Paloma" (Yradier).
9.0 : Weather forecast and station notices.
9.2 : Studio Octet, "New Sullivan Selection" (arr. Godfrey).
9.10 : Tenor—Mr. Harold Prescott, with Orchestral Accompaniment, (a) "Serenade" (Schubert); (b) "Kashmiri Song" (Woodford-Pinden); (c) "Macushla" (McMurrough); (d) "A Little Irish Girl."
9.23 : Piano—Miss Beatrice Claridge, "Prelude in C Sharp Minor."
9.26 : Accordeon duo—Gellin and Bergstrom, (a) "Firefly" (Leslie-Nicholls); (b) "Show Waltz."
9.32 : Old-time songs—Mr. Rudie Petersen, (a) "Is Your Mother in, Molly Malone" (Munroe); (b) "In the Pale Moonlight" (Clifford).
9.38 : Valse—Studio Octet, "Southern Roses" (Strauss).
9.47 : Soprano—Miss Gladys Brooks, (a) "The Winds in the South" (Scott); (b) "Derbyshire Song" (Rowley).
9.53 : Cornet—Mr. R. Ohlsen, "Concertante" (Hock).
10.0 : March—Sousa's Band, "Golden Jubilee" (Sousa).
10.3 : God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—WEDNESDAY, MARCH 11.

- 2.30** : Relay from Carisbrook Grounds of Grand Rally by Girl Guides and Boy Scouts, in honour of Lord and Lady Baden-Powell.
5.0 : Children's hour, conducted by "Big Brother Bill."
6.0 : Dinner music session.
 New Light Symphony Orchestra, "Scene De Ballet-Marionettes."
 Berlin State Opera Orchestra, "Polonaise No. 2."
 Marek Weber's Orchestra, "Pot-pourri of Waltzes" (Robrecht).
 National Symphony Orchestra, "Tra Diavolo" Overture (Auber).
 Piano—Vladimir De Pachmann, (a) "Mazurka in C Sharp Minor"; (b) "Mazurka in A Minor" (Chopin).
 Trio—De Groot, David Bor, H. M. Calve, "El Religario" (Padilla).
 Band of H.M. Coldstream Guards, "Martha" Selection (Flotow).
 New Symphony Orchestra, "Air on G String" (Bach).
 Marek Weber and Adlon Orchestra, "The Rose Bearer" (Strauss).
 New Light Symphony Orchestra, "Persiflage" (Francis).
 New Symphony Orchestra, "Londonderry Air" (arrgd. Grainger).
 Trio—De Groot, David Bor, H. M. Calve, "Selection in Hebrew Melodies" (arrgd. Saunders).
7.0 : News session.
7.15 : Talk—Mr. Lloyd Ross, under auspices of 4YA Primary Productions Committee, "Economics."
8.0 : Chimes.
 Studio programme to be rendered by Trinity Methodist Church Choir, under direction of Mr. James Simpson, assisted by 4YA Studio Trio, accompanist, Mrs. Jas. Simpson.
 Overture—Budapest Philharmonic Orchestra, "Hungarian Rhapsody No. 1 in F" (Liszt).
8.13 : Chorus—The Choir, (a) "A Spring Song" (Pinsuti), (b) "O Peaceful Night" (German).
8.21 : Trios—Instrumental Trio—(a) "Canzonetta" (Godard), (b) "Daughter of the Regiment" (Donizetti).
8.33 : Soprano—Miss P. West, (a) "Harvester's Night Song" (Power), (b) "Kashmiri Song" (Woodforde-Finden).
 Chorus—Choir, (a) "Tally Ho" (Weir), (b) "Comes at Times a Stillness" (Woodward).
8.48 : Cello—Mr. P. J. Palmer, "Melodie" (Purcell).
8.54 : Duets—Miss Myra Stokes and Mr. Norman Gamble, (a) "It Was a Lover and His Lass" (trdli.), (b) "Faithful Johnnie."
9.0 : Weather report and station notices.
9.2 : Trios—Instrumental Trio, (a) "Reve Angelique" (Rubenstein), (b) "Pierette" (Chaminade), (c) "Rondo in G" (Haydn).
9.14 : Contralto and chorus—(a) "The Lost Chord" (Sullivan), (b) "There is a Land of Pure Delight" (Gregory).
9.20 : Piano—Mr. Max Scherek, "Impromptu in A Flat" (Schubert).
9.24 : Bass—Mr. S. Lawn, "The Song of the Clock" (Burchell).
 Choruses—Choir, (a) "Hark, Hark the Lark" (Schubert), (b) "Largo" (Handel).
9.34 : Dance session.
 Foxtrots—Paul Tremaine and His Orchestra, "Hand Me Down My Walkin' Cane" (argd. Tremaine).
 Paul Whiteman and His Orchestra, "Happy Feet."
 Ray Starita and His Ambassadors Band, "Ev'ry Little Moment" (Newman).
 Paul Whiteman and His Orchestra, "A Bench in the Park."
9.46 : Waltzes—Russian Novelty Orchestra, "Greetings of Spring."
 Novelty Dance Orchestra, "Sobbing Waltz."
9.52 : Vocal—James Melton, "Neapolitan Nights."
9.55 : Foxtrots—Ben Selvin and His Orchestra, "The Woman in the Shoe."
 Paul Whiteman and His Orchestra, "Should I?" (Brown).
 The Rhythmic Troubadours, "On Her Doorstep Last Night."
10.4 : Waltzes—Paul Whiteman and His Orchestra, "A Bundle of Old Love Letters" (Brown).
 Moana Orchestra, "Imi Au Ia Oe" (King).
 Foxtrots—The Rhythmic Troubadours, "Fairly on the Clock" (Myers).
 Ben Selvin and His Orchestra, "Only Love is Real."
10.16 : Vocal—Ernest Hastings, "Perverted Placards" (Bateman).
10.19 : Foxtrots—Paul Specht and His Orchestra, "The Harbour of My Heart" (Youmans).
 Gil Dech and His Syncopators, "Let's Be Common."
 Paul Specht and His Orchestra, "Keepin' Myself For You."

Ray Starita and His Ambassadors Band, "Spread a Little Happiness" (Grey).

- 30.31: Waltzes—Russian Novelty Orchestra, "The Love of a Gypsy."
Novelty Dance Orchestra, "First Love Waltz."
10.37: Foxtrots—Ben Selvin and His Orchestra, "Song of the Islands."
Moana Orchestra, "For You a Lei" (Noble).
Gil Dech and His Syncopators, "Nobody's Using It Now."
10.46: Vocal—James Melton, "Dear Little Mother of Mine."
10.49: Foxtrots—Guy Lombardo and His Royal Canadians, "With You."
Will Osborne and His Orchestra, "I Knew We Two Were One" (Denniker).
Guy Lombardo and His Royal Canadians, "There's Danger in Your Eyes, Cherie" (Richman).
Waltzes—Moana Orchestra, "My Hawaiian Souvenir" (King).
Vic Meyer and His Band, "If I'm Dreaming" (Burke).
11.4: God save the King.

2YB, NEW PLYMOUTH (1230 KILOCYCLES)—WEDNESDAY, MARCH 11

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

Thursday, March 12

1YA, AUCKLAND (900 KILOCYCLES)—THURSDAY, MARCH 12.

- 3.0: Selected recordings.
3.15: Talk—"Boys and Girls' Clubs," arranged by the Home Science Extension Department of Otago University.
2.30: Further selected recordings.
5.0: Children's session, conducted by "Peter Pan."
6.0: Dinner music session:
J. H. Squire's Celeste Octet, "Operatica" (arr. Squire).
Band—The Bombardiers, "Hungarian Dance No. 5" (Brahms).
Orchestre Symphonique de Paris, "L'Arlesienne Suite—Adagietto."
Regal Orchestra, "Pagliacci" Selection (Leoncavallo).
J. H. Squire's Celeste Octet, "Song of the Waterfall" (Squire).
Orchestre Symphonique de Paris, "L'Arlesienne Suite—Entr'acte, Le Carillon" (Bizet).
London Theatre Orchestra, "A Country Girl" Selection (Monckton).
Band—The Bombardiers, "Hungarian Dance No. 6" (Brahms).
Orchestre Symphonique de Paris, "L'Arlesienne Suite—Intermezzo."
Regal Cinema Orchestra, "Show of Shows" Selection.
J. H. Squire's Celeste Octet, (a) "Scent of the Jasmine" (Squire),
(b) "Two Eyes of Grey" (McGeoch).
Orchestre Symphonique de Paris, "L'Arlesienne Suite—Entr'acte La Cuisine de Castelet" (Bizet).
7.0: News and market reports.
7.40: Talk—"Flour, Oatmeal, and Other Cereal Products," arranged under the auspices of the New Zealand Manufacturers' Association.
8.0: Chimes. Overture—Great Symphony Orchestra, "A Rendezvous with Lehar" (arr. Hruby).
8.9: An old-time nigger minstrel show by the 1YA Broadcasting Choir and the following assisting artists:—Mr. J. M. Clark, interlocutor; Messrs. Elton Black, Stan Asquith, Eric F. B. Waters, and Len Barnes, corner men; C. Thomas, banjo accompanist; Miss Audrey McDonagh, mezzo-contralto; I. Smith (Mrs. A. M. Smith), contralto.
8.52: Banjo—Ernest Jones, "Nigger Town" (Morley), "Mississippi Bubble."
9.0: Evening weather forecast and announcements.
9.2: Selection—Reg. King and His Orchestra, "Song o' My Heart."
9.10: Continuation of old-time nigger minstrel show.
9.54: Selection—Regal Cinema Orchestra, "Sally" (Burke-Kern).
10.0: God save the King.

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

- 3.0: Chimes. Selected gramophone recordings.
3.15: Lecturette—Miss I. F. Meadows, "Boys and Girls' Clubs," arranged by the Home Science Extension Department of the Otago University.
3.30 and 4.30: Sporting results to hand.
5.0: Children's session, conducted by "Uncle George" and "Big Brother Jack."
6.0: Dinner music session:
Band of H.M. Grenadier Guards, "Sir Harry Lauder Medley."
J. H. Squire's Celeste Octet, "Second Movement from Symphonie Pathetique" (Tchaikowsky, arr. Robertson).
Modern Dance Players, "Amoretten Tanze" (Gung'l).
Court Symphony Orchestra, "The Windmill Man."
Organ—Stanley Macdonald, "The Rosary" (Nevin).
Symphony Orchestra, "When the Lemons Bloom" (Strauss).
Plaza Theatre Orchestra, "The Three Bears" (Coates).
Symphony Orchestra, "Doctrinen" (Strauss).
Continental Novelty Orchestra, "Las Lagarteranas."
New York Symphony Orchestra, "Entrance of the Little Fauns."
B.B.C. Wireless Military Band, "Le Reve Passe."
J. H. Squire's Celeste Octet, "Scene de Ballet" (De Beriot, arr. Sear).
Organ—Stanley Macdonald, "La Rosita" (Dupont).
Continental Novelty Orchestra, "Los Claveles de Sevilla" (Guerrero).

7.0: News session, market reports and sports results.

- 8.0: Chimes. Studio concert by the Wellington Artillery Band (Conductor, Capt. T. Herd) and 2YA artists.
Overture—Band, "Veronica" (Greenwood); waltz, "Queen of Emeralds"
8.13: Quartet—The Lyric, "Little Tommy" (Macy).
Tenor—Mr. Charles Williams, "My Desert Queen" (Jones).
8.19: Accordeon duo—Gellin and Borgstrom, "Darby and Joan" Waltz (Gilbert); "Rio Negro" Tango (Juarez).
8.25: Serenade—Band, "Lovelight" (Adams); fantasia, "In Coonland."
8.40: Baritone—Mr. Will Goudie, (a) "When the House is Asleep," (b) "Sailors' Paradise" (Richards).
The Lyric Quartet and Miss Blanche Godier, contralto, "O Ye Tears."
8.48: Selection—Royal Opera Orchestra, "Prelude—The Huntresses Intermezzo and Valse Lente" from "The Sylvia Ballet" (Delibes).
8.57: Irish ragtime—Band, "Hooligan" (Beyer).
9.2: Weather report and station notices.
9.4: Selection—Victor Arden and Phil Ohman's chorus and orchestra, "Funny Face."
9.8: Contralto—Miss Blanche Godier, (a) "This is the Island of Gardens" (Coleridge-Taylor), (b) "A Blackbird Singing" (Head).
9.14: Selection—Band, "Musical Snapshots" (Trenchard); foxtrot, "Love Letters" (Fulton).
9.24: Tenor—Mr. W. Roy Hill, (a) "The Little Red Lark" (traditional), (b) "Cockles and Mussels" (traditional).
Join-in songs—Lyric Quartet, (a) "Three Crows," (b) "Mermaid," (c) "Polly Wolly Doodle" (from "Scottish Students' Album").
9.40: Organ—R. Arnold Grier, "Patriotic Organ Medley."
9.46: Contralto—Miss Blanche Godier, "Amber and Amethyst" (Carse).
Bass—Mr. W. Binet Brown, "King Love" (Sutton).
9.52: Waltz—Band, "Wildflower" (Rimmer); march, "The Prince of Smiles"
10.1: God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—THURSDAY, MARCH 12.

- 3.0: Gramophone recital.
3.15: Lecturette—"Boys and Girls' Clubs," arranged by Home Science Extension Service of Otago University.
4.25: Sports results.
5.0: Children's hour, "Ladybird" and "Uncle Frank."
6.0: Dinner music session:
The Philharmonic Orchestra, Berlin, "The Gipsy Baron" (Strauss).
Heerman Trio, "Pierette" (Chaminade).
Brunswick Hour Orchestra, "Only a Rose" (Hooker, Friml).
Symphony Orchestra, "Eva" Medley (Lehar).
New Light Symphony Orchestra, "Spanish Dance No. 1" (Moszkowski).
Brunswick Concert Orchestra, "The Perfect Song" (Brell).
Symphony Orchestra, "Frederick" Medley (Lehar).
New Light Symphony Orchestra, "Spanish Serenade" (Bizet).
Brunswick Concert Orchestra, "Sylvia" (Speaks).
Heerman Trio, "Dalvisa" (Sanby).
Paul Godwin's String Orchestra, "Lehariana" (arr. Geiger).
7.0: News session.
7.30: Talk—Dr. I. Weston, "Some Aspects of Accounts," arranged by 3YA Productions Committee.
8.0: Chimes. Overture—Band of H.M. Coldstream Guards, "Light Cavalry"
8.4: Baritone—Mr. Robert Allison, (a) "On with the Motley" (from "Pagliacci"—Leoncavallo), (b) "I Attempt from Love's Sickness to Fly."
8.10: Overture—Studio Octet (Harold Beck, Conductor), "L'Impressario."
8.15: Soprano—Miss Betty Sutton, (a) "Salome's Aria" (from "Herodiade"—Massenet), (b) "Damon" (Max Stange).
8.21: Studio Octet, (a) "March," (b) "Air de Ballet," (c) "Angelus."
8.33: Mezzo-soprano—Mrs. J. A. Stewart, "O Love, from Thy Power" (from "Samson and Delilah"—Saint-Saens).
8.37: Four violins—The Studio Players, "Anna Boleyn Gavotte" (Tolhurst).
8.40: Baritone—Mr. Robert Allison, "M'Appari Tut Amor" (from "Martha").
8.45: Flute—Mr. A. E. Hutton, "La Sympathie" (Croner).
8.50: Selection—Studio Octet, "Suite from Dramatic Music of Purcell."
9.2: Weather forecast and station notices.
9.4: Selection—Band of H.M. Coldstream Guards, "Der Freischutz."
9.8: Soprano—Miss Betty Sutton, "The Loreley" (Liszt).
9.11: Flute—Mr. A. E. Hutton, "Cavatina" (Clinton).
9.16: Mezzo-soprano—Mrs. J. A. Stewart, (a) "Serenade" (Raff), (b) "The Violets" (Mozart).
9.21: Studio Octet, "Remembrances of Brahms" (arr. Morena).
9.30: Dance music by Mr. Bob Bradford's Dance Orchestra:
Foxtrots—"Don't Tell Her" (De Sylva), "Go Home and Tell Your Mother" (McHugh), "You're Simple Delish" (Meyer), "Here Comes the Sun" (Woods), "Swingin' in a Hammock" (Wendling), "Ro-rolling Along" (Mender).
Waltz—"One More Waltz" (McHugh).
Foxtrots—"I'll Still Belong to You" (Brown), "Sing, You Sinners" (Coslow), "Little White Lies" (Donaldson), "Looking at You" (Berlin), "My Baby Just Cares for Me" (Donaldson), "Without You, Emaline" (De Rose), "If I Had a Girl Like You" (McDermott), "Two Weeks' Notice" (Krompart).
Waltz—"It Happened in Monterey" (Rose).
Foxtrots—"Deep Hollow" (Guy and Macomber), "Anchor's Aweigh" (Zimmerman), "Cheer Up" (Green), "Dancing with Tears in My Eyes" (Burke).
11.0: God save the King.

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

SILENT DAY.

Friday, March 13

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

- 3.0 : Selected recordings.
 3.30: Literary selection.
 5.0 : Children's session, conducted by "Nod" and "Aunt Jean."
 6.0 : Dinner music session.
 Great Symphony Orchestra, "Vienna Operetta Revue" (Robrecht).
 Jacques Jacobs Ensemble, "Wiener Blut" (Strauss).
 Band of H.M. Grenadier Guards, "La Benediction Des Poignards."
 Jacques Jacobs Ensemble, "España Waltz" (Waldteufel).
 Plaza Theatre Orchestra, "My Lady Dainty" (Hesse).
 Jacques Jacobs Ensemble, "Sobre Las Olas" (Rosas).
 Symphony Orchestra, "Countess Mariza" Medley (Kalman).
 J. H. Squire's Celeste Octet, "Valse Bleu" (Margis).
 B.B.C. Wireless Symphony Orchestra, "Il Trovatore" Selection (Verdi).
 J. H. Squire's Celeste Octet, "Amoureuse Valse" (Berger).
 Band of H.M. Grenadier Guards, "Lo! Here the Gentle Lark."
 Plaza Theatre Orchestra, "The Busy Bee" (Bendix).
 7.0 : News and market reports.
 8.0 : Chimes.
 Presentation of an Evening of Play, Story and Song, under the direction of Zoe Bartley Baxter. Berlin State Opera Orchestra, "Oberon Overture" (Weber). Two Stories of O. Henry (Dramatised and arranged by Zoe Bartley Baxter), (a) "The Gift of the Magi." Cast: He—Fryer Raisher. She—Zoe Bartley Baxter. (b) "The Third Ingredient." Cast: The Man—Lees Bullot. The Artist: Ysolinde McVeagh. The Shop Girl—Zoe Bartley Baxter.
 Violin—Mr. Jock McGregor, "Lullaby" (Barnes).
 Baritone—Mr. Edward Churchouse, "I Pitch My Lonely Caravan."
 Recital—Zoe Bartley Baxter, "Orphaned By The Sea" (Original).
 A Musical Fantasy—"The Nightingale and the Rose" (arrgd. by Zoe Bartley Baxter from the Fairy Tale by Oscar Wilde).
 9.0 : Evening weather forecast and announcements.
 9.2 : Lute and Mandolin—Calace and Herdenreich, "Reverence Gavotte" (Calace); Professor and Marie Calace, "Tarantella" (Calace).
 Recital—Miss Ysolinde McVeagh, "The Little White House in the Moonlight" (Anon.).
 Violin—Mr. Jock McGregor, "Berceuse" (Godard).
 Baritone—Mr. Edward Churchouse, "The Star" (Ball).
 Piano—Miss Dorothea Ryan, "Improvisations at the Piano."
 Presentation of a one-act play—"The Price," by George de Clive Lowe.
 Cast: Rodney Spencer, Lees Bullot; Blanche Courtney (his sister), Zoe Bartley Baxter; Ford (his butler), Bernard Carter; Detective-Inspector David Andrews, C.I.D., Jack Gordon.
 Overture—Edith Lorand Orchestra, "Johann Strauss" Fantasia.
 10.0 : God save the King.

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

- 3.0 : Chimes—Selected Gramophone Recordings.
 3.30 and 4.30: Sporting results to hand.
 5.0 : Children's Session, conducted by "Uncle Jim" and the "Story Book Lady."
 6.0 : Dinner Music Session:
 Great Symphony Orchestra, "Countess Mariza" Medley (Kalman).
 Paul Godwin Quartet, "Octobre" (Tschalkowsky); "Serenade Des Mandolines" (Desormes).
 Paul Godwin Orchestra, "The Bird Seller" (Zeller).
 Paul Godwin Quartet, "Un Peu D'Amour" (Sileu); "Serenade D'Amalfi" (Bece).
 Polydor Orchestra, "Aus Winkeln Und Gassen" (Hannemann).
 Paul Godwin Quartet, "Intermezzo Russe" (Franke).
 Paul Godwin Trio, "La Lettre De Manon" (Gillet).
 Ilja Livschakoff Orchestra, "The Land of Smiles" (Lehar).
 7.0 : News Session, Market Reports and Sports Results.
 8.0 : Chimes—Note: This programme is subject to interruption to permit of a relay of a Sound Film Feature from the Majestic Theatre.
 Overture—2YA Orchestra (Conductor, Signor A. P. Truda), "Comrades in Arms" (Gruenwald).
 8.9 : Baritone—Mr. Eric Harrison: (a) "The Nightingale and The Rose" (Hawley); (b) "Love's Sorrow" (Shelley).
 8.15: Banjo—Mr. Stan Williamson: (a) "Tattoo" (Grimshaw); (b) "It Happened in Monterey" (Wryne and Rose).
 8.21: Selection—2YA Orchestra, "Country Girl" (Godfrey).
 8.29: Humour—Mr. William J. McKeon: (a) "Anecdotes—Original and Otherwise" (Original); (b) "Peace and Riot" (Robbins).
 8.34: Soprano—Miss Cicely Audibert: (a) "Boat Song" (Ware); (b) "Nymphs and Fauns" (Bemberg).
 8.42: Banjo—Mr. Stan Williamson, (a) "Neapolitan Nights" (Zamecnik); (b) "Medley Foxtrot" (Arr. Williamson).
 8.50: 2YA Orchestra, "Down South" (Myddleton); Waltz, "Tesoro Mio" (Becucci).
 9.0 : Weather Report and Station Notices.
 9.2 : Baritone—Mr. Eric Harrison: (a) "Serenade" (Neidlinger); (b) "The Pine Tree" (Salter).

- 9.8 : Soprano—Miss Cicely Audibert: (a) "The Dreary Steppe" (Grechaninoff); (b) "Robin's Song" (White).
 9.15: Humour—Mr. William J. McKeon: (a) "More Anecdotes" (Original); (b) "Pity the Architect" (Garland).
 9.20: Spanish Tango—Orchestra, "Recuerdo De Alzaga" (Arnel); Foxtrot—"Peach of a Pair" (Whiting); Valse—"Estudiantina" (Waldteufel).
 9.30: Dance Programme:
 Foxtrot with vocal Trio—Alfredo and His Band, "Sweetheart of All My Dreams" (Fitch).
 The Blue Jays, "Dance of the Paper Dolls" (Tucker).
 Alfredo and His Band, "Deep Night" (Henderson).
 The Blue Jays, "The Toymaker's Dream" (Golden).
 9.42: Waltzes with vocal choruses—Alfredo and His Band, "My Song of the Nile" (De Sylva); "I'll Always Be in Love With You".
 Foxtrots with vocal choruses—Alfredo and His Band, "Turn on the Heat" (De Sylva); "This is Heaven"; "If I Had a Talking Picture of You" (De Sylva).
 Vocal—G. H. Elliott, "Muddlin' Thro'" (Howard Flynn).
 10.0 : Foxtrot with vocal duet—Alfredo and His Band, "Little Pal" (De Sylva); "Laughing Marionette" (Collins); "Why Can't You?" (De Sylva).
 Waltz with vocal chorus—Alfredo and His Band, "Sometimes."
 Waltz with vocal trio—Alfredo and His Band, "Let Me Dream in Your Arms Again" (Nicholls).
 10.15: Vocal—Stanley Kirkby, "My Mother's Eyes" (Baer).
 Foxtrots with vocal choruses—Radio Rhythm Boys, "Painting the Clouds with Sunshine" (Burke).
 Alfredo and His Band, "Mean to Me" (Turk).
 Radio Rhythm Boys, "Tiptoe Thro' the Tulips With Me".
 The Plaza Band, "A Precious Little Thing Called Love".
 10.30: Waltz with vocal chorus—Alfredo and His Band, "Lady Divine".
 Foxtrot with vocal chorus—Harry Hudson's Melody Men, "Why Do I Love You?" (Kern).
 Two-step—Bal Musette Orchestra, "Mayorqua" (Brunel).
 Vocal—G. H. Elliott, "Yodelling Coon" (Howard Flynn).
 10.42: Foxtrots with vocal choruses—Alfredo and His Band: "I've Never Seen a Smile Like Yours" (Johnson); "I Think of What You Used to Think of Me" (Turk).
 Harry Hudson's Melody Men, "Ol' Man River" (Kern).
 Alfredo and His Band, "I Don't Know Why I Do It, But I Do"; "Do Something" (Green).
 Dutch Dance—Bal Musette Orchestra, "Rafle" (Berniaux).
 11.0 : God Save the King.

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

- 3.0 : Gramophone recital.
 4.25: Sports results.
 5.0 : Children's hour, "Chuckie."
 6.0 : Dinner music session.
 Paul Godwin Orchestra, "Anbade" Serenade (Schweitzer); "The Divorced Lady" Medley (Fall).
 Paul Godwin Orchestra, "Lotus Waltz" (Ohlsen); "Alsatian Country Dance, No. 1" (Merkelt).
 Great Symphony Orchestra, "The Master Miner" (Zeller).
 Mandolin and the Lute Band, "Per Aspera ad Astra" (Urbach).
 Paul Godwin Orchestra, "Smitten" (Ziehrer-Hruby); "Alsatian Country Dance, No. 2" (Merkelt).
 Berlin State Opera Orchestra, "Knight Passman Ballet" (Strauss).
 Paul Godwin Orchestra, "Bells of Vineta" Waltz (Lindsay-Thiermer).
 Mandolin and Lute Band, "Turkish March" (Mozart).
 Paul Godwin Orchestra, "Flower Song" (Lange); "Rejoicings" March (Schweitzer).
 7.0 : News session.
 7.30: Talk—Mr. C. F. Jones, "Cross Country Running."
 8.0 : Chimes.
 Overture—Great Symphony Orchestra, "Jolly Robbers" (Suppe).
 8.8 : Valencia Quartet, "Cruiskeen Lawn" (Trad'l).
 Tenor—Mr. T. G. Rogers, "Yes, Let Me Like a Soldier Fall" (from "Maritana") (Wallace).
 8.14: Novelty piano items—Miss Maisie Ottey, (a) "Fire Crackers" (Starita); (b) "Piano Pan" (Ohman).
 8.19: Soprano—Miss Lucy Fullwood, "Break o' Day" (Sanderson).
 8.22: Male voice quartet—The Four Deuvilliers, "I'd Fall in Love With Me" (Murray).
 Male trio—The Mariners, "Down the River of Golden Dreams."
 8.28: Christchurch Broadcasting Trio, (a) "Petit Bolero" (Ravina); (b) "Simple Aven" (Thome); (c) "Spanish Dance, No. 4".
 8.38: Bass—Mr. E. J. Johnson, "Before You Came" (Lane Wilson).
 8.41: Violin—Miss Irene Morris, (a) "Boat Song" (Ware); (b) "Midnight Bells" (Kreisler).
 8.48: Contralto—Miss Jean Johnson, "Hindoo Song" (Bemberg).
 8.51: Clarinet—Mr. M. E. Withers, "Serenade and Ave Maria."
 8.56: Tenor and Bass—Valetta Duo, "The Army and Navy" (Cooke).
 9.0 : Weather forecast and station notices.
 9.2 : Selection—Gorskaja Balalaika Orchestra, "Die Sehnsucht."
 9.6 : Bass—Mr. E. J. Johnson, "The Trumpeter" (Dix).
 9.10: Novelty piano items—Miss Maisie Ottey, (a) "Ragamuffin" (Greer); (b) "Running up the Down" (Cohn).
 9.15: Soprano—Miss Lucy Fullwood, "Comin' Thro' the Rye" (Trad'l).
 9.19: Valencia Quartet, "Where My Caravan Has Rested" (Lohr).
 9.22: Christchurch Broadcasting Trio, (a) "March Militaire" (Schubert); (b) "The Last Rose of Summer" (Trad'l); (c) "Tarantella."

- 9.32: Contralto—Miss Jean Johnston, "Harbour Night Song" (Sanderson).
 9.35: Selection—Gorskaja Balalaika Orchestra, "Der Letzte Sechser."
 9.39: Soprano and contralto—Valencia Duo, "Sing, Sing, Birds on the Wing."
 9.42: Clarinet—Mr. M. E. Withers, "Blue Bells of Scotland" (Macdonald).
 9.47: Tenor—Mr. T. G. Rogers, "Off in the Stilly Night" (Moore).
 Valencia Quartet, "Oh, Hush Thee My Baby" (Sullivan).
 9.53: Selection—San Francisco Symphony Orchestra, "Valse de Concert."
 10.1: God save the King.

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

- 3.0: Selected recordings.
 5.0: Children's hour, conducted by "Aunt Sheila."
 6.0: Dinner music session.
 Dajos Bela Orchestra, "I Pagliacci" Selection (Leoncavallo).
 Frank Westfield's Orchestra, "The Druid's Prayer" (Davson).
 Orchestra of the Opera Comique, Paris, "Carmen" Overture (Bizet).
 Edith Lorand Orchestra, "Tales of Hoffmann-Fantasia" (Offenbach).
 Grand Symphony Orchestra, "L'Arlesienne Suite No. 1," (a) "Minuet"; (b) "Adagietto" (Bizet).
 Organ—F. Rowland-Tims, "Melody" (Dawes).
 Dajos Bela Orchestra, "La Traviata Fantasia" (Verdi).
 Grand Symphony Orchestra, "L'Arlesienne Suite No. 2," (a) "Intermezzo"; (b) "Farandole" (Bizet).
 Edith Lorand Orchestra, "Cavalleria Rusticana" Fantasia.
 Orchestra of the Opera Comique, Paris, "Carmen Entr'acte" (Bizet).
 Frank Westfield's Orchestra, "Neapolitan Nights."
 7.0: News session.
 8.0: Chimes.
 Overture—Albert Ketelbey's Concert Orchestra, Suite, "In a Fairy Realm" (Ketelbey).
 8.13: Bass—Mr. Wilfred Kershaw, (a) "At Grendon Fair" (Marie); (b) "Sapphic Ode" (Brahms); (c) "Believe Me if all Those Endearing Young Charms" (Moffatt).
 8.23: Instrumental trio—Misses Mary Fraser, Moffatt and Judd, (a) "Mikado" (Sullivan); (b) "Love Song" (Flegler); (c) "Humoresque" (Dvorak).
 8.33: Contralto—Miss Irene Hornblow, L.R.A.M., (a) "Dearest Heart" (Sullivan); (b) "John Anderson" (Burns); (c) "Melisande."
 8.48: Violin—Miss Eva Judd, (a) "Czardas" (Monti); (b) "Cradle Song." Selections—Instrumental Trio, (a) "Minuet" (Beethoven); (b) "Autumn and Winter" (Glazounoff).
 9.0: Weather report and station notices.
 9.2: Chorus—Light Opera Company, Vocal Gems from "The Merry Widow."
 9.10: Xylophone—Franz Kruger, "The Spanish Beggar Girl Waltz" (Orth).
 9.16: Scenes from "Tom Brown's Schooldays" (Hughes), on the occasion of the anniversary of the death of the author, Thomas Hughes. Caste: Messrs. J. B. McConnell, Lester Moller and D. E. Dall.
 9.56: Selection—New Concert Orchestra, "Jolly Fellows" (Bruder).
 10.0: God save the King.

Saturday, March 14

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

- 3.0: Selected recordings.
 3.30: Literary selection.
 5.0: Children's session, conducted by "Cinderella."
 6.0: Dinner music session.
 March—National Military Band, "National Emblem" (Bagley).
 Cello—W. H. Squire, "The Broken Melody" (Van Biene).
 Albert Sandler's Orchestra, "I Kiss Your Hand, Madame" (Erwin).
 Organ—G. T. Pattman, "Cherie Waltz" (Valentine).
 New Mayfair Orchestra, "Follow Through" (de Sylva).
 Court Symphony Orchestra, "The Gondoliers" (Sullivan).
 Paul Whiteman's Orchestra, "Gypsy" (Gilbert).
 Albert Sandler's Orchestra, "Chalita" (Schertzingler).
 Padilla's Marimba Serenaders, "Paree" (Padilla).
 Piano—Gil Dech, "Sometimes I'm Happy" (Youmans).
 Royal Serbian Tambouritz Orchestra, "Serbian Melody."
 Intermezzo—Ketelbey's Orchestra, "Bells Across the Meadow."
 Rio Marimba Serenaders, "Dolores" Waltz (Waldteufel).
 Organ—G. T. Pattman, "Worryin' Waltz" (Fairman).
 March—National Military Band, "Stars and Stripes" (Sousa).
 7.0: News and market reports.
 8.0: Chimes.
 Overture—Regal Cinema Orchestra, "Show of Shows."
 8.9: Baritone—Mr. Morris T. Schroder, (a) "Shipmates o' Mine" (Sanderson); (b) "North Wind" (Head).
 8.15: English concertina—Mr. Robert McKnight, "Home, Sweet Home" with variations (Farmer).
 8.20: March—Orchestral Octet, under the direction of Mr. Harold Baxter, "Old Faithful" (Holzman); Waltz, "La Berceuse" (Waldteufel).
 Dialogue—John Henry and Gladys Horridge, "The Bull-Fighter."
 8.35: Popular songs—Miss Eileen Smithson; (a) "The Rose of Tralee" (Schneider); (b) "Pal of My Dreams" (Roat).
 8.42: Mouth-organ—Stern Mouth Organ Band, (a) "Gladiators' Entrance" (Fucik); (b) "Vienna Citizen" (Ziehrer).
 8.49: Suite—Orchestral Octet, "Carnival Venetian" (Burgmeier); (a) "Florindo"; (b) "Rosaura"; (c) "Colombine"; (d) "Le Seigneur Arlequin."
 9.0: Evening weather forecast and announcements.

- 9.2: Selection—Band of H.M. Coldstream Guards, "Light Cavalry" (Suppe).
 9.6: English concertina—Mr. Robert McKnight, (a) "Schon Rosmarin" (Kreisl); (b) "Belphegor March" (Brepasant).
 9.12: Baritone—Mr. Morris T. Schroder, (a) "Thora" (Adams); (b) "An Emblem" (Thompson).
 9.18: Piano and orchestra—Orchestral Octet and Miss Dorothea Ryan, "Valse Caprice" (Rubenstein).
 Orchestral Octet, "Three Songs," (a) "Mágic" (Helmund); (b) "The Dew is Sparkling" (Rubenstein); (c) "On Wings of Song."
 9.29: Choral—Ray Starita's Band and Chorus, "The Five O'Clock Girl."
 9.37: Selection—Band of H.M. Royal Air Force, "Gondolier Nightingale."
 9.41: Popular songs—Miss Eileen Smithson, "Dancing With Tears in My Eyes" (Burke).
 9.45: Idyll—Orchestral Octet, "Summer Nights" (Roberts); Ballet, "Espagnole" (Borch); Intermezzo, (a) "Albumleaf" (Cui); (b) "Premier Amour" (Benoist).
 10.0: Dance Programme.
 Foxtrots—Hal Swain's Cafe Royal Band, "Dance of the Paper Dolls." Ted Wallace and His Campus Boys, "Jericho" (Meyers).
 Hal Swain's Cafe Royal Band, "Petticoat Lane."
 Waltz—The Columbians, "Christina" (Gottler).
 10.12: Foxtrots—Will Prior and His Stage Band, "Old-Fashioned Rose." Stellar Dance Band, "Sweetheart of All My Dreams." Vocal duet—Ford and Glenn, "Tin Pan Parade" (Gillespie).
 10.21: Foxtrots—Jan, Ralfini and His Band, "Deep Night" (Valse). Stellar Dance Band, "Honey" (Simons). Jan Ralfini and His Band, "Fashionette" (Glogau). The Harmonians, "Little Pal" (de Sylva).
 10.33: Waltzes—Rudy Vallee and His Connecticut Yankees, "Bye and Bye Sweetheart" (Valentine). Bar Harbour Society Orchestra, "Celia" (Whiting).
 Foxtrots—Rudy Vallee and His Connecticut Yankees, "Caressing You." Will Prior and His Stage Band, "I Faw Down An' Go Boom" (Brockman).
 10.45: Vocal duet—Billy Jones and Ernest Hare, "Spring is Here" (Bennet). Foxtrots—Paul Specht and His Orchestra, "The Things that Were Made for Love" (Tobias). Ted Wallace and His Campus Boys, "I've Got a Feeling I'm Falling." Ipana Troubadours, "Old Fashioned Lady" (Silver).
 Waltz—The Columbians, "Pagan Love Song" (Brown).
 11.0: God save the King.

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

- 12.0: Results of the Wellington Racing Club's Meeting, interspersed with selected gramophone recordings.
 3.30 and 4.30: Sporting results to hand.
 5.0: Children's session, conducted by "Aunt Molly."
 6.0: Dinner music session.
 The Classic Symphony Orchestra, "Raymond Overture" (Thomas).
 Band of the Garde Republicaine, "The Two Pigeons" (Messenger). 1—Entrance of Tziganes; (2)—Scene and March of the Two Pigeons.
 Herman Finck's Orchestra, "Schubertiana" (arr. Finck).
 Musical Art Quartet, "To a Wild Rose" (McDowell).
 The Rhythmic Troubadours, "Song of the West" Selection.
 London Theatre Orchestra, "Maid of the Mountains" Selection.
 Rhythmic Troubadours, "Puttin' on the Ritz" Selection.
 Rio Novelty Orchestra, "Spaventa" Tango" (Pares and Van Parys).
 Herman Finck's Orchestra, "Schubertiana" (arr. Finck).
 Musical Art Quartet, "Mighty Lak a Rose" (Nevin).
 Rio Novelty Orchestra, "Mientras Lloro el Tango."
 7.0: News session, market reports and sports results.
 8.0: Chimes. Followed by "The Eight O'Clock Revue." A Second Series of Grown-up Children's Hours, specially written and arranged by Mr. Will Bishop, featuring: The Etude Quartet (Miss Gretta Stark, Ray and Rita Kemp, Mr. Will Hancock), Miss Elsie Croft, and Mr. Will Bishop.
 9.0: Weather report and station notices.
 9.2: Overture—Salon Orchestra, "Stephen Adams Popular Songs" (arr. Henley); Selection, "Half-past Eight" (Rubens).
 9.16: Soprano—Miss Elsie Croft, (a) "Come to the Fair" (Easthope Martin); (b) "An Interlude" (Easthope Martin).
 9.20: Piano—Beryl Newell, (a) "Dancing the Devil Away" (Harbach); (b) "I Love You So Much" (Kalmar-Ruby).
 9.26: Suite—Salon Orchestra, "Petite Suite de Concert."
 9.41: Soprano—Miss Elsie Croft, "A Short Cut" (Trotter).
 9.46: Accordeon—Medard Ferrero, "Monte Christo" (Gabutti).
 9.54: Xylophone with orchestra—Mr. L. W. Probert and Salon Orchestra, "20th Century Galop" (Stobbe).
 Piano with orchestra—Mr. M. T. Dixon and Salon Orchestra, "The Clock and the Dresden Figures" (Ketelbey).
 Salon Orchestra, "Latest Dance Novelties."
 10.2: Dance Programme.
 Foxtrots—Earl Burnnett and His Los Angeles Biltmore Hotel Orchestra, "When the Little Red Roses Get the Blues for You" (Dubin); "Puttin' on the Ritz" (Berlin); "Levent-Thirty Saturday Night" (Burnnett).
 Waltz—Regent Club Orchestra, "It Happened in Monterey" (Rose).
 10.14: Foxtrots—Ben Bernie and His Orchestra, "To My Mammy" (Berlin). Slatz Randall and His Orchestra, "What a Perfect Night For Love" (Lenzen).
 10.20: Vocal—Chester Gaylord, "Any Time's the Time to Fall in Love." Foxtrots—Earl Burnnett and His Los Angeles Biltmore Hotel Orchestra, "Courtin' Time" (Stoddard).

- Meyer Davis' Hotel Astor Orchestra, "Oh! How I Adore You" (Stoddard).
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "Song of the Dawn" (Yellen).
 Roger Wolfe Kahn and His Orchestra, "Dark Night."
 Waltz—Meyer Davis' Hotel Astor Orchestra, "Farewell" (Stoddard).
 10.38: Foxtrots—Ben Bernie and His Orchestra, "Looking at You" (Berlin).
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "There's Danger in Your Eyes, Cherie!" (Richman).
 Slatz Randall and His Orchestra, "Sweetheart Trail."
 10.47: Vocal—Chester Gaylord, "Blue is the Night" (Fisher).
 Waltz—Colonial Club Orchestra, "Why Don't You Love Me?" (Mason).
 "Into My Heart" (Turk).
 Louis Panico and His Orchestra, "Wabash Blues."
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "With You" (Berlin).
 11.2: Sporting summary.
 11.12: God save the King.

3YA, CHRISTCHURCH (980 KILOCYCLES)—SATURDAY, MARCH 14

- 8.0: Gramophone recital.
 4.25: Sports results.
 5.0: Children's hour, "Aunt Pat" and "Uncle Charlie."
 6.0: Dinner music session:
 New Light Symphony Orchestra, "Merry Wives of Windsor" (Nicolai).
 Marek Weber's Orchestra, "Moonlight on the Alster" (Fetras).
 Cedric Sharpe Sextet, "Chanson Napolitaine" (D'Ambrosio).
 New Light Symphony Orchestra, "Hearts and Flowers" (Tobani).
 Marek Weber's Orchestra, "Wine, Women, and Song" (Weber).
 Organ—Reginald Foort, "By the Blue Hawaiian Waters" (Ketelbey).
 Cedric Sharpe Sextet, "O Lovely Night" (Ronald).
 New Light Symphony Orchestra, "The Glow-Worm Idyll" (Lincke).
 Victor Salon Orchestra, "Indian Love Call" (from "Rose Marie"—Friml); "The World is Waiting for the Sunrise" (Lockhart).
 De Groot and His Orchestra, "When Summer is Gone" (Harrison-Wilhite); "The Merry Widow" (Lehar).
 Organ—Reginald Foort, (a) "Leave Me Alone," (b) "Songs My Mother Taught Me" (Dvorak).
 Vienna Schrammel Quartet, "Roguish Eyes" (Uschmann).
 7.0: News session.
 7.30: Sports results.
 8.0: Chimes. Overture—Jack Hylton and His Orchestra, "Memories of Paris" (Padilla).
 8.9: Cabaret songs at the piano with banjolele—The Rose and Thistle Duo, (a) "Idolising" (West), (b) "My Blue Ridge Mountain Home."
 8.15: Broadcasting Trio, (a) "March Miniature Viennoise" (Kreisler), (b) "Souvenir" (Severne), (c) "Hungarian Dance No. 1" (Brahms).
 8.24: Bass—Mr. A. E. Ward, "Out on the Deep" (Lohr).
 8.28: Cello—Mr. Harold Beck, "Orientale" (Oul).
 8.31: Male voice quartet—De Reszke Singers, (a) "Absent" (Metcalf), (b) "My Lady Chlo" (Clough Leichter).
 8.37: Mouth-organ—Mr. J. Woodham, (a) "Killarney and Irish Jig" (Prince), (b) "Medley" (arr. J. Woodham).
 8.42: Contralto—Mrs. D. W. Stallard, (a) "Farewell to Lochaber" (Mudie), (b) "Caller Ou" (Gray).
 8.48: Steel guitars and ukulele—Elaine Moody's Hawaiian Quartet, (a) "Why Have You Forgotten Waikiki" (Kahn-Wayne), (b) "Song of the Islands" (King), (c) "Confessin' that I Love You."
 8.57: Organ duet—Jesse Crawford and Mrs. Jesse Crawford, "The Moonlight Reminds Me of You" (Kahn).
 9.0: Weather forecast and station notices.
 9.2: Selections—Paul Godwin Orchestra, (a) "A Concert in the Forest" (Ellenberg), (b) "The Nightingale and the Frog" (Ellenberg).
 9.8: Cabaret songs at the piano—The Rose and Thistle Duo, (a) "Avalon Town" (Clarke), (b) "South Sea Rose" (Gilbert).
 9.14: Broadcasting Trio, (a) "Clog Dance" (Handel on the Strand) (Percy Grainger), (b) "April's Lady" (Ancliff), (c) "Scherzo."
 9.25: Bass—Mr. A. E. Ward, (a) "Song of the Bow" (Aylward), (b) "Go to Sea" (Trotter).
 9.31: Cello—Mr. Harold Beck, "Scherzo" (Van Goens).
 9.34: Choral—The Maestros, "Passing By" (arr. Evans).
 9.37: Mouth-organ—Mr. J. Woodham, (a) "Annie Laurie" (Scottish, own arrangement), (b) "La Marsellaise" (De Lisle, arr. Woodham).
 9.42: Contralto—Mrs. D. W. Stallard, "Loch Lomond and You" (Drummond).
 9.46: Steel guitars and ukulele—Elaine Moody's Hawaiian Quartet, (a) "With My Guitar and You" (Snyder), (b) "It's for You, Only You, that I've Waited" (Rotter-Kaper), (c) "The Kerb Step" (Knox).
 9.55: Selection—Savoy Orpheans, "Round the World Medley" (arr. Somers).
 10.0: Dance music programme:
 Foxtrots—Waring's Pennsylvanians, "With You" (Berlin).
 Leo Reisman and His Orchestra, "Charming" (Grey).
 Waring's Pennsylvanians, "There's Danger in Your Eyes, Cherie" (Richmond).
 Nat Shilkret and His Orchestra, "Caribbean Love Song."
 10.12: Waltz—Leo Reisman and His Orchestra, "Shepherd's Serenade."
 Foxtrots—Rudy Vallee and His Connecticut Yankees, "Celebrated Stein Song" (Fenstad).
 Jack Hylton and His Orchestra, "Bunkey-doodle-I-doh."
 10.21: Vocal—Chick Endor, "Singin' in the Bathtub" (Magidson).
 10.24: Foxtrots—The High-Hatters, "In My Little Hope Chest" (Coslow).

- Jack Hylton and His Orchestra, "We're Uncomfortable."
 The High Hatters, "Sing, You Sinners" (Coslow).
 Waltz—George Olsen and His Music, "Romance" (Leslie).
 10.38: Foxtrots—Nat Shilkret and His Orchestra, "When I'm Looking at You" (Grey).
 George Olsen and His Music, "After a Million Dreams."
 Nat Shilkret and His Orchestra, "The Rogue Song" (Grey).
 10.45: Vocal—Chick Endor, "Lady Luck" (Perkins).
 10.48: Foxtrots—George Olsen and His Music, "I'm on a Diet of Love."
 Jack Hylton and His Orchestra, "House on the Hilltop."
 George Olsen and His Music, "Mona" (Conrad).
 Jack Hylton and His Orchestra, "Dreamy Honolulu."
 11.0: God save the King.

4YA, DUNEDIN (650 KILOCYCLES)—SATURDAY, MARCH 14

- 8.0: Selected recordings.
 5.0: Children's Hour, conducted by "Aunt Anita."
 6.0: Dinner music session.
 Berlin Philharmonic Orchestra, "Titus" Overture (Mozart).
 Paul Godwin Orchestra, "The Roses' Bridal Procession" (Leon Jessel).
 "On This Beautiful Springtime" (Lincke).
 Great Symphony Orchestra, "Fortissimo" (Kalman).
 Paul Godwin Orchestra, "The Marionettes' Mounting Guard" (Kahn).
 State Opera Orchestra, Berlin, "Orpheus and Eurydice Ballet Music."
 Paul Godwin Orchestra, "Murmure De Bal" (Meyer Helmund).
 Berlin Philharmonic Orchestra, "Le Nozze Di Figaro" Overture.
 Paul Godwin Orchestra, "Poppies" (Moret): "Dreaming Flowers."
 7.0: News session, including results of Vauxhall Yacht and Motor-boat Club Regatta.
 8.0: Chimes. Relay of Vandeville programme from 3YA Christchurch.
 10.0: Dance programme.
 Foxtrots—Colonial Club Orchestra, "Out of Breath" (Mercer).
 Andy Kirk and His Twelve Clouds of Joy, "Sweet and Hot."
 Colonial Club Orchestra, "I Am Only Human After All."
 Tom Clines and His Music, "Bye Bye Blues" (Bennett).
 10.12: Waltz—Castlewood Marimba Band, "Waiting For You" (Green).
 Foxtrots—Colonial Club Orchestra, "Hittin' the Bottle" (Koehler).
 Ben Bernie and His Orchestra, "Highway to Heaven" (Dubin).
 10.21: Vocal—Allen McQuhae, "At the End of a Cobblestone Road."
 10.24: Foxtrots—Anglo Persians, "In Memory of You" (Dubin).
 Ben Bernie and His Orchestra, "Love Comes in the Moonlight" (Dubin).
 Colonial Club Orchestra, "How Are You To-night in Hawaii?" (Leslie).
 10.33: Waltz—Ray Miller and His Orchestra, "Beneath Montana Skies."
 Foxtrots—Isam Jones' Orchestra, "Miss Hannah" Redman).
 Earl Burnett and His Los Angeles Biltmore Hotel Orchestra, "Here Comes the Sun" (Freed).
 10.42: Vocal—Allen McQuhae, "The Dawn Brought Me Love and You."
 10.45: Foxtrots—Abe Lyman and His California Orchestra, "If You're Not Kissing Me" (Freed).
 Tom Gerun and His Orchestra, "Sittin' on a Rainbow."
 Castlewood Marimba Band, "Lo Lo" (Feist).
 10.54: Foxtrots—Colonial Club Orchestra, "Out of a Clear Blue Sky."
 Tom Clines and His Music, "I'm Needin' You" (Young).
 11.0: God save the King.

Sunday, March 15

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

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

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

- 3.0 to 4.30: Afternoon session of selected gramophone recordings.
 6.0: Children's Song Service, conducted by "Uncle George," assisted by the Children's Choir from the Knox Presbyterian Church, Miramar.
 7.0: Relay of Evening Service from St. Andrew's Presbyterian Church.
 Preacher: Rev. R. J. Howie. Organist and Choirmaster: Mr. Frank Thomas.
 8.15 (approx.): Studio Concert by the Miramar Silver Band (Conductor Mr. R. A. Sutherland) and 2YA artists.
 March—Band, "Badge of Honour" (Harris): Air Varie, "Edwinstone."
 8.30: Bass—Mr. R. J. G. Madigan, "O Lord Have Mercy" (Stradella).
 8.35: Cello—Mr. George Ellwood, (a) "Sonata" (Corelli), (b) "Arlequin."
 8.46: Male Choir—Ural Cossacks, "Russian Medley Pt. 1" (Sorokin).
 8.50: Waltz—Band, "Cinderella" (Raymond).
 9.0: Weather report and station notices.
 9.2: Trio—De Groot-Bor-Kilbey, "Paraphrase of Strauss Waltzes."
 9.3: Selection—Band, "Hamlet" (Thomas).

- 9.23: Bass—Mr. R. J. G. Madigan, "The Monk" (Meyerbeer).
 9.27: Cello—Mr. George Ellwood, (a) "Chanson Indoue" (Rimsky-Korsakov), (b) "Rhapsodie" (Popper).
 9.39: Male choir—Ural Cossacks, "Russian Medley Pt. 2" (Sorokin).
 9.45: March—Band, "The Flying Squad" (Ord Hume): Characteristic Piece—"Mandy's Wedding" (Johnson); March—"Valorous."
 10.0: God save the King.

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

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

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

- 3.0: Selected recordings.
 5.30: Children's Song Service, conducted by "Big Brother Bill."
 6.15: Selected recordings.
 6.30: Relay of Evening Service from Hanover Street Baptist Church.
 Preacher: Rev. Ernest S. Tuckwell. Choirmaster: Mr. H. P. Desmoullins
 7.45 (approx.): Selected recordings.
 8.15: Relay of Concert programme from 3YA, Christchurch.
 10.0: God save the King.

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

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

Programme Features

(Concluded from page 19.)

The Salon Orchestra, under Mr. M. T. Dixon, will play a varied programme, including the overture "Stephen Adams's Popular Songs," "Half Past Eight," "Petite Suite de Concert," xylophone solo, "20th Century Gallop" (played by Mr. L. W. Probert), and Mr. M. T. Dixon will play "The Clock and Dresden Figures" for piano, with orchestral accompaniment. The Orchestra will also play the latest dance novelties.

Christchurch Notes

THIS evening's programme (to be relayed to 4YA also) will contain plenty of variety. The Rose and Thistle Duo will sing cabaret songs at the piano with banjolele. Mr. A. B. Ward (bass, of the Avonside Quartet), will sing "Out of the Deep," "Song of the Bow" and "Go to Sea." Mr. Harold Beck will play two cello solos.

Mr. J. Woodham, winner of championship honours as a mouth-organ player, will play Irish, Scottish and French airs, the last-mentioned being the stirring "Marseillaise." Mrs. D. W. Stallard, popular contralto, will sing three Scottish songs. Miss Elaine Moody's Hawaiian Quartet, with steel guitars and ukulele, will contribute popular airs. The Christchurch Broadcasting Trio will also provide a variety of items.

Aerial Hints

ONE of the best methods of protecting the end of a lead-in tube from wet is to fit over the terminal an empty shaving-stick cover, which will keep that end of the tube dry in almost any weather.

WHEN an aerial must of necessity be supported against a wall it should not be stapled to this, but should be fixed on "stand-off" insulators, so that there is plenty of air spacing between the wire and the wall.

The Life of Donizetti

(Concluded from page 2.)

posed, the parts learned, the opera performed, and the theatre saved."

He is also said to have composed the whole of the last act of "La Fille du Regiment" (Act IV), except the aria, "Angi Si Pur," and the slow part of the duet, in three or four hours. Not only could Donizetti boast great musical ability, but also considerable literary skill. He is known to have designed and written the last acts of both "La Favorita" and "Lucia di Lammermoor."

Donizetti's musical career, which began, so far as reputation was concerned, with "Anna Bolena," produced at Milan, 1830, and which later gave the world such masterpieces as "Lucia di Lammermoor," "Daughter of the Regiment," "Linda di Chamounix," "La Favorita," "Lucrezia Borgia," and "Elixir D'Amore," ended somewhat sadly.

During his last years Donizetti was subject to fits of melancholia. In 1845 he had a stroke of paralysis, and in 1847 he returned to Bergamo in time to die. He was buried some little distance outside the town, and lay in peace until September 12, 1875, when his body was disinterred and given the belated distinction of burial in the church of Santa Maria Maggiore, where a monument by Vincenzo Vela does honour to his memory.

He has not been forgotten, however, elsewhere. For his works live.

Modern Vikings

(Concluded from page 3.)

who deserves a whole article himself—a genial son of the sea, particularly fitted to skipper such a venture. One of his previous exploits was bringing out the auxiliary yawl Seaweed, a boat only some 50 feet long, from Southampton, England, to Melbourne, Australia. His only "crew" were his wife and another man.

Lieut.-Commander Juler, a retired officer of the Royal Australian Navy, made a good "mate," so that the navigation of the vessel was in very capable hands, this resulting in a perfect landfall being made. Mr. Bennell, jun., acted as engineer, presiding over the 20 horse-power Diesel engine which was used during calm spells, advantage being taken of this to charge up the 12-volt batteries for the transmitter.

The Oimara left Wellington for Auckland last Thursday, as more favourable winds for the home trip could be expected from there than from Wellington.

Mr. Monks having returned to Sydney by the Ulmaroa, the yacht is at present without a licensed operator, but it is understood that several have volunteered for duty on the return trip, and it is just possible that a New Zealander will have charge of the Morse key when the Oimara sails from Auckland in the course of a few days' time. As, however, the boat may sail without a regular operator, amateurs are requested to keep a listening watch for signals emanating from the Oimara, and if there is occasion to answer these, to transmit very slowly, so that the messages may be successfully copied by an inexperienced operator.

We wish them "Bon Voyage" and "Kia Ora."

Australian Programmes

Times Corrected for New Zealand

Thursday, March 5.

STATION 2FC: 10 p.m., an hour with the modern composers. 11.15 p.m., The National Broadcasting Orchestra, in an hour of compositions by Eric Mareo, conducted by the composer.

2BL: 10 p.m., "The Belle of Old Bailey," a musical burlesque. 11 p.m. and 11.42 p.m., Carl and Bert Stuart, entertainers. 11.14 p.m. and 12.17 p.m., Wendling and Molloy, novelty instrumentalists.

3LO: 10 p.m., "The Silver King," a five-act play.

Friday, March 6.

STATION 2FC: 10 p.m., 10.33 p.m., and 11 p.m., The Wikara Trio, novelty instrumentalists. 10.14 p.m. and 11.7 p.m., Frank Ryan, comedian. 11.15 p.m., relay from 3LO of Military Band concert.

2BL: 10 p.m., relay from the Aeolian Hall of a concert programme arranged by G. Vern Barnett.

3LO: 10 p.m., "Work," described in music, story, and a play. 11 p.m., The Paraphrasing Five. 11.15 p.m., Military Band concert.

Saturday, March 7.

STATION 2FC: 10 p.m., final concert of the Sixth Annual Elsteddfod.

2BL: 10.7 p.m. and 12.1 p.m., Carlo Martini, tenor. 10.14 p.m. and 11.44 p.m., Frank Leonard, entertainer. 10.21 p.m. and 11.30 p.m., Vera Spaul, popular vocalist. 10.30 p.m., description of boxing contest at Sydney Stadium.

3LO: 10 p.m., "March Magic," a monthly review.

Sunday, March 8.

STATION 3LO: 10 p.m., and at intervals throughout the evening, the Collingwood Citizens' Band. 10.56 p.m., "The Sundowners' Quartette."

3AR: 9.0 p.m., Divine service from Wesley Church, Melbourne. 10.30 p.m., relay from 2BL, Sydney.

Monday, March 9.

STATION 3LO: 10 p.m., a recital of old French music. 10.30 p.m., "Fantasticks," a romantic comedy.

3AR: 10.30 p.m., half an hour of novelty music. 11 p.m., "La Viva Ensemble," introducing light music and ballads. 11.30 p.m., dance music and comedy.

Tuesday, March 10.

STATION 3LO: 10 p.m., an old-time music hall entertainment. 11.15 p.m., Military Band concert. 11.35 p.m., "Jack and Jill Propriety Unlimited."

3AR: 10.20 p.m., 10.47 p.m., and 11.15 p.m., Russian String Orchestra. 10.40 p.m. and 11.8 p.m., Gilbert Jones, monologues. 11.23 p.m., Frank D. Clewlow will tell a mystery story. 11.40 p.m., The Karoola Trio.

Wednesday, March 11.

STATION 3LO: 10 p.m., Orchestral concert by the R.B.C. Wireless Symphony Orchestra.

3AR: Brass band and ballad concert. 11 p.m. and 11.55 p.m., Alan Adcock, entertainer. 11.21 p.m., 11.43 p.m., and 12.10 p.m., Prahran City Band.

Short-wave Notes

NRH, Costa Rica, Changes Call.

IT is reported that the Government of Costa Rica has changed the call of Senor Cespede's short-wave station NRH to TIH. This station broadcasts daily from 3 p.m. to 4 p.m., New Zealand summer time, on 30.5 metres.

HVJ, Vatican City.

THE engineers at the Vatican City short-wave station when testing with W2XAF, Schenectady, recently, gave the letters of their call as "H" for Holy, "V" for Vatican, and "J" for Jesus.

The 19.86 metre wavelength is used from 3 a.m. to 5 a.m., and 50.28 metres from 5.30 a.m. to 7.30 a.m., our time. Marchese Marconi was heard to state that the power of the new station is 10 k.w., and that the secret of the excellent radiation from the station is due, mainly, to a special master oscillator and a specially-designed aerial system, which gives a uniform distribution of current over its entire length.

League of Nations and Short Waves.

DAY, night and twilight wavelengths are to be used by the short-wave station to be built for the League of Nations by the French Radio Society. During daylight the wavelength will be 15 metres, at night 35 metres, and at dusk periods 18 metres.

WORKING on 30 metres, Belgrade, Jugo-Slavia, broadcasts every Tuesday morning from 8 a.m. to 9 a.m., New Zealand summer time.

RECEPTION from Tokio, Japan, is reported on a wavelength of 24.8 metres daily from 10 p.m. till 12 p.m., our time.

Stations Heard During Week Ending February 28.

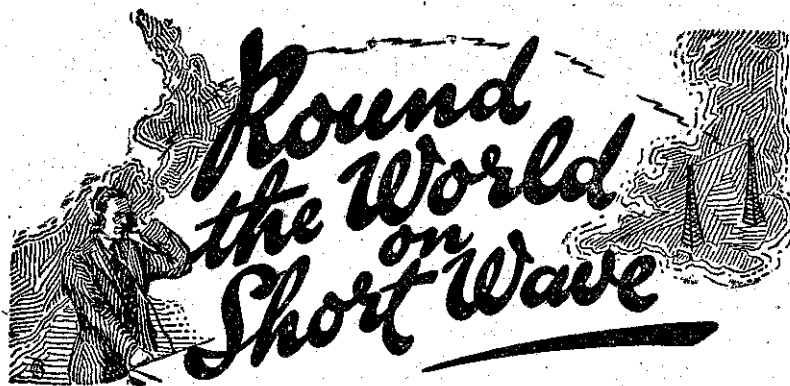
G5SW, Zeesen and PCJ have improved considerably during the past few days in the early morning. TLO also is better volume, but seldom good readability on account of interference.

RV15, Siberia, 70.1 metres: Every evening without fail at good volume. Static always there, but not so bad at present.

PMB, Sourabaya, Java, 58 metres.—Just after midnight on Saturday, RS, but static very bad.

HVJ, Vatican City, 50.26 metres.—Only heard once since the official opening, Wednesday, 6.10 a.m., R9, sounded like the conclusion of Mass. Closed down at 6.15 a.m. Not any English spoken.

50.2 Metres (about).—Just above TLO, Nairobi, heard several mornings, with



music and talk. Always weak, but think the talk is German.

TLO, Nairobi, 50 metres.—Commences at 6 a.m. At 6.30 a.m. a time signal, 6 dots is heard, followed by shipping news, etc. Volume has been up to RS recently, but readability only 25 per cent. at best.

49.9 Metres (about).—Just below TLO at the same time (early morning), but too weak to be readable. Talks and music.

W9XF, Chicago, 49.83 metres.—Good each evening till 7 p.m.

W8XAL, Cincinnati, 49.5 metres.—has been heard up till 11 a.m., testing with records. Volume steady at RS-9.

VK3ME's Schedule

Advice recently received from Mr. G. Robertson, New Zealand manager of Amalgamated Wireless, A'sia, Ltd., states that short-wave station VK3ME is now transmitting on a wavelength of 31.28 metres every Saturday night from 8 to 9.30 o'clock Australian time (10 to 11.30 p.m., N.Z. Summer Time).

W8XAL, Boundbrook, 49.18 metres.—One of the best. Till 6 p.m. each day at R9.

Saigon, Indo-China, 49 metres.—Starts just before 11.30 p.m. Another reliable station. Always R9.

W8XK, Pittsburg, 48.86 metres.—Sunday afternoon, about R5 by 5 p.m., with messages to the Far North.

VE9CL, Winnipeg, 48.7 metres.—Wednesday is the only day this station is heard, when they are on till 6 p.m. At their best they are weak at this time of the year.

HRB, Honduras, 48.62 metres.—Reached R5 on Sunday, but was too gushy to be readable.

3ZC, Christchurch, 46.3 metres (about).—Friday, volume good, with slow fading.

Moscow, 45 metres (about).—Every morning from a very early hour at good volume. Like RU15, there is plenty of talk.

VK3ME, Melbourne, 31.55 metres.—Saturday night, from 10 p.m. R9 with test records, readings and relay of 3LO.

NW2XAF, Schenectady, 31.48 metres.—"Lucky Strike" hour till 4 p.m. on Sundays and RKO programme till the same time on Saturday, reaching R8 in volume.

Zeesen, Germany, 31.38 metres.—Has been coming in at excellent volume and quality, best about 6.30 a.m., when they are easy R9. On Monday morning at this time German announcements were heard, followed by the latest American jazz (the words being in English).

WIXAZ, Springfield, Mass., 31.35 metres.—Does not reach good volume during the afternoon as a rule, but at 12.30 a.m. with their "Rising Sun Series" they are quite good, reaching R8.

PCJ, Holland, 31.28 metres.—Back again to something like normal volume, but is troubled with morse interference.

DHO, Nauen, Germany, 26.2 metres.—Saturday at 11.45 p.m. music RS-9, talk between items being much weaker. Still good after midnight.

G5SW, Chelmsford, 25.53 metres.—Volume and quality has much improved when opening at 7 a.m. There is still a rapid fade, but readability has, on most mornings, been quite good.

12RO, Rome, 25.4 metres.—Very good each morning, volume being R9 at 6.30 a.m.

W8XK, Pittsburg, 25.25 metres.—This station is later in reaching readable volume now, 7 a.m. being the best time.

W2XAD, Schenectady, 19.5 metres.—Has only been heard on a few odd mornings recently.

N.Z. Short-wave Club

Very Much Alive

THE committee of the club have been exceptionally busy, and are making arrangements for a very interesting lecture and demonstration, which will probably be held on the third Wednesday in March, particulars to be published later.

The Electric Lamp House, Manners Street, Wellington, has offered to donate a valuable trophy for the best home constructed S.W. set, constructed by members. The set will be tested, and the award will go to the one that gives the best results, irrespective of design.

Arrangements are to be made for the formation of a class in Morse code, as many people are desirous of learning the code.

Since last meeting several members have had a practical demonstration of tuning a short-wave set, and are now benefiting as a result.

Many inquiries are coming in, and the roll is increasing. The honour of being the first member belongs to Mr. J. Donnelly, of Wellington, who has the call NZ1W. The first member outside Wellington City is Mr. Edward Bond, of 9 Grant Street, Dunedin, who is NZ1D.

Several designs for the club's badge were drawn by Mr. W. E. Jamieson, and quotations have been received for badges, report cards, and membership certificates.

The first lecture will probably be on making out a report, and a demonstration of an oscillator, showing how signals are received with the various R. strengths.

Judging from the secretary's mail, there appears to be a number of listeners who have S.W. sets and have laid them aside, disappointed with the whole business. Usually it has been due to the lack of the simple necessary assistance. With the band of experienced listeners and technicians in the club, it is hoped to make short-wave more popular than ever.

Arising from a meeting of three men in a little room on January 3 last, the club has done remarkably well, and per medium of the Radio Press, has been broadcast from Auckland to the Bluff, showing that there is a real live interest in radio. We want to further that in-

terest, and the trophy generously donated by the Lamp House will greatly help by encouraging listeners to build a set. In building a set lies the knowledge of radio principles, and we want to encourage the experimenter because there are many things to be found out still in radio.

Country members desiring a pen pal to write to on radio, should send the secretary a line, and any information on items of interest will be acceptable. It is hoped to get listeners in various districts to assist us in getting members because, the more we get, the better the work we can do, and, if the overseas stations find N.Z.S.W. report cards arriving, they will pay attention and do something for us, for information arriving from here is exactly what they want.

Address any communications to A. B. McDonagh, secretary, N.Z. Short-wave Club, 274 Cuba Street, Wellington.

Useful Tips

ONE of the most important points in the care of an accumulator is to obey the manufacturer's instructions regarding the rate of charge and discharge.

UNLIKE howls due to too much reaction, etc., the low-frequency howl is distinguished by the fact that it does not vary with the tuning or reaction adjustments.

VERY often a slight roughness in reproduction can be cured by the simple expedient of connecting a grid leak across the secondary terminal of the audio-frequency transformer.

NEVER use twisted flex for taking aerial and earth leads away from the set, for the aerial should be kept as far away from the earth wire as possible.

FOR SALE OR EXCHANGE

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

SALE.—Radio apparatus, sets and accessories; 20 per cent. off list prices. Send for lists. Limited time only. Ultimate Radio Service, Kaitia.

MEN of 50! Restore the strapping figure of your youth by taking Youth-O-Form Capsules. 6/6 Posted. A. C. Timms, Chemist, Pahiatua.

WE repair Battery and Electric Radios, Speakers, Eliminators. Estimates given. Latest appliances. Valves tested free. R. H. Co., 553, Colombo Street, Christchurch.

REDUCE without discomfort by taking Youth-O-Form Capsules. 20lb. reduction 6 weeks. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

£26 Triple Screen-Grid Metrodyne Chassis and Dynamic, less valves. Powerful, easily tuned, Phono. Connection. R. H. Co., 553 Colombo Street, Christchurch.

£14. 7-Valve all-electric chassis, complete with Valves and M.P.A. Speaker. Absolutely new and guaranteed six months. Wonderful bargain. N. R. Cunningham, Ltd., Box 147, Masterton.

WONDERFUL Surf Girls with beautiful figures secured by taking Youth-O-Form. Absolutely harmless. 6/6 posted. A. C. Timms, Chemist, Pahiatua.

AERIAL Wire, 100ft., 3/-; Tinned, 3/6; Heavier, 4/9, 5/6, 6/-, 7/-. Lead-ins, 25ft., 2/-. R. H. Co., 553 Colombo Street, Christchurch.

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Here At Least, There Is No Unemployment

Impressions of Palestine

By

(Mrs. G. G. McQuarrie)



It is just a little difficult to decide what phase of our trip will prove most interesting to you. To me it has been one great holiday, and I could talk about it for hours. We saw so many beautiful places, met so many nice people, that things at the present time seem somewhat confused, but I shall try and unravel them and tell you something of what we encountered.

You, no doubt, are most interested in wireless and electricity. So am I, but we cannot give it too much prominence in a trip that was decidedly a holiday. I think I shall take you on our holiday, away from electricity and wireless, and we shall keep them in somewhat the proportions they took while we were abroad.

Our route lay through Australia, to Ceylon, Suez, Naples, Gibraltar, dear old England and Scotland (we stayed there two months), France, and home through Palestine.

I shall not follow through the trip in the order we did it. Rather I think it would be better to detail my impressions as I retain them; and, I think, standing out most clearly are those of Palestine. After having witnessed the appalling state of affairs in Great Britain with its huge crowds of unemployed, it was a change, and to some extent a relief, to see that here, at least, was a country with some unity of purpose. There were no long queues of able-bodied men waiting for the dole. Everyone was going about his business in a sensible fashion. In the town and country alike there was industry. Men, and women, too, were working the land with up-to-date machinery, and it does not need a strong imagination to see that in a few years this country will be a veritable garden of Eden again.

The natural resources of the country are being tapped. The sea of Galilee is being utilised to provide an adequate supply of electricity for Palestine. This is known as the Rutengberg scheme, and when it is completed in about four months, power will be available to work the land. It will be used in the homes at less than a penny a unit, in the streets, on the rapidly improving farms and even in irrigation works. When these are complete the areas of cultivation must extend into regions that have lain useless for centuries, and, what was once barren, will yield a harvest that only the climate of the Mediterranean can produce.

We saw the labourers at their daily tasks. There were no agitation meetings and no loafers. Men and their tired donkeys were carrying heavy loads of timber and stone as they applied themselves to the construction of the new Palestine.

The men of Palestine are really very strong and carry amazing loads on

their backs. We passed one man bent down with a huge load of timber. It was enough to build a fair-sized room, and we felt he would never straighten up again. Judging by the present rapid trend of things, the donkey must go. He will be replaced by motor-lorries and trucks. Only a few years ago we were visiting Palestine and there was

covered his with water which ran down in trenches and surrounded the drenched offering, but in answer to his simple prayer the sacrifice was enveloped in flames.

A Roman Catholic church is now erected over that historic spot. It was partly destroyed by the Turks during the Great War. They broke down the

Mrs. G. G. McQuarrie and Miss McQuarrie have just returned from a protracted trip abroad, and in the accompanying article Mrs. McQuarrie relates some of her impressions. The writer is a well-known figure in radio and electrical business circles, but most wisely she has taken the opportunity to break from her business ties, and her story places radio and electricity in the background they occupied during her trip.

not a car of any description to be seen. Now taxies ply for hire, and the more wealthy and even some of the workers have their own private cars. Without question the old order of things is changing at a great rate, as the Jews come again into their own.

Haifa has huge possibilities. Situated opposite the ancient fortress of Acca, the scene of many terrible wars, and on the slopes of Mount Carmel, it is surrounded as it were with a romantic halo. But it is being modernised and in a few years will be a valuable port. It is quite close to Agra, that historic town which is to be found mentioned in most history books.

On Mt. Carmel we visited the German colony mission house, a quaint white building rambling over a large area of ground and surrounded by a profusion of olive and date trees. In fact, there are few other trees that these in Palestine.

From this house we looked down on the town. And how much it resembled our own Wellington! It reminded me of Wadestown—looking down from the main road on to the city. The very contour of the hills was New Zealand-like.

On Mount Carmel we visited Elijah's tomb. You will remember that it was here that Elijah and the priests of Baal assembled and each in turn called upon his God to accept the burnt offering lying on an altar of stone. The sacrifice of the people of Baal remained as they had left it, and all their supplications were of no avail. Elijah

statues and pillaged the church, leaving it but an empty shell; but it has been fitted out again and is a truly beautiful edifice.

Flower farming is quite common, and when we were there the narcissus and anemones were just bursting into bloom. They were not in the small quantities we see when peering over the nurserymen's fences, but in big fields. They made a blaze of colour equalled only by the heather of Scotland.

There were orange groves bearing their rich harvest of fruit. In the towns 200 huge juicy oranges could be had for a shilling.

Here and there are clumps of date palms also bearing their rich harvest. And because of these, another industry is rapidly finding its feet under Jewish control. That is the date industry. Every season, many hundred thousands of packets of dates are exported to a world-wide market.

We must leave Palestine—much as I should like to stay here and tell you of the wonderful things I saw—and return to England. A different scene here. The country is not flourishing as I should have liked to have seen it. It is different in this respect to Palestine. The unemployed roll has been steadily mounting until it has reached alarming proportions. The dole, I feel, is very much done to death. Out in the country there is work, but the unemployed do not want to go, for they can receive nearly as much by staying at home and doing nothing as they can by working. I am certainly glad to

return and find that New Zealand has not adopted the system of giving something for nothing.

We were in England during Christmas and what impressed me most was the wide use of electricity. Gamage's had the most wonderful display of electric lighting that I have ever seen. Outside their premises, covering an area about equal to that of the Wellington D.I.C., were arranged thousands of coloured lamps, which were operated to form a moving Santa Claus filling stockings of several sleeping children. The representation was complete even to the Christmas tree, covered with good things. In Paris we saw a display something the same, but it was not quite equal to the English demonstration.

Broadcasting in England is flourishing. It is becoming very popular and is one of the industries that seem little affected by the depression. In Scotland we visited the new Edinburgh station, which should be on the air now, for when we were there it was only two months from completion. It is a grand place. Before the main studio is a hall with a seating accommodation for many hundreds. It is like a small theatre, but is carefully designed and draped for acoustic effects. The broadcasting studio is the stage, which can accommodate, without crowding, a whole symphony orchestra, and, as you can imagine, a hundred players will not go into a small space. It is fitted up, too, with a view to the production of radio plays. These are quite a feature of English broadcasting, and I must admit I enjoyed many of these presentations. I should very much like to see some of them produced in this country. In the Scottish station, there are numerous small studios round about the main one. In fact, two broadcasts could take place at the same time.

The hotels are well equipped with radio. In some of the larger ones it is in every room. One merely presses a button and one is entertained by grand opera, vaudeville or whatever is going.

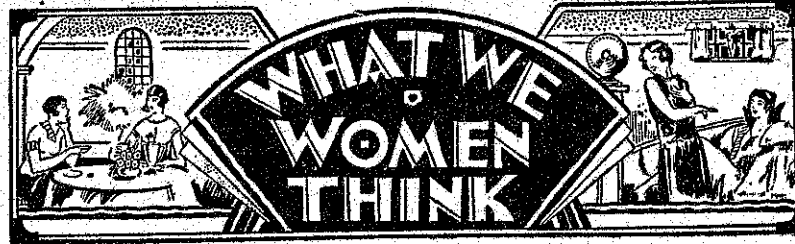
The Continental stations put on some delightful music. I heard many of these in England, but many more when in Paris. One can appreciate the musical portion of the programmes almost as much as if they were English. The announcements, of course, are so much double Dutch.

Talking of languages, you would be surprised how easy it is to see Paris and the main French towns without knowing their language. In every place of importance there is someone who can speak English, while the guide books are very helpful.

Although it is all over now, I am still doing that trip. Our large collection of photos remain to remind us of the delightful hours that we cannot and do not wish easily to forget.

TO the Princess Royal, lately passed for ever beyond the world's voices, an English paper pays this tribute: "A shock it is, for the popular regard and affection for this shy and gentle lady are not to be measured by her share in the limelight of royalty. She stood in all men's minds for an ancient and noble tradition of womanhood—the wife and mother who sought no applause, who mixed in none of the traffic and business of State, but who was yet a shining influence on many lives by the sheer force of that example to which Ruskin attributed a power 'purer than the air of heaven and stronger than the seas of earth.'" Staunch and true and sweet, this great lady was the embodiment of what are known as the old-fashioned virtues, which yet shine with an enduring radiance, despite pomps and vanities of modernity.

WHEN we were very young it was the fashion to inculcate admiration for the wisdom and literary genius of John Ruskin. With a smile and a sigh comes memory of that earnest sage's exhortation to industry and his homily on the dignity of labour. How triste and dull it sounded to the class of golden girls who sat in the sunshine and listened to exposition of the beauty of Ruskin's prose and Tennyson's poetry, by the accomplished scholar who in those days at the Girls' High School controlled the literary destinies of young Otago. Much water has flowed under our bridges since the school hours when we gazed at precept, and dreamed that through all our days our lines would fall in pleasant places. Since then we have acquired much painful knowledge of the world's processes, and by devious ways have reached conviction that, however heavily the day's work may bear on body



and spirit, yet individually and collectively, man and woman, we'd be lost without it. Illusion dies, ambition goes up in smoke; the light of our eyes is filched from us by fate or our own foolish fault; sorrow has its way with us, and the laughter of our fellow-men is as the crackling of thorns under a pot. Then it is that we find weekly and monthly grind a godsend, and dour and downright everydayness of the workday world the one thing that keeps our head above the slough of despond. We grumble, of course, after good old British tradition, we kick against pricks of environment, and wild horses would not drag us to the confessional nor make us admit that work, hard work, is salvation. We end as we began, still scoffing at the dignity of labour. But with a difference!

FRAU VICKI BAUM, author of the overwhelmingly successful novel, recently published, entitled "Grand Hotel," and a keen observer and student of the psychology of the eternal feminine, makes reassuring comment anent the modern product. This German writer, it is stated, abjures the pessimists' belief that woman to-day is losing her femininity, and asserts that, generally speaking, the much-dis-

cussed sex is fair and fascinating as ever it was. The talented authoress, herself extremely attractive looking, quaintly suggests that there is a slight move in the direction of becoming gentlemanly, but no indication whatever of sweet girl graduates or their less intelligent sisters developing unduly masculine views and bearing. Which is all to the good in the opinion of mere man.

IT is interesting to recall, observes a writer in an English publication, that 80 years ago, when the question of Sabbath observance was raging,

As a white candle
In a holy place,
So is the beauty
Of an aged face.

As the spent radiance
Of the winter sun,
So is a woman
With her travail done.

—Joseph Campbell.

even as occasionally it does now, an Anglican clergyman, author of the hymn "Sun of My Soul," though primed of conservative early Victorians, instituted a Sunday afternoon cricket club, where he and Miss Charlotte Younge, blameless creator of that immaculate hero "The Heir of Redclyffe," went each week and kept the scores for the players. The good vicar's theory, like that of many of his Anglican brethren in these days, was that if you keep your early communion and attend morning service, you are justified in seeking some worldly recreation during the rest of the day.

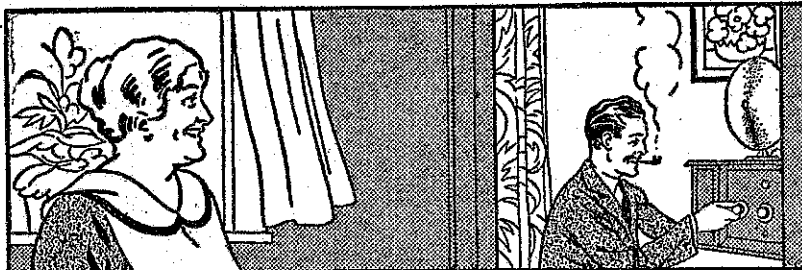
VICTOR McLAGLAN, big, brawny, and far from beautiful heavyweight of the films, is one of three brothers, all following the same lucrative profession. The sons of a South African bishop, they are all adepts at boxing, which seems something of an anomaly. Victor is the most famous of the quartet, and weekly draws a small fortune from the coffers of Hollywood. He has had an adventurous career, as one would expect, remembering his tumultuous performance as King of the Khyber Rifles. At the age of 14 he enlisted in the Life Guards, has been a silver miner in Canada, a champion boxer, and was Provost-General of Baghdad during the war. After demobilisation he went into pictures,

and found "room at the top" in Hollywood when he appeared in "The Black Watch" and "What Price Glory." His magnificent height and build, great strength, vitality, and suggestion of the bruiser, prove irresistibly attractive to adorners of the cave-man type of masculinity.

THE problem of which are the best years in life is more acute for women than for men because, although love is equally delightful and amusing for both sexes, nature has very unkindly made a man capable of attracting it considerably longer than a woman. Take, as a symbol of this, the use of that little word 'miss.' How pleased the young girl is when first addressed as 'madam'; how enchanted the married woman of several years' standing when porters and shop assistants again address her as 'miss'; and how desolated she is round about the fifty mark when these same shrewd judges call her 'miss' again. She knows then that she looks not only elderly, but as though she had never been married. A man has no such intimation of mortality in his life, save only one—that agonising moment when young men first address him as 'sir.' These acute remarks are made in an English periodical by Miss Tennyson Jesse, and are compact of intuition and observation, though not of experience, as the brilliant young novelist herself is still in the three-decade period.

THE artistic temperament, prone to seize the opportunity as it flies, has been, in the language of the proletariat, raising Cain once more. A prima donna refused to sing to her impatient audience at Nice Opera House because the management failed to perfume the entire theatre with mimosa. What happens, asks a contemporary, when Carmen demands tuberoses and Marguerite insists on lily of the valley? What if the taxpayer went mad at the sight of the income-tax form, and refused to pay a penny because the demand was not printed on his favourite newspaper? And how good it would be if politicians refused to talk any more because the House was not perfumed with honesty! I ponder poor Strephon's dismay if hauteur of Chloe can only be dissipated with pints of Parisian pot-pourri; and father's bewilderment when seventeen-year-old hope of suburbia kicks and scratches because birthday bath-salts are scented with eau de cologne instead of chypre.

INDIVIDUALLY women have won high honours in 1930, and collectively they have pulled better together than they have ever done. The year has seen the beginning of the British Federation of Business and Professional Women, while the International Federation was formed at Geneva. The women of fifteen countries were represented at the inaugural meeting, and they will in future exchange hospitality and make business opportunities for each other.



Radio is a Mystery to Mother —

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By "John O'Dreams"

Prize Poem Competition

THE prize of half a guinea for the current competition is awarded to "The Crystal Age," by R.B.C. This poem has elusive beauty, and is phrased in original form. We shall hope to see more of the work of this contributor, who is new to our columns. We like, also, the lines forwarded by "Civis," which display facility of expression, and are thoughtful and interesting, though a certain roughness of finish is at times discernible. "John Storm" sends verses instinct with quiet sentiment. Our contributor is not at his admirable best in the two poems under notice, though his work is never without appeal.

"Lucibel Lee" forwards a collection of her graceful rhymelets, including one anent those "sweet cities" that so lately toppled to their doom "like packs of cards." This, however, like other poems we have read on the same subject, is totally inadequate to so catastrophic a calamity.

W.W.: That a garden is a lovesome spot, Got wot! we've all known since Adam and Eve walked together. All the more reason that, when using it as motif of a poem, the treatment should be distinctive, which unhappily is not the case in "Just Linger."

"A Picture," framed by a tramcar window, is the subject of this effort, which conveys love of beauty but none of the glamour thereof.

"A Promise": We applaud the spirit of patriotism, but its expression is faulty.

"Wild Rose": As usual in your poetry, spiritual response to beauty is apparent, but we would prefer the second line to read, "They bend softly to sigh." Avoid the split infinitive as you would the evil one.

D.A.S. has achieved the well-nigh impossible literary feat of deifying the "Dawn" without exuding "pearlies" and "earlies" and sentimental verbiage of the more obvious variety. We do not recollect any recent treatment of this trite inspiration approaching his in originality and vigour.

"Comfort Ye": Religious sentiment admirable, but alas, the technique!

... The Crystal Age ...

Let us be glad,
Ye that escaped from death.
Let us go down into a green valley,
Where a river is flowing,
Steadily, calmly, unconcernedly flowing.
And sitting us down beneath the trees
Let us gaze at the sky,
Hearing a bird that calls in the bush,
And be for ever
Imperturbably calm.

Then shall ascend from our thinking
A perfume, rolling, amassing,
Like fragrant smoke that rises at even
From a smouldering fire,
And is beautiful.

—R.B.C.

TO those who appreciate a droll and diverting narrative, I recommend "Leave it to Susan," by K. R. G. Browne. This is an amusing hotch-potch of the adventures of a heterogeneous collection of people who for one night find themselves the guests in a conventional English country house. Here is modern youth, daring, destructive, and far from dull; an alcoholic admiral, and his unwilling, highly mirth-provoking escapades; English-

women who are true to life; a Frenchman who is excellent. Entertaining to a degree are the struggles of this foreigner with our vernacular; and even the most inveterate Mrs. Gummidge would smile on reading of the sports parade in which Monsieur Pepin and the butler reluctantly take part, with the frisky great Dane as runner-up. The types are soundly envisaged, and the volume is cordially recommended as an excellent remedy for the prevailing depression.

MR. ARCHIBALD MARSHALL, sometimes called the later-day Trollope, has recently published a tale of the everyday life of people in English country houses. The fortunes of two groups are followed in Mr. Marshall's characteristically vivacious fashion through three generations, the tale taking its leisurely course from the far-back sixties down to the year of the Armistice.

WE learn from a contributor to the "Sunday Times" that Mr. Arthur Symons, penetrating and accomplished student of letters, who links our own time with the later Victorian era, has just published a book on one of the most distinctive writers of that period. Forty-four years ago Mr. Symons opened his literary career with a study of Browning; now he carries on with a treatise on the art and thought of Oscar Wilde. The writer quotes Edmund Gosse's conversation with a distinguished Frenchman of letters. "There are two of your modern authors," said the eminent foreigner, "of whom I have heard much. One is Alceen, whose works I have still to read. The other, whom I greatly admire, is Skarvildy." It took Gosse some time to discover that the writers referred to were Hall Caine and Oscar Wilde!

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ON October 10 there were 3,242,000 licensed listeners in Germany, and the revenue thus derived amounted to 88 million marks (£4,400,000).

IT is reported that the "People's Commission of Soviet's Posts and Telegraphs" have devised a five years' plan for the development of broadcasting. The erection of sixty-two further stations is provided for, and as a result of this it is expected that the total number of listeners will exceed 14 millions. They appear optimistic enough to anticipate that the famous economic five-year plan will allow them sufficient leisure to sit down and listen.

FRANCE'S methods for operating its broadcasting studios are in many ways unique. For example, at the main Paris station there are at least six announcers, but they are not paid a fixed and regular salary. In the United States, it is true, the announcers receive only a nominal remuneration for their services, but they are more than compensated for this by the substantial fees which are forthcoming from the advertisers who sponsor the programmes. It is reported that Graham McNamee, the "Prince of American Announcers," collects 250 dollars (£50) for introducing such a commercial programme. And during winter months, when radio is booming, he may be engaged to take charge of four such programmes a week.

THE German listener misses very few worth-while relayed broadcasts, even if the studio programmes are such that they cannot be altered for the inclusion of the relay. Quite a number of German stations have their own recording plants and if, as it happens, they cannot see their way to give their listeners the broadcast of an interesting event at the time it is



taking place, they register the relay on wax and store it for future use. This idea could certainly be used with advantage in New Zealand on the occasions of world-wide short-wave broadcasts of importance, such as that of the Pope's recent address from the new high-powered Italian short-wave station. Because of the time difference between the two countries, the relay of the proceedings were conducted by the YA stations at approximately 3.30 a.m., a most inconvenient time for anybody to listen-in. With a recording equipment operated by a single short-wave listener, however, the whole event could be recorded and re-broadcast at a more propitious hour.

THE American Federal Radio Commission recently ruled as illegal an effort to broadcast in the United States radio programmes sponsored by Canadian liquor interests. An effort was made by a Detroit station to bring such a programme into the country by wire across the border and then to broadcast it over a chain of stations.

IT has been proposed to erect in the sacred city of Mecca one of a proposed system of radio stations to form a network across Arabia. The main object of the development is to enable

King Ibn Saud to keep in constant touch with various parts of his kingdom. It is, however, forbidden to anyone not of the Mohammedan faith to enter the precincts of the sacred city of Mecca, and it has been found necessary for the contracting company to supply a Mohammedan engineer to install the transmitting and receiving equipment inside that city. In order to provide for the maintenance of the stations after they have been erected, the King has sent four of his subjects to England to be trained as wireless engineers.

A SERIES of twenty weekly plays, dealing with incidents in Canada's history, will be presented shortly over a coast-to-coast chain of Canadian stations by one of the British Broadcasting Corporation's dramatic producers. Radio plays have not been attempted extensively in Canada, but it is confidently believed that this new series, which is being specially written, will prove both popular and entertaining. Why not inaugurate a similar series in our own country? New Zealand yields pride of place to none in her romantic and picturesque early history, and well-chosen incidents suitably dramatised would prove immensely popular. And, incidentally, the apparently unsolvable royalty problem would be overcome.

AS the result of a recent competition promoted by a French wireless magazine in order to ascertain the taste of listeners, the following was the final order of merit: (1) Comedy; (2) Operette; (3) Variety (i.e., Vaudeville); (4) Symphony Concerts;

(5) Comic Opera; (6) Opera; (7) News; (8) Outside Broadcasts; (9) Chamber Music; (10) Dance Music. A similar competition in New Zealand would undoubtedly produce a very different result.

EXCLUDED from the frequency-sharing agreement in force between the United States and Canada, the Republic of Mexico this year licensed 16 new stations. Nine of these have powers and are on frequencies which will interfere with Canadian-American broadcasters. Today there are 38 broadcasting stations in Mexico; and their trend is toward higher and higher powers. The problem of satisfactory frequency allocation between the three countries of the North American continent is one which, from present indications, is likely to lead to international complications.

LAST November a radio-telephone circuit between New York and Moscow was opened, and in December a New York-France and a San Francisco-Shanghai service was opened. Circuits for 1931 will extend from New York to Capetown, Mukden, and Switzerland. Recently Professor Einstein spoke from the liner Belgenland in the Panama Canal to New York, and was relayed throughout America.

THOUGH perhaps best known popularly as a spiritualist, Sir Oliver Lodge is far better known in the scientific world for his physical researches and his pioneer wireless tuning patent of three decades ago. In a recent interview he revealed that he was working on ways and means of relieving congestion on the wave-lengths by reducing the separation between them, and thus increasing their number. Dr. Robinson, former radio research chief of the British Air Ministry, and also prominent in the scientific world, recently successfully demonstrated his Stenode Radiostat (the word "Stenode" being derived from the Greek, meaning "narrow path") can multiply the number of radio channels many fold.

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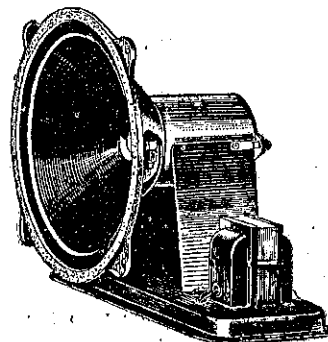
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