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## Auckland City Council and Radio

**A**UCKLAND and other listeners throughout the country have been disappointed for some time past at the non-appearance on the air of the Auckland Municipal Band, which formerly was a popular feature of 1YA programmes. Alternative methods were adopted by the Radio Broadcasting Company to supply the desire for band music, and negotiations have been in progress since with the Auckland City Council in an effort to induce that body to waive the exorbitant and increased fee asked for the right to broadcast the performances by the Municipal Band. These negotiations have so far failed of success, but the present position is that the full council has referred back to the sub-committee dealing with the matter the report presented on the subject.

**T**HE following statement covers the whole ground concisely and authoritatively, and will show listeners in detail the steps that have been taken by the Radio Broadcasting Company in connection with the matter and the efforts made to secure for the radio audience the privilege of hearing the Auckland Municipal Band, which incidentally is maintained by the Auckland ratepayers for the support and betterment of music.

**O**RIGINALLY the city council permitted the broadcasting of the band's Sunday evening concerts (for which no charge is made for admission) free of charge to the company, the company paying all costs incidental to the broadcast. Later the council asked for payment, and the company agreed to pay £300 per annum for the right to broadcast all band and organ performances, exclusive only of the performances given at the Zoo.

Under this arrangement a total of forty-one performances were broadcast from March to August, 1928, inclusive, equalling eighty-two broadcasts per annum.

**I**N September, 1928, the Council raised the question of a larger payment, and finally stipulated that the fee should be fixed at £750 per annum for a total of thirty-seven band concerts, only eleven of which were to be Town Hall concerts,

plus a number of organ recitals which past experience had shown to be unsuitable for broadcast purposes.

This amount was considered by the company to be altogether excessive, and negotiations were suspended. However, it was decided to approach the council again in an endeavour to arrive at a more reasonable arrangement satisfactory to all concerned, and with this end in view a representative of the company met in conference a special committee of the council, the Mayor presiding.

**A**S a basis for discussion the company's representative submitted a proposal for the payment of £352 16s., representing payment at the rate of £7 7s. per concert for a minimum of forty-eight performances, viz., 20 Saturday evening band concerts and 20 Sunday evening ditto (all Town Hall), one band Christmas carol performance, six organ recitals with Municipal Choir, and one Christmas carol concert with organ and choir.

It was pointed out to the committee that only the performances set out in this proposal were of real use and value to the company for broadcasting purposes.

**T**HE committee submitted a counter proposal providing for the payment of a lump sum of £500 per annum for eighty-eight concerts, including thirty-seven organ recitals of doubtful broadcast value.

**T**HE company's representative submitted that the inclusion of a larger number of performances which were virtually worthless to the Company materially reduced the prima facie value of the committee's proposal and consequently rendered such performances as could be broadcast to the satisfaction of listeners unwarrantably expensive.

The company's offer of £352 16s., based on £7 7s. per concert for 48 concerts covered the twenty Sunday evening band concerts for which no charge was made for admission and which ought, therefore, to be available for broadcasting free of charge to the company.

**T**HE granting of the right to broadcast the free Sunday evening concerts could not possibly involve the council in any financial loss, but would on the contrary prove advantageous to the city by reason of the valuable publicity which would result.

The company's offer figured on the basis of the concerts for which the council charged admission—morally the only concerts for which there should be any charge for broadcasting—would represent the payment of approximately fifteen guineas per concert.

Such a payment is obviously largely in excess of any loss which could possibly result from broadcasting.

Evidence was given that the broadcasting of band concerts in another city had resulted in a substantial increase, instead of a falling off, in the takings.

—Continued on page 3.

# Broadcast Music for the Coming Week

## The Druids' Opera.

Few operas can boast of as good and effective a libretto as that which Romani wrote for Bellini's "Norma." The fact that the Woolston Band is playing a "Norma" selection next Monday at 3YA makes the subject of this remarkable work appropriate of discussion. Felice Romani as poet for the Royal Italian theatres wrote 100 books for the operas of Mayr, Bellini, Rossini, Donizetti, and others. He took for his subject a French tragedy which he turned into lovely Italian verse.

The story concerns a Druidess, who gives the opera its name (Norma), Adalgisa, a Virgin of the Temple of Irminsul, Pollione, a Roman Procurator, and Oroves, an Arch-Druid, Norma's father. Herself a Druid High Priestess, Norma has broken her vows and secretly married Pollione. They have two children. But their father's love has vanished. In the first act we find he is, on his own confession, enamoured of another young priestess, Adalgisa, of the Druidic Temple of Irminsul, the Druids' god. We have at once an entanglement that grows more complicated as the opera progresses. The story is in the main a fascinating one, but too long to un-

fold in these columns. The finale sees Norma and her husband burning to death on the pyre built for the express purpose of consuming Pollione, who has been discovered intruding in the sacred grove whither he had gone to carry off Adalgisa by force. Norma tells an enraged populace that with the Roman must die another victim—namely, herself. They perish together. With this work Bellini won his fame and crowned his successes.

It is in the richness of melody where Bellini excels, and this has made "Norma" the favourite opera it always has been for the past ninety years or more.

## "A Sigh."

THE "Etude in D Flat," by Liszt, which is to be played at 1YA on Thursday, March 28, has a sub-title, "Un Sospiro" (a sigh). It is hardly a sigh of regret, but if of regret, then it is coupled with the happiest memories which crowd themselves into the musical utterance until it overflows with fervour. Its exquisite melody with its running accompaniment is typical of Liszt, and the manner in which he enriches it as the work

## By Bolton Woods

proceeds gives us a fine example of his genius for writing effectively for the piano.

The beautiful sweep of its arpeggios has made it a great favourite, and it shares with "Liebstraum" and the second "Hungarian Rhapsody" the palm of being the most popular of Liszt's compositions.

## "The Toreador's Song."

IN Bizet's opera, "Carmen" the scene of the second act is laid in a room in the tavern of Lillas Pastia, which is the meeting-place of the band of smugglers of whom Carmen, when not engaged in other immoralities, is occasionally one. Before very long there is a great stir among the characters on the stage, and the cry goes up, "Hurrah! The Toreador! Hurrah! Escamillo!" A torchlight procession is passing in honour of the conqueror at the Grenada bull fight. Those present drink the health of the toreador, who enters, is greeted joyously by all, and, in the famed song, tells of the scene in the arena when a bull fight is toward. A great deal of the superb effect of the song comes from the strength of the very original rhythm.

To each stage of the graphic description of the bull fight is appended a refrain in the major, in which the toreador turns to thoughts of the bright eyes that are fondly regarding him, and the impressionable hearts awaiting him. In this refrain everybody joins, and at the second time the whole company carries it to a vigorous conclusion.

THE singer of this glorious operatic solo at 2YA next Tuesday is John Brownlee, a worthy protege of Dame Melba. As one who has added to the lustre of Australia's musical fame, John Brownlee scores heavily on the record, H.M.V. D1396.

## Grieg's Only Concerto.

GRIEG'S Concerto in A Minor is the only composition by him in this form. It was first performed by the composer himself in Leipzig in 1879, and immediately established his reputation as a composer and pianist. It displays his remarkable gifts for the invention, of exquisite melody and deep feeling for effectiveness in orchestral writing. The various movements of the work are admirably contrasted.

There is a haunting beauty in his harmonies, and the whole composition glows with the Norwegian colouring with which Greig painted the musical picture. Composed when he was in his twenty-fifth year, while spending a summer holiday in Denmark. It has all the freshness of a youthful work. At the time he was deeply influenced by two remarkable compatriots, Ole Bull, the violinist, and the young musician Nordrask, who died before he achieved a reputation. The love of his land and its music clung to Grieg throughout his whole life.

Like Chopin and Glinka he was a national poet, and to hear his music is to recall a line of our own poet William Watson: "The north has my heart to the end of the way." Ignaz

Friedman, pianist, has recorded the work with an orchestra on four superb records, two of which, containing the second and third movements, will be broadcast by 4YA next Tuesday.

A greater English poet than Watson, Tennyson, says, somewhere, "Dark and true and tender is the North." Grieg's Concerto convinces on this point. It fairly breathed Norway.

## "Home, Sweet Home."

THE words of this song, which is to be sung as a quartet at 1YA by Madam Mary Towsey's vocalists on Thursday (March 28), are by J. Howard Payne, an American actor, journalist, and dramatist, who flourished in London at the beginning of last century. In one of his plays, "Clari, the Maid of Milan," he introduced the immortal ballad which was set to music by Sir Henry Bishop, the opera being produced at Covent Garden on May 8, 1823. In the published music it is called a "Sicilian air," but no evidence is forthcoming that such an air has ever been known and sung in Sicily, nor was the collection of folk-melodies begun in Europe—at all events in the south—at this date. It is most probably a melody of Bishop's own, but Parke in his "Musical Memoirs" states that he took it from a German opera—a doubtful statement, as, had that been the case, its origin would certainly have been discovered.

## Sullivan, the Procrastinator.

FORTY-FOUR years ago to the date when this note was penned (March 14) Gilbert and Sullivan's Oriental opera, "The Mikado," was produced at the Savoy Theatre, London. That the composer was a hopeless procrastinator in his work was, alas, all too true. His diary entries are frank confessions of this weakness, which attacks less brilliant men than "The English Schubert," as he has been called.

Between February 21 and March 1 he did not emerge from his room except to attend the Savoy rehearsals, and one solitary conducting engagement. His own diary reads:—"March 2: All these days since February 21 writing and rehearsing ('Mikado'). No drives, parties or recreations of any kind." And again on March 3: "Worked all night at Finale, first act. Finished at 5 a.m.; 63 pages of scoring at one sitting!"

Three days later he finished scoring Act II at 5.45 in the morning. He composed "The Flowers That Bloom in the Spring" one evening between tea and dinner. The completed music of "The Mikado" was in the hands of D'Oyly Carte just a week before the date fixed for the first night. One may suppose that there was no need for this rush, that the first night might well have been postponed.

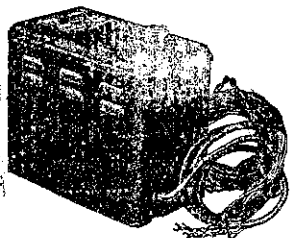
But Sullivan always worked best in light opera when the calendar stared him in the face. His temperament, unlike the usual temperament of genius, was willing to yield to discipline when discipline was required.

Because he loved his music he was always as happy under discipline that brought production as in those days when he was a free agent to enjoy himself in leisure.

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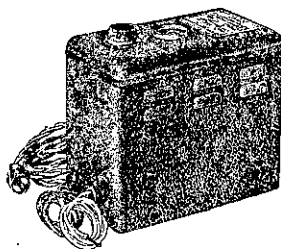
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The orchestral selection to be played on Saturday (March 30) at 1YA and its jocund strains will be as eagerly listened to as they were by our parents and grandparents last century.

### "Sonny Boy."

AMONG the wonders of science in the second half of the present century none is more marvellous than the "talking film." The expression "talking film" is American, and in that country gramophones are still called by the name that was given them fifty years ago when Edison produced his original phonograph.

One of the first of the "talkies" is a film of super-sentimentality called "The Singing Fool," the story of which is a tragedy of modern stage life and is, alas, all too common in real life.

The principal part is taken by Al Jolson who, in the title role as Al Stone, is a singing waiter and songwriter at "Blackie" Joe's. Molly Winton, star entertainer, haughtily ignores his affection and refuses to sing a song he writes for her. Consoled by Grace, a cigarette girl, Al does the number himself and is a tremendous hit. Molly, sensing his success, puts herself back in his good books. Al and Molly marry and gain considerable fame. Al is very happy with his admiring followers and Junior, his son, but Molly does not love him. On New Year's Eve she elopes with John Perry, taking the child with her. Haggard and broken the singer wanders back to "Blackie" Joe's, where once again Grace inspires him to "stage a come-back."

One night Al is called to a hospital where Junior is dying. He sings his heart out in a last lullaby to put his son to eternal rest. Stumbling out past Molly, the singer reaches the theatre in a dazed condition. Made up, out on the stage, Al breaks down trying to sing that "last lullaby."

This film has called forth an insistent demand for a record of "Sonny Boy" by the original "Singing Fool" (Al Jolson), to which Brunswick has responded with a most realistic version of the song.

At 2YA on Thursday (March 28) "The Fatherly Fellow" will feature this popular song.

### Passiontide and Eastertide.

QUITE to the manner born, the four YA stations for broadcasting in New Zealand adapt themselves naturally to the religious aspirations of the people and provide either by re-broadcast or from their respective studios suitable Passiontide and Eastertide musical fare for their listeners. Stainer's still popular "Crucifixion" will be relayed from Beresford Street Congregational Church by 1YA on Palm Sunday (March 24), and from St. Thomas's Anglican Church, Newtown, on Good Friday by 2YA. Originally written by the late Sir John Stainer and dedicated to the choir of St. Marylebone Parish Church, London, where he was organist in 1885, the work has been sung every year since by the same choir, and it is a beautifully reverent and appealing Meditation on the Passion of our Lord, the words being selected and written by the Rev. J. Sparrow-Simpson, M.A. The work itself appeals simply and directly to the listener, for it brings the varying scenes of its poignant story

before him with intensely dramatic vividness.

Appropriate studio programmes will be broadcast by the other stations after divine service on Palm Sunday.

On Good Friday (March 29) Maunders' Sacred Cantata, "Olivet to Calvary," will be presented in the 2YA studio by the Island Bay Wesley Church choir. This work rivals Stainer's "Crucifixion" in popularity, and whilst it is simpler in construction, it is highly effective when well sung.

Bach's "St. Matthew's Passion" is being relayed by 3YA from the Christchurch Cathedral on Good Friday, and with that efficiency that characterises present-day broadcasting all the solemnity of the cathedral atmosphere and the occasion will be apparent to listeners. A book could be written on this one work by Johann Sebastian Bach and listeners will recognise the inspirational force behind the music. The relays of services on Easter Sunday will meet with approval from the mass of listeners who will have no cause to complain of the fine studio programmes that follow as a matter of course.

### An Easter Hymn.

AT 3YA on the evening of Easter Sunday a fine record of the Easter Hymn from Mascagni's "Cavalleria Rusticana" (Parlophone AR1005) will be broadcast. It is certainly one of the most popular selections from that fine little work, and the solo by Emmy Bettendorff is of much merit, her intoning of Santuzza's lovely prayer being most thrilling. The fine ensemble of chorus and orchestra always produces an electrical effect upon those who hear it.

The general belief is that Mascagni's fine opera is one of a single tune—the famous Intermezzo—but this is not the case. Although this selection made the composer world famous over-night, the opera is as full of gems of melody as an egg is full of meat. The singing by a German chorus on this record is rather slow to the mind of the writer, but this is a natural failing—ponderosity being overestimated in the Fatherland.

## Broadcast Prediction

### Question of Wavelengths

MR. Hugo Gernsback, editor of the "Radio News," New York, states:

"It looks very much as if, in a few years, broadcast stations are likely to abandon their present wavelengths, and there will then be a general exodus down into the shortwave bands. For one thing, on the shorter waves, it will be easier to take care of more broadcasters without cramping them; secondly, in certain regions of the short wave band, there is less annoying static than in the longer-wave bands.

"And, the more shortwave receivers come into use, the more will be known about this phase of the art, and the better it will be for the industry and the public. It is a good thing that the progress from long to shortwaves is slow and orderly for, if this were not the case, 90 per cent. of the present-day radio sets would become at once obsolete. Yet there seems to be no danger of this, as the transition will be quite gradual, and will extend over a period of many years."

## Auckland City Council and Radio

(Continuation of cover page.)

FINALLY it was urged that on the higher ground of community service the council might reasonably be expected to co-operate with the Broadcasting Company in making the services of the band of the widest possible use and benefit to the community, and thereby facilitate an arrangement based not wholly on hard and fast commercial considerations.

THE Municipal Band, maintained as it is at the cost of the rate-payers for the avowed purpose of providing the citizens with good music, could obviously best achieve that purpose by making use without any additional cost to the council of a medium by which the benefit of their services could be extended to an immeasurably larger community than the band itself could possibly reach.

By making use of this medium not only would the band be rendering a community service of great worth to the Dominion, but it would be putting Auckland "on the map" more effectively than ever and thus justifying the cost of its existence through the returns which come directly and indirectly from a popular, far-reaching and impressive form of publicity.

Acceptance of the company's offer of £352 16s. would have helped substantially to relieve the financial burden now wholly borne by the ratepayer

## Facts about Lightning

### Investigations in U.S.A.

BROADCAST listeners have a very particular interest in lightning, which is one of the causes of static.

"That the needed facts about lightning can now be obtained is attested by the great success the Westinghouse Company has had in its Chilhowee Mountain investigation, which is still progressing. Early in the investigation there was obtained for the first time in history a complete authentic autograph of a lightning flash on an operating high voltage line. The records show when it occurred, how long it lasted, how far distant the lightning was, its voltage, its effect on the power lines—in fact, everything necessary for full analysis.

"It was found, for example, that the over-voltage on the line continued for 50 millionths of a second. Prior to this actual determination, we have had to guess as to the duration.

"It was found, furthermore, that while many lightning storms may occur in a general locality, only once or at most a very few in a year will have any effect on a power line and that many of the storms near power lines are harmless. However, when they do occur, they may be very harmful.

"Facts such as these are of tremendous value to scientists striving to find out how to combat lightning. If they should come in from a hundred investigations in a hundred localities, then, and only then, could we hope for final victory over our ancient enemy, and the consequent benefits of cheaper, more reliable, and more abundant power."

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## Radio in Southland

### Considered Unsatisfactory by Correspondent

A CORRESPONDENT from Hawera wants to know what is wrong with Southland. The latest returns for receiving licenses show Dunedin 2958 out of a total of 43,040. Of Dunedin's tally, I believe, some 700 belong to Southland. If an investigator from the north had visited Southland this summer, he would have found reception conditions, such as he might have been lead to expect, from the number of licenses in the district; that is, very poor. It is not worth while tuning in until darkness sets in, owing to rapid fading, and unfortunately for radio reception in the south, at mid-summer, this doesn't take place until 9.30 p.m. It requires a lot of enthusiasm to keep a radio set going under these conditions. If no improvement takes place, I, for one, do not intend to replace B batteries in the spring, as the game is not worth the candle. Why does this poor reception exist in the south? you may ask. No doubt there will be several opinions about this; some may even say it doesn't exist, but I will just quote from the editorial of the February number of that well-known American radio authority ("Radio News"): "The average 500-watt broadcast transmitter cannot be heard consistently over a distance of more than about 50 miles."

Nothing but multivalve sets are any good for Southland. Take a low average of £20 for a complete set, and we get a total of £14,000 invested by 700 listeners-in; and now for the annual upkeep. I see one correspondent works it out at £15 7s. per year, but we will be moderate and say £10 per year, including license fee. That makes £7000

per year. Do you wonder there are not more listeners-in down south? It strikes me that too much money is being invested in receiving sets and their upkeep, and not enough in supplying power to broadcast stations. Radio is developing rapidly, and it behooves the Government to approach the Broadcasting Company to instal more power at their weaker stations, and at the same time, if necessary, extending their license by an additional number of years to compensate for this.

I am enclosing a circular I received through the post a day or so ago re a Southland Broadcasting Association and broadcast station. I have promised support to the extent of £1 ls. per year, but have very little confidence that the station will ever get going, owing to lack of support, through the small number of license holders in Southland; but believe that if it did; crystal set users would keep it going after the first year. I make no apology for writing at this length, as I wish to see broadcasting available all over New Zealand, and furthermore the listener-in as a whole is in the game for keeps, while the Broadcasting Company has a limited existence on its present contract.—A.R.

THE circular referred to sets out that "steps are being taken to establish a Radio Broadcasting Association in Invercargill with the primary idea of providing Southland with a better radio service than is being obtained at present.

At first the expense of installing a worth-while plant was a big hurdle, until an offer was received from a prominent Invercargill business man, which immediately placed the idea within a measurable degree of accomplishment.

Stated briefly, this gentleman offered to donate a 500-watt station, completely installed, of the latest and best design, with but one condition—namely—"That sufficient support was forthcoming to cover the upkeep of the station."

This it is proposed to obtain by an annual subscription from each radio license holder in Southland, and by donations from radio dealers and others. If sufficient support is received, the station will become an accomplished fact.

The committee have been assured of the whole-hearted support of the Invercargill Orphans' Club, the Operatic and Dramatic Society, and other musical bodies of Invercargill; as well as the Rugby Union and the Boxing Association.

Now, Southland, it's up to you—with your support the station will be established—without it the project will fall through. The whole proposition is purely voluntary, and all programmes and services of local artists will be entirely on that basis.

The present committee wish it to be clearly understood that this station will belong to every listener-in who subscribes, and will have an equal voice in its management.

There are, roughly, 700 license-holders in Southland, and the support of at least 500 of these is necessary to enable the station to function successfully.

Now, all you radio enthusiasts—cease growling about poor reception from Northern stations. Give this project your hearty support by filling in the enclosed form, and posting it to Box 99, Invercargill, at your earliest convenience.

It will be your station—so give it your very best assistance.

Yours faithfully,

On behalf of the Committee,  
CHAS. A. LOCKHART.

This movement gives point to our advocacy earlier this year that the next phase of development should be the provision of relay stations at the main provincial centres, where population warranted. Invercargill certainly deserves consideration in such a development, but as our correspondent rightly points out, no company could be expected to undertake such extension or increased power without adequate protection and adjustment of its contract.

## Auckland Notes

(By "Listener.")

MR. LEN BARNES took over command at 1YA this week, and Aucklanders are expecting him to be more than a station director. He has been heard here on the concert platform in the past, and many have enjoyed his items contributed frequently at 2YA. Now we want to hear him from our own studio, and doubtless it will not be long ere he finds time from his routine duties to supply what will be most welcome contributions to our nightly programmes.

THOSE listeners who have come into personal contact with Mr. S. J. Hayden, who left on Sunday night to take charge at Dunedin, will sincerely regret his departure. Mr. Hayden was invariably courteous—at times to those who expressed petty dissatisfactions in a far from similar manner. He had the welfare of the station thoroughly at heart, and from the amount of time he spent at duties in 1YA, one wonders if he really saw much of his own home. Now, however, he has taken unto himself a wife, the wedding being celebrated on the day before he left for the South.

ON Tuesday night, through the courtesy of the Allan Wilkie Company, listeners were enabled to listen to a scene from Henry V, relayed from His Majesty's Theatre. The atmosphere of the play, as conveyed by the loud-speaker, was surprisingly good, but unfortunately parts of the dialogue were far from distinct. Whether this was due to the pace of the spoken words or to the acoustic properties of the theatre it is hard to decide, but the relay certainly emphasised the fact that, for the production of radio drama, the studio itself is by far the best place. To-morrow night we shall be able to make further comparisons, for then the Little Theatre Society will broadcast "Outward Bound" from 1YA itself.

SUNDAY afternoon's re-broadcast of KDKA was another feather in the cap of 1YA. It was a most successful achievement. The evening re-broadcast, however, was rendered impossible by disturbed atmospheric conditions. To alleviate the disappointment of listeners 1YA conducted most successful broadcasts of both 2YA and 3YA, the southern stations coming in through the local station quite as well as they were received direct. More of these efforts would bring north and south closer together in spirit and sympathy, and do much to obviate provincial jealousies which still flare up at times.

THE high barometric pressure which has been reigning here for many days may be a contributory factor to clarity of the atmosphere, for overseas reception has been phenomenally good for this period of the year. Australian stations have been audible at good strength before nightfall, and later have come in with surprising volume.

THE Tuesday evening relays from the Majestic Theatre usually provide something out of the ordinary for local listeners. This week Miss Madge Clague has been the vocalist at the theatre, the reproduction of her songs from 1YA was as real a treat to her large unseen audience as it was to those in the Majestic who applauded so vociferously.

WHEN 1YA shuts down on Sunday night there is bound to be considerable disturbance in local listening conditions. The clocks go back on Sunday morning, and all, from "one valvers" upwards will be anxious to find out how 2BL comes in now that it is half an hour nearer us once more.

THE next fortnight offers for dealers, radio societies, and all concerned for the welfare of broadcasting, a golden chance to impress upon all and sundry the necessity for an immediate renewal of the expiring license, or the procuring of a new one and the joining of the growing band of listeners who are nightly catered for in such a thorough manner.

MAKING comparisons between British and American broadcasting, the chief engineer of the B.B.C. declares that the broadcasters in America who are "selling time" (hiring their stations out for advertising or propaganda purposes) are rapidly becoming rich and powerful, and are spreading their network over the whole country.

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# Radio Round the World

A CONTRIBUTOR to "Popular Wireless," writes:—"Ireland, that land of freedom, has apparently been a bit too free, for according to a letter in the 'Irish Independent,' the hand of the wily advertisement-monger is at work, corrupting Irish broadcasting with a boost of—ye gods!—baking-powder. Worse, the baking-powder manufacturer is a 'foreigner,' which, I suppose, means 'Englishman.'"

LISTENERS in and around London and even in the provinces, when the last mail left Home, were seeking a definite clue to the origin of an unknown broadcaster who had been interfering with 2LO. A few days previously, many listeners complained of an amateur station working on 2LO's wavelength, which was not only causing interference with the programmes but which was broadcasting matter which had been described as blasphemous and obscene. It was thought that these vulgar transmissions emanated from a station somewhere in the centre of London, although it was also a theory that it is a high-power station operating in the North of England. According to the London "Daily Express," a listener in North London said that one evening he was listening-in to the Children's Hour from 2LO when he thought he would switch over to a German station and, as he was switching over, he heard someone singing "Linden Lee," in a manner which seemed to indicate that it was not from one of the regular stations.

ON December 16 the wireless telephone service between Buenos Aires on the one side and Berlin, Hamburg, and Frankfurt on the other, was opened to the public. The charge is £9 for the first three minutes, plus £3 per additional minute. This is a bold experiment, for the distance involved is much greater than between London and New York. It is understood, however, that excellent speech is possible, and that the expectation of big business runs high.

THE British Broadcasting Corporation evidently does not agree with the pessimistic assertion credited to a leading politician that by the end of 1930 broadcasting will have shot its bolt. On the contrary, the B.B.C. is spending half a million in hard cash on a building that will not be ready for occupation till the beginning of 1931. To this building the headquarters of broadcasting from Savoy Hill to Portland Place, Oxford Circus, will be transferred as soon as possible. The site, with an area of about 20,000 sq. ft., is in the form of a peninsula facing south, visible from Oxford Circus. The western facade will dominate Portland Place, and the eastern front will face Langham Street.

RECENTLY the New South Wales Broadcasting Company, Limited, was notified that Mr. Robert Cox, of Cundle, Manning River, had reached his 100th birthday. A call was given over the air, in which congratulations were given to Mr. Cox on passing his century, and it was pointed out that in

cricket, reaching 100 was always looked upon as an outstanding event, but in real life it was indeed an achievement. The hope was expressed that Mr. Cox's innings would continue, and it was stated that if he maintained his present form, young Hammond, Bradman and Jackson would have to look to their laurels as century-makers.

VOLUNTEERS have been called by the New South Wales Broadcasting Company, Limited, for a description of Sydney at the end of a rope dangling from a crane on one of Sydney's tallest buildings. It is thought that someone with a power of description could give listeners a thrill if he described his own sensations, and incidentally the wonders of Sydney, as he was hauled up, yard by yard, to the top of the crane.

AN engineer, resident in Johannesburg, reports having picked up some television from 2XAF, Schenectady, New York State, a distance of nearly 7000 miles. The engineer was using a home-made television receiving set. This feat is phenomenal, considering that television reception is regarded as impracticable at long-distance.

TOULOUSE, the ancient capital of part of Gaul when Caesar's legions conquered the country, paid a compliment to its early invaders when its radio station broadcast a message in Latin. Thus one of the oldest tongues was conveyed by the newest scientific means. Latin scholars were invited to transmit their impressions in Latin.

IT has just come to light that when William Backhaus, the pianist, was at 2FC, Sydney, he positively refused to leave until everything in the studios and control room had been explained to him in detail. Percy Grainger, the Australian pianist, had similar characteristics; but they were confined to a study of every musical instrument in the studio. He finally chose the xylophone, and practised on it for twenty minutes.

FIRST the ocean newspaper and now the ocean illustrated paper. Pictures have been successfully transmitted by the Fulton process through Rugby to the Olympic in mid-Atlantic, and printed in the ship's paper. This is undoubtedly a great stride forward, and soon there will be no place on earth where a man can escape from the busy world.

EDITORS of the "South African Wireless Weekly" have little faith in human nature. There have been no prosecutions of pirates for some time in South Africa; and the paper wants to know why. Pirating is reputed to be rampant in South Africa.

THE tendency in Canada is for "console" sets—in other words, radio sets like furniture. This is an expensive departure, and the real radio enthusiast in New Zealand is, generally speaking, satisfied with a set that will

stand on a small table and look nice. There is, however, a steady market for "console" sets in New Zealand for those who can afford to pay for "furniture."

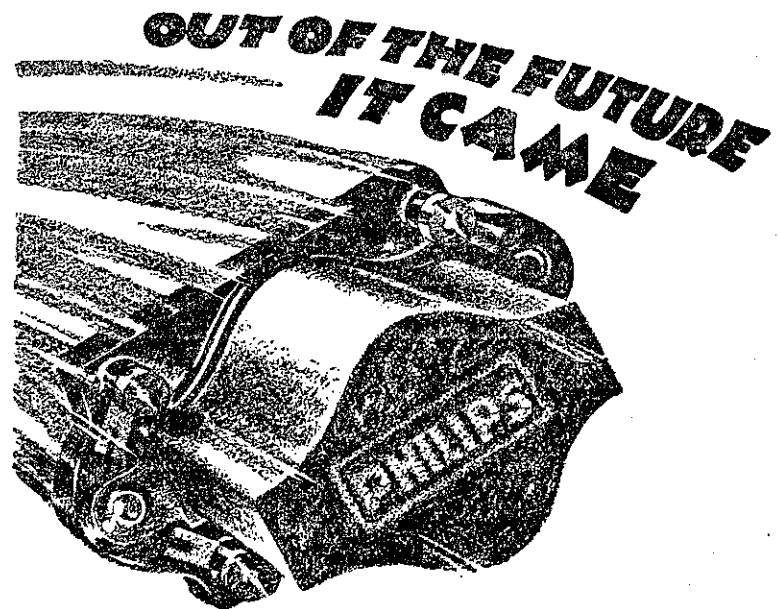
IT is reported that an English congregation listens in to the evening broadcast from Westminster Abbey. Listens in is not the right word. The congregation takes part in the service, singing the hymns, kneeling to pray, and following the Bible readings. The vicar has been a wireless enthusiast for twenty years.

A RADIO enthusiast writes to the London Press on "the brotherhood of radio" as follows:—"At one time I collected postage-stamps, but other collectors used to envy all my unused specimens. Then I tried photography—and lost all my friends when they saw my 'studies' of them! Finally, I took up radio—and found every other 'fan' a friend in need, ready to help and advise and assist, just as happy over my triumphs as over his own! Why is radio so friendly?" The New Zealand

land listeners are similarly inclined to help each other, and what listener cannot recall the readiness with which another listener has come to his aid when asked?

SEATS for 1000 visitors will be provided in the largest studio of the British Broadcasting Company at London. The building, which is to cost £400,000, is now scheduled to be completed in 1930, and will contain nine studios, one for picture transmission.

LONDON radio journals give publicity to a report from Oslo, Norway, to the effect that the police have been called in on the biggest license-dodging case ever heard of. According to the returns of the authorities, there were some 62,800 licenses, of which about 27,000 were not renewed. In addition to this, it is estimated that there are at least 20,000 listeners who never took out a license. Roughly speaking, about 50 per cent. of listeners are now evading payment. The difficulty of rounding them up lies in the fact that they are widely scattered on lonely farms, etc.



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Not of the present, but distinctly of to-morrow is the Philips Audio Transformer. Its features are as varied as they are unique.

- (1) A pure silver primary—non-corrosive.
- (2) A nickel secondary.
- (3) A special alloy core—impossible to saturate even when using the largest of Power Valves.
- (4) Compact—efficiently compact.
- (5) Completely shielded.
- (6) Transforms ALL frequencies equally from 50 to 10,000 cycles.

This transformer used with the correct "Miniwatts" (a Power Tube for the last stage of course) and a Philips Loudspeaker, will give you music that lives again in all its glory.

27/6

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# The New Zealand Radio Record

P.O. BOX, 1032, WELLINGTON.

Published Weekly. Price 3d. Subscription Post Free in advance, 10s. per annum; booked 12s. 6d.

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

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

N.Z. RADIO PUBLISHING CO., LTD.  
P.O. Box 1032, WELLINGTON.

WELLINGTON, FRIDAY, MARCH 22, 1929.

## AUCKLAND MUNICIPAL BAND.

**A** REGRETTABLE position has obtained for some time past in Auckland in relation to the Auckland Municipal Band and radio broadcasting. Imbued with a sincere appreciation of music, the members of the Auckland City Council in the past have devoted some £2000 of the taxpayers' money annually to the maintenance of a very creditable City Band. It has been the duty and function of this band to give, freely and regularly popular concerts to the ratepayers in return for the sum expended on them. As indicated, a motive for the maintenance of this band is to give to the populace the joy and pleasure of listening to popular music, and so raise the standard of citizenship and spread a love of culture. Part of the city's expenditure on the inculcation of music has been devoted to the maintenance of a City Organ and City Organist, the objective being the same, viz., the improvement of the popular musical taste.

**WITH** the advent of radio broadcasting, it became possible for the objective to make good music available for citizens to be more comprehensively attained, and arrangements were early made for the broadcasting, free of charge, of the band's Sunday evening concerts. Later, the business heads of the City Council considered that the Broadcasting Company might pay something for the privilege; and, on negotiations being opened, the company agreed to pay the sum of £300 per annum for the right to broadcast all band and organ performances, exclusive of the performances given at the Auckland Zoo. This arrangement obtained for some time, and under it listeners in Auckland district and elsewhere were regaled with some very fine performances by the band, but not so many by the organ, as those recitals proved to be unsuitable for broadcast purposes.

**IN** September of last year, however, the Auckland City Council conceived the idea of raising the price for the right to broadcast band performances, and in lieu of the former figure of £300 per annum, demanded £750 for the series of band concerts and Town Hall concerts, plus the organ recitals, which latter had proved by experience to be unsuitable for broadcasting purposes. This amount was considered by the Company to be quite excessive in contrast with the cost of providing a similar service from other sources. A statement published in another section of this paper outlines the negotiations that have been conducted since, in the effort to co-operate with

the Auckland City Council in their prime objective of providing good music for the people.

**WE** are bound to say that, in our opinion, perusal of the statement made will show listeners that the Auckland City Council, in taking up the line it has in demanding £750, has failed to measure up to the conception on which the expenditure of the ratepayers' money was originally appropriated to this purpose. If before the advent of broadcasting the Auckland City Council felt justified in spending £2000 per annum in providing music for the people, then surely with the advent of broadcasting, and its possibility of extending those benefits to a far wider audience than formerly, the Council should be glad of the opportunity of securing a wider circle of influence without extra cost, rather than seeking to reimburse its general funds at the expense of listeners' money. The Radio Broadcasting Company, it will be apparent from the recital of facts, is quite prepared to pay a reasonable fee for the concerts that it finds suitable to its clientele. Even though a number of the concerts provided by the band are free for the public, the Broadcasting Company was prepared to pay for them on the basis of seven guineas per concert; the total offer amounting to £352 16s. per annum. This offer, at writing, stands refused. We cannot help regretting that so narrow a view has been taken by the Auckland City Council on this matter, and sincerely trust that ratepayers and listeners, who are most intimately concerned in the position, will use their influence to effect an adjustment.

## One-Act Play

### Prize Winners Announced

**AT** the last meeting of the IYA Musical and Dramatic Committee, the report of the sub-committee which adjudicated in the One-Act Play Competition presented its report.

There were thirty-five entries, six of them being so good that the judges have been unable to allocate the three prizes in order of merit.

The sub-committee, therefore, recommended as follows:—

- 1st Prize to be divided between "Breeze," Timaru, "Devil's Rock," and Frank Hill, Wanganui, "The She-male Bachelor."
- 2nd Prize to be divided between "Jehosophat," Auckland, "Interlude," and "Crystal," Auckland, "No Imagination."
- 3rd Prize, "Hemi Pango," "Ebullitions"; "Leave it to Trixie."

## Dealers' Licenses

of radio-dealers' licenses shall be as follows, payable in advance:—

	£	s.	d.
(a) For a Class I license ..	15	0	0
(b) For a Class II license ..	7	10	0
(c) For a Class III license ..	2	0	0

## New Rates and Conditions

**FULL** details of the new regulations imposing an increase in the fees payable by radio dealers and other adjustments are given below.

Radio dealers' licenses shall be divided into three classes as follows:—

Class I: (a) Licenses of dealers carrying on business in any of the four main cities, viz., Auckland, Christchurch, Dunedin, Wellington, and within ten miles by the nearest practicable route of the Chief Post Offices at those cities. (b) (Portable) Licenses of dealers without any fixed place of business who are not representatives of Class I (a) or Class II licenses.

Class II: Licenses of dealers carrying on business in all other areas.

Class III: (Portable) Licenses of dealers without any fixed place of business who are the representatives of Class I (a) or Class II.

The fees payable for each year ending on the 31st day of March in respect

In the event of a license being granted after the 1st day of April, the fee shall be paid up to the 31st day of March following, at the rate of:

- (a) For a Class I license, £1 5s. per month or fraction thereof.
- (b) For a Class II license, 12s. 6d. per month or fraction thereof.
- (c) For a Class III license, 3s. 4d. per month or fraction thereof.

The fee for the first year, or portion thereof, shall accompany the application.

In cases of renewals, where payment of the above-mentioned fee is not made on the due date, the radio-dealer's license shall automatically lapse.

On payment of the foregoing fees, each radio-dealer shall have available to him, free of charge, during the currency of his license, the New Zealand patent rights held by Amalgamated Wireless (Australasia) Limited, in respect of radio receiving apparatus.

**Mullard**  
THE MASTER VALVE

Embodies all improvements  
known to Valve Manufacturers.

## Wellington Amateur Radio Society

### Interesting Points Raised

THE last general meeting of the Wellington Amateur Radio Society was very disappointing from the point of view of attendance, there being not more than twenty present. However, the meeting was quite an interesting one, as some very important points were raised.

The first, and probably the most important question, was raised by one speaker, who asked if the report published by certain papers that the Society was urging a Royal Commission to investigate broadcasting, was correct. He was assured that no such suggestion had been put forward by the Society, the view being that expressed by one speaker, and not discussed by the Society.

A letter was read from the Post and Telegraph Department in reply to a letter from the Society, in which it was asked whether or not the Broadcasting Company had the right to accept advertisements over the air. The letter was to the effect that by an agreement in 1926, the Company was given power to broadcast advertising for a fee. What might be described as advertising was discussed, following the letter being read, but nothing definite was arrived at.

### Titles of Records.

THE next important point raised was that of the titles of gramophone items which 2YA had been announcing after the record had been played. A letter from a correspondent urged the Society to pass a resolution requesting that the items be announced before the record was played. The feeling of the meeting was that the system was unpopular. In explanation, Mr. Ball, the Company's representative, stated that the system was inaugurated in response to numerous requests. That the system was generally unpopular, he was aware, and some alteration was to be made to compromise both points of view.

Commenting on the small attendance, one speaker said that if a greater attendance was desired, the Company should co-operate in either one of two ways. In the first case, they might shut down an hour earlier for a few nights, or secondly, put on a few "rotten programmes"—"for a change," interrupted another speaker. To make the meetings more popular, the chairman suggested a system similar to that in Christchurch, but it was not kindly received. That something should be done of a social nature was urged, and the question will receive fuller consideration.

### Electrical Units.

A PAPER was read on this subject by the vice-president, Mr. I. M. Levy, for Mr. Hardcastle, who was unavoidably absent from town.

Mr. Hardcastle had given great thought to the preparation of his paper and treated the subject from its very elements. He had commenced with the three fundamental units, mass, length and time, shown how these were connected with the English and C.G.S. systems, and latterly with electrical units. Such terms as "potential," "resistance," "induction," "ampere," "ohm," "voltage," "henry," and "farad" were defined.

## Dukes and Daggers and Jester's Bells

### Wonderful Recording of "Rigoletto" to be Broadcast

THE proposal to broadcast from time to time some of the best of the grand operas, such as was done in the case of Wagner's famous "Valkyrie," which was broadcast by 3YA and 4YA, will be continued in the presentation of "Rigoletto." The first instalment will be presented by 1YA on April 10, and this will be followed by a later presentation at the other stations.

The broadcasting of grand opera in this way gives listeners an opportunity of hearing the music of these famous compositions, as sung by the greatest of living artists. Electrically reproduced, the renditions are perfect, and listeners are therefore privileged to hear grand opera presented in a way they could never hope to hear unless in the La Scala Theatre, Milan, the home of Italian Opera for two hundred and fifty years.

This comprehensive recording of an entire opera, with full choruses, arias, and orchestral score, is a wonderful achievement. The most beautiful operatic music in the world is interpreted by the foremost artists and orchestras.

Throughout the radio presentations the necessary explanatory and descriptive details will be given in order that listeners may more fully understand the story of the opera and visualise each scene.

Here is colour, intrigue, action...melodrama in its most gorgeous form...music at its lyric best...this swashbuckling, bloodthirsty, lurid and immensely loveable old opera called "Rigoletto." Here it is in its entirety, with its "Caro Nome," its "La Donna e Mobile," and its famous Quartet.

Could anything more delight the soul of the opera-goer? In fifteen double-faced records is contained one of the richest outpourings of Verdi's melodic genius. And every bar of it is performed with a spirit, an elegance and precision rarely heard on any operatic stage.

The libretto of "Rigoletto" was adapted from Victor Hugo's play, "Le Roi s'Amuse," in which Verdi saw distinct operatic possibilities. The Venetian police, however, flatly refused to countenance a work in which a king was shown in such dubious character. Verdi, himself, was equally obdurate, and matters were at a standstill when the local chief of police, an ardent operatic enthusiast, saved the day by suggesting the substitution of the Duke of Mantua for Francois I. This was done, Verdi wrote the music in six weeks, and the opera was produced with immense success on March 11, 1851.

### Heard in Nova Scotia

### Long Distance Reception of 2YA

FURTHER letters have come from Canada and the States reporting reception of the New Zealand stations, especially 2YA. Many of the letters are from the Pacific Coast, but others are from further afield.

The furthest is from Nova Scotia, on the Atlantic Coast of Canada, where station 2YA was heard.

One correspondent in California, reporting on the election results as given out by 2YA, describes the parties as "Royalists" and "Laborers." He is evidently not abreast of New Zealand politics.

Another Californian correspondent has the true American advertising instinct. He writes on his letter in a way that cannot be overlooked, "Sunshine and Oranges."

A postal clerk in Alberta, Canada, said the temperature there was 40 degrees below zero.

Other letters came from Nebraska.

### Overhaul of 1YA

STATION 1YA is at present having a general overhaul at the hands of two of the Broadcasting Company's engineers, Mr. J. M. Bingham (chief) and Mr. W. Huggins. The occasion is also being availed of to have the studio completely renovated.

### From the Highways

### 3YA Seeks Entertainers

IN his search for variety for his programmes the station manager of 3YA goes into the "highways and byways" looking for talent.

The other evening he engaged a trio of Italian itinerant players, street musicians who were visiting Christchurch, and for three-quarters of an hour they played operatic, classical and jazz tunes, to the delight of listeners, one of whom saw fit to ring up from Greymouth. As the result of the entertainment provided by the Italians 3YA could not finish its programme till 11.45.

## Striking Feature at 1YA

### Humorous Mock Trial

ON Thursday, 21st instant, at 1YA, Mr. J. F. Montague will present the Auckland Comedy Players in a new feature for the air—a mock trial, which, with overture and incidental music, will occupy the whole evening. The trial is, of course, written on humorous, topical lines, and should provide a delightful evening's entertainment. It tells the story of a collision between the Hon. Fitzhugh's beautiful limousine (with the owner's patent stopping gear), and a taxi-cab, driven by one Charles Higham Larkin, and the claim is for £1500 damages. The bench will be occupied by Mr. Justice Dahling, and a strong "bar" is engaged, including Mr. Ellis Dee and Mr. Hugo Honne. There is a long array of "witnesses," including Miss Marion Earle (a nurse), Esau Backfire (a chauffeur), Count Von Richman, Dr. Adeny Payne, Police Constable MacHinery, and a host of others. Among those taking part will be Messrs. Julius Hawken (the judge), Dan Flood, T. T. Garland, J. F. Montague, J. N. Gordon, George Helyer, Dyson Watson, Alan Gladfield, Miss Constance Gilbertson, Miss Ruby Palmer, and a great number of others, as counsel, witnesses, criers, messengers, policemen, and the "jury." The idea is broadly funny, and the fun should be fast and furious. The Auckland Comedy Players have already many successes to their credit, and the cause, "Larkin v. Fitzhugh," should add another to the list.

## Radio Season at Hand

### Boom Time for Broadcasting

THERE are good indications that 1929 will be a very successful year for the radio trade in New Zealand. The year should be a record one for the radio dealers owing to the greatly improved financial position of the country.

Heralding in the new license year, the Broadcasting Company is carrying out an advertising campaign in the city papers, which is calculated to speed up the renewing of licenses and enrol new listeners. Already there is a vigorous feeling in the radio trade.

It would appear that the occasion is a very opportune one for the radio dealers to take advantage of. The more enthusiasm they can add to the efforts already being made, the greater will be the mutual benefit.

Apart from its energies in the direction of advertising, the Broadcasting Company intends further to improve its service this winter. It is in anticipation of being able to do that that the present advertising campaign is being carried out, for the limits of what can be done depend a great deal on the number of licenses issued in the next few months.

The first essential to a boom year in radio is for all listeners to renew their licenses as quickly as possible.

# The Listener and the Service

## Points of Interest from the General Manager's Mailbag

### The Silent Vote for Quality.

THAT there is a big silent vote for quality in programmes is evidenced by the following letter:—"There seems to be so much said about popularising the programmes broadcast, but those people (and there are many) who appreciate a higher class of music rarely express their opinions. We personally appreciate programmes of a classical nature, particularly piano solos, records and local. Mr. Montague's excellent plays, orchestral or band items, and debates. To us the jazz and Hawaiian items are very objectionable, and the vocal items rather too numerous, and while I know it is necessary to cater to a great extent for the so-called 'public taste,' it seems a pity not to have more of the many beautiful records, which not only would please a large number of people, but would enable them to hear, reproduced, those artists whom they may never have the chance to hear first hand. For people who have many duties and little time for study or reading, the wireless is an ideal way to combine enjoyment with 'improvement,' but the question is whether the majority of items do not tend to lower rather than raise the taste. I do hope the committee of 1YA will keep in mind the splendid opportunity they have for helping those people, particularly, who through their duties or health, are prevented from keeping up either their musical or literary education."

In acknowledgment, the general manager commented on the weight of the opposite viewpoint: "You will appreciate that it is extremely difficult for us to please everybody at all times, and as an illustration of the variance in

individual opinion you will be interested to learn that a number of the listeners who appreciate the lighter type of music suggest to us that our programmes are too heavy and feature to an unnecessarily great extent items of a classical nature. In arranging our programmes, therefore, we must of necessity be guided by the opinion which is shared by the majority of listeners, but we have also made the additional provision that when all stations are broadcasting simultaneously each individual station is broadcasting a programme of different type. Thus, for example, on Thursday evening a listener with a sufficiently powerful receiving set can receive an operatic programme from Christchurch, a band programme from Wellington, and a popular programme from Auckland. In this way we are able to cater for the greatest possible numbers of listeners at the one time, although we endeavour as far as we possibly can to arrange the programmes for the individual sessions such that they will provide maximum satisfaction, both for those who care for entertainment of the lighter type and those who appreciate more classical items."

### Radio Outback.

VERY appreciative letters come from listeners outback. Here is one of the latest received: "It is with much pleasure that I drop you a line to let you know that every word, also the band and orders issued by officers, came through to me first class. Most distinct and interesting to me, as an old soldier (Imp.), camped in tent miles away from everybody in this mountainous country. I have a six-valve set—my only amusement when not killing wild pigs, deer,

etc., which is my occupation. My only regret is I am not able to be present with you all on the Basin Reserve this Sunday. I have seen Queen Victoria, King Edward, also King George, trooping the colours, so as you spoke I could follow you as to what they were doing. I listen-in every evening, sometimes also of an afternoon, and enjoy some of your children's singing, one especially. I think her name is Margaret; she sang yesterday (Saturday). She has a fine voice and her pronunciation is beautiful over the air. Sometimes I have as many as 20 men from the main camp up, and they all go away thoroughly pleased with the excellent programme you provide us with. Thanking you."


### Variation of Programmes.

COMPLAINT was lately made that programmes as published were occasionally departed from in greater or less degree. In replying to this complaint it was pointed out by the general manager that while every endeavour was made to maintain programmes, "even a departure of two or three minutes at the beginning of the programme or a last-minute engagement of an artist of outstanding merit will upset the timings for the whole evening, as they have been previously published. With the development of our service, this is a difficulty which we will no doubt be able to overcome to a greater extent as time goes on." The stations had strict instructions to adhere to the programmes as published to the utmost degree. In the case of gramophone records, some difficulty has been experienced in obtaining the exact records which are published for performance, but it was hoped in the very near future to supply all records from the head office, when there would be no necessity to substitute numbers for those announced.

### To Please All.

"To the Wellington Broadcasting station what is wrong with the night constants now they are very bad they are not worth listening to it as gone back very badly of late they are worth putting on there is no hands or nothing put over now there is two many songs and not a nuff music every body is complaining about the same thing over this way I was thinking of getting set but not while they are bad like that I not."

INSIST ON—



# SIEMENS

## RADIO BATTERIES

Absolutely Silent in Action.  
Catalogue posted free on request  
N.Z. Distributors:  
**CORY-WRIGHT & SALMON**  
Engineers, Wellington, Auckland

The foregoing is a true copy of a letter received by the general manager. Even so, a courteous reply was forwarded in the hope of winning a convert. "We regret to learn from your letter that our recent programmes from this station have given very little satisfaction. Owing to the large number of listeners for whom we have to cater, it is somewhat difficult to please everyone at all times, but we are of the opinion that a close examination of our programme details will indicate that our service to-day has not retrogressed, but rather the reverse to a considerable extent. In arranging our programmes due attention is given to placing the items, and as far as we can possibly arrange, there is no unnecessary predominance of either instrumental or vocal numbers. In regard to bands, several of these have been out of Wellington for the purpose of attending the contest in Wanganui, but their non-appearance at the studio at 2YA is quite temporary, and we hope in the very near future to feature band programmes again as previously."

### Operating a "Chain"

SPEECHES by prominent figures in politics, engineering, and industry at Washington, New York, and at the tunnel's mouth in the Cascades were controlled by the inexorable second-hand of a stop-watch. Stop-watches, in turn, were synchronised with electric clocks on the Atlantic and Pacific Coasts, adjusted to the second with the clocks that govern the operation of the Oriental, Limited. By moving a switch the engineers shifted the centre of the network to the eastern portal of the tunnel just as the train approached. There it came to a momentary halt, while an announcer "presented" Mr. Ralph Budd, President of the Great Northern Railway. Afterwards, both boarded the train, and, as its light disappeared, other switches transferred listeners back to New York and Washington, and again to San Francisco before the express emerged from the western end of the tunnel, where another microphone picked up a description of the first trip through what is said to be the largest tunnel in the world. Thirty-seven stations, from coast to coast, participated.

## Have Safe Easter Trips by Rail

### SAVE 6/- IN THE £

Working carefully, day and night, on the principle of "Safety First," your Railways have carried more than 70 million passengers without one fatality during the past three years.

Have a safe, comfortable Easter holiday with the help of the liberal concession fares of your own Railways.

These special concession trips will begin from 26th March to 1st April, but tickets will be obtainable at all railway booking offices 14 days before the date of travel and will be available for return until 4th May.

Write to the Officer-in-Charge, Publicity Branch, N.Z. Railways, Wellington, for literature regarding the principal tourist resorts.



## 2YA Poetry Competition Awards

### Dramatic and Humorous Sections

THE competition organised by the 2YA Musical and Dramatic Advisory Committee, for the best original poems, dramatic and humorous, occasioned widespread interest and resulted in no less than fifty entries being received. The competition was divided into two sections, one for dramatic and the other for humorous poems, and the prizes were kindly donated by Messrs. Cadbury's, Limited. Three judges were appointed, Dr. G. H. Scholefield (Parliamentary Librarian), Mr. Johannes Andersen (Turnbull Librarian), and Mr. C. A. Marris (editor of the "Referee"), being good enough to consent to act in that capacity. February 28 was fixed as the closing date of entry. All entries were opened at 2YA and the names of competitors carefully removed, each name being numbered and a corresponding number being marked on the entry. The judges, therefore, had no knowledge of the identity of the competitors. Unfortunately Dr. Scholefield had to leave Wellington, and rather than hold up the judging, Messrs. Andersen and Marris undertook the responsibility of making the awards. Their report, which follows, makes most interesting and instructive reading:—

#### Dramatic Section.

MANY of the competitors evidently do not know what is meant by "dramatic." It simply means striking or impressive, either in action or situation. Some of the entries were purely descriptive, and descriptive of natural scenery. One piece entered in this section was comic without being dramatic; it should have been entered in the humorous section, though it would not have taken a prize, being much too crude in workmanship.

On the whole, the execution of the pieces is below the average, and we are agreed that none is good enough for the first prize. We would recommend that the second prize should go to "Berwyn," for "The Bushman's Child." At the same time we should like to point out that this piece, while of great human interest, comes very near to being melodramatic. The situation is a good one, and in spite of the faulty workmanship we experienced the feeling while reading this piece that all true drama should give. We feel that, properly delivered, this story should appeal to radio listeners.

One or two other pieces might be mentioned. "Pania of the Reef," by "Gloria Harlington," is well written in the Hiawatha metre, but the story, reminiscent of "Agnes and the Mermaid," has too little human interest, and is too tamely told to have any dramatic appeal. However, to this piece we have awarded the third prize. "The Flight of the Falcon," by "Breeze," might appeal to boys, but only to boys in their young teens, and before they were out of their Deadwood Dick days. "A Burning Story," by "Rock," has a certain amount of feeling, but it is not dramatic and is rather weakly expressed. Some of the others, whilst fair verse, have little to say; others, with a little to say, have

not the command of verse to be able to say it. One tried to emulate Gordon's "How We Beat the Favourite"

The best expressed verses in this section, and the best expressed taking both sections together, is "Odysseus," by ———. This piece is really good; it has the spirit of poetry, and the writer has command both of language and of metre. It is not, however, dramatic; it is purely meditative; and whilst verse like it may be found in drama, it is not in itself dramatic, and in drama that kind of verse is used only in the pauses of the drama. It is, however, of such a quality that we should like to recommend a small special prize, as it is well worth publication in the "Radio Record." (Messrs. Cadbury's Ltd., have generously endorsed the judges' recommendation, and the writer of "Odysseus" will receive from them a special prize of £1.)

#### Humorous Section.

ALL the competitors, or nearly all, know what humour means. Some of them have good ideas, but are quite unable to give them good expression. Here, too, we think that a first prize is hardly deserved, but on account of its delicacy of touch the first prize might go to ———, for "Parted"—a well-expressed idea that at first appeals as sentimental, but is transformed to humour in the last stanza—a light, pleasant humour reminiscent of the English Calverley. The second prize is deserved by "Austral" for "The Four Sports." This is broad humour; and this, too, if properly delivered, will we feel sure appeal to radio listeners. One that runs this one very close is the really humorous situation in "Breeze's" "Mr. and Mrs. White Hold Hands." This would need much blacksmith work to make the metre run smoothly; the writer needs much practice in technique, but this is entitled to the third prize.

A word might be said in connection with one competitor's remarks in "Hope Deferred." The competitor thinks that if he knew just what the editors wanted he might be able to supply the want. That is the wrong way to look at it. If you have anything to say, say it; if you really feel it and can express your feeling, that is the thing the editor wants. Genuine feeling well expressed always appeals and is always wanted. But if you have no genuine feeling or are unable to express it if you have, what you say will never be wanted.

#### Prize-Winners.

Dramatic Section.—Mrs. Beryl Windsor, Gay Street, Ross, Westland, second prize, £2; V. May Cottrell, 24 Hastings Street, Napier, third prize, box of Cadbury's Chocolates, valued 10s. 6d.

Humorous Section.—J. P. Black, 56 Hector Street, Seatoun, Wellington, first prize, £3; Geo. T. Palmer, 58 Forbury Crescent, St. Clair, Dunedin, second prize, £2; Betty Kerr, "Athlone," Kingsdown, Timaru, third prize, box of Cadbury's Chocolates valued 10s. 6d.

Special.—A. R. D. Fairburn, New Lynn, Auckland, special prize, £1.

## Miss Edith Harrhy to appear at 1YA

### Richly Gifted Singer, Pianiste and Composer

MISS EDITH HARRHY, who is to arrive in Auckland this week, is under engagement to appear at 1YA on Saturday, March 30, and Wednesday, April 3. This will be an opportunity for New Zealand listeners to hear one of the foremost Australian radio celebrities.

Miss Harrhy had a distinguished career at the Guildhall School of Music, London, where she studied piano, singing, chamber music, ensemble playing, harmony, composition, and opera, under Sir Landon Ronald, Hamish McCunn, Hubert Bath, Edward German, Liza Lehmann, Coleridge Taylor, and others. Miss Harrhy has made many celebrity tours in the Homeland, and has appeared in company with such artists as Robert Radford and Peter Dawson, who sing her songs.

As her name suggests, Miss Harrhy is Welsh, and her English Press criticisms are very good, not only as to her soprano voice, but as a solo pian-

iste and accompaniste. She is also a composer. She has written delightful words and music for four books of children's songs. It is in her own accompaniment to her own songs that the rich charm of her personality makes itself fully felt. These songs are built up on the little happenings of everyday life, and owe their conception to the bedtime song hour which she holds every evening for her two little daughters. (In private life Miss Harrhy is Mrs. William C. Beckx Daly.) One of these songs is "Mary Magdalene," which is to be sung by Miss Harrhy at 1YA. Others of her own composition to be sung will be "Roses for the King," "Friendship," and "Golden Wattle."

Pianoforte solos will include three works by Chopin, of which she is a great exponent. It was in connection with her playing of Chopin that an English critic said: "She reminds us of the great Pachmann in the delicacy of her feeling and fineness of her touch."

### Power of 2YA

### Kreisler—Master Musician

#### Strength of Transmission

"SWITCH" writes: In last week's issue of the "Record," Mr. J. M. Bingham, chief engineer of the Radio Broadcasting Company wrote: "I wish to draw attention to a slight inaccuracy in a paragraph by 'Switch' concerning the power required by 2YA." Then Mr. Bingham went on to show that the approximate power required in various sections of the equipment totalled 20,000 watts, or nearly 27 horse-power, not 6½ horse-power, the figures mentioned by "Switch." But if Mr. Bingham had noted the opening sentence in "Switch's" par he would have observed that it referred to the strength of transmission. "Switch" wrote: "Beginners are often puzzled over the strength of transmission by broadcast stations expressed in watts." The New Zealand rating gives 2YA a transmission strength of 5000 watts. This rating does not take into account the power employed in the water pump, bias, etc., as mentioned by Mr. Bingham.

FRITZ KREISLER, whose name is constantly appearing on the programmes, was born in 1875. He is best known to musicians as a fine interpreter of great music. He is also well-known as a composer and, even more notably, as an arranger of other people's pieces. This son of a leading Viennese doctor began studying under Hellmesberger and Auer at the Conservatorium at seven (he was about half the age of any other pupil there). Later, in Paris, he worked at theory under Delibes, and at twelve carried off one of the Conservatoire's biggest prizes, against competitors of twenty. Strangely, after a while he left music, studying medicine and art; then he did some army service. When he came out again as a violinist, he soon began to make the reputation that for nearly thirty years has steadily grown. For some years he lived in America. He put in good service during the war, in which he was early wounded. His connection with British-speaking people has been close and cordial. He holds the gold medal of the Royal Philharmonic Society (1904).

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## Compound for Accumulators.

WHERE in Wellington can I purchase litharge (negative compound for accumulators)? asks "W.J.P." Trentham.

ANSWER: Try Kempthorne, Prosser's, Victoria Street.

With regard to electrolytic "B" battery chargers, is it possible to calculate the voltage and the amperage output across the leads to the "B" battery?

ANSWER: Voltage is immaterial. It is the amperage that counts, and the only satisfactory way of determining this is to connect an ammeter in series with one of the leads.

## Cramped for Space.

"W.S.H." (Wellington) writes stating that through lack of space he is unable to erect two masts, but at the present time has an aerial between two chimneys. He is getting interference noises badly. He asks for details of a cage aerial in the hope that this will cure his troubles.

ANSWER: Cage aerials are not recommended, as they have too much capacity to earth. To erect one mast and run the wires out in the fashion of the ribs of an umbrella, insulating them well above the ground, should give quite a good aerial. Regarding the tramway noises, a counterpoise should be tried instead of the ground. It may be a length of insulated wire under the carpet. Interference from power noises have been dealt with very fully in the 1929-30 "Radio Listeners' Guide."

## Mush and Distorted Signals.

"IN the afternoon," writes "W.W." (Wellington) I can get Christchurch splendidly on my six-valve set, but at night both Christchurch and Auckland

are practically unworkable owing to mushed signals, though at the same time Sydney comes in loudly and clearly. Can you explain.

ANSWER: It appears that the detector valve is being overloaded, for during the daytime, Christchurch, although usually weak, comes in well. When at night time, it would be coming in very much stronger, mushiness and distortion results, so that the case is apparently one of overloading.

There are several ways in which this difficulty might be overcome; for example, the provision of valves that will handle a greater amount of undistorted current, but the simplest method if the signals from one station come in sufficiently loud, would be to weaken the signals that are now being distorted. The most convenient way is to connect a variable resistance of 10,000 ohms between the aerial and the earth terminal. By varying this, according as to whether the signals are coming in too strongly or not, the correct amount only should be allowed to pass through the set.

## Neutralising the 2-R.F. Browning-Drake.

"I HAVE found the following specific faults with my 2-R.F. Browning-Drake: (1) Very broad tuning of the first stage, although the second stage is quite selective. (2) I find it impossible to neutralise the first stage, though the second stage with the same number of

## Questions and Answers

primary turns and neutralising condenser neutralised well. (3) Under no circumstances would the first stage oscillate, though the second stage if out of neutralisation oscillates justly. (4) The first stage indicated in several ways that it was a passenger.

On one occasion I received fair loud-speaker volume with the first valve out of the socket. I have tried several different valves and checked up all the wiring. With two UX-199's with the same primaries (16 turns) I could get only 'phone strength with two stages A.F. More turns on the primary gave better results with the 199's, but caused the PM3's to howl. All the valves were tested and are O.K. Would a screen grid be applicable, or should I persevere with the 199's?

ANSWER: With regard to the four enumerated points: (1) Make sure that the "F" end of the coil is actually connected to the filament negative and that the capacity of the variable condenser is adequate to cover the band satisfactorily. That is, it should be .0005. The radio frequency transformer is probably the cause of the trouble, and trouble of this nature is usually to be found in the first grid coil. The primary of this transformer should for PM3's or 199's consist of at least 25 turns, and some recommended that there should be 32 turns. Make quite certain that there is no coupling between the various grid and anode coils, due to bad spacing or alignment. (2) It appears that coil interaction more than inter-electrode capacities is at the bottom of the trouble here. Check over the shielding, and try the reversal of the primary winding of the radio frequency transformer. (3 and 4) This more than ever suggests a disconnection somewhere in the first stage. Try taking out the first valve, by connecting the aerial to the plate of the first valve, thus the primary coil acts as an aerial coil. Persevere with the 199's.

## A One-Valve Problem.

"T.P." (Blenheim), writes: "I have a one-stage amplifier, and am using this in conjunction with a one-valve set. Wishing to experiment, I connected a variable condenser between the aerial and the earth outside the set, and have found that I get very good results. Do you think it can possibly do any harm to either set?"

ANSWER: It certainly cannot do any harm if the connections are as has been shown by a diagram. The reason that the correspondent gets improved results is because of the fact that the aerial and aerial coil are being tuned to the wavelength desired. A tuned aerial has a far greater efficiency than an untuned aperiodic coil.

## Re-neutralising a Set.

WOULD you tell me how to re-neutralise my set, which has been unbalanced by my inserting new valves? I have changed from American to Continental valves, and it now oscillates.

ANSWER: As the set is a factory-made one and specially designed for American valves it is quite likely that it will continue to oscillate, as very much trouble has been occasioned other users of this set who have departed from the valves specified. This is not at all a wise procedure, as each set maker designs his set around his valves, and the greatest efficiency can only be obtained by adhering explicitly to the valves in question. However, in response to your request, we publish in the "Beginners' Corner" this week a simple method of neutralising.

## Transformer v. Tuned Anode.

"DIALS" (Napier) writes: Why is it necessary that the screen grid Browning-Drake should have a primary? Apparently, a large number of turns should be put on the primary and the

step-up of the transformer is going to be reduced to a ratio of 1 to 1. Where is the gain, for by the use of the condenser (tuned anode) we simply by-pass the signals by electrostatic induction? With the primary and secondary we pass the signals by electro-magnetic induction. Why not use the condenser if there is no gain to be had by the transformer method?

ANSWER: The secret of obtaining the full efficiency from the screen grid valve is to have its external plate circuit as near as possible matched to the impedance of the valve, and for this reason the inductance of the coils is brought as near as possible to that of the valve. This is most nearly accomplished by transformer coupling.

Certainly, the tuned anode system is far simpler, but has the disadvantage of tuning very flatly. Again, if the radio frequency transformer is done away with, can the receiver be called a Browning-Drake?

## The Beverage Aerial.

"C.H." (North Auckland) writes: I have a five-valve factory-made set, and I can get the New Zealand and Australian stations with good volume. Of the Americans, I can get only KFON faintly.

1. Would a Beverage aerial improve reception?

ANSWER: Yes, it is fairly safe to assume that if a Beverage aerial running from north-west to south-east is erected, reception from the Americans would improve.

2. Would plain wire be suitable for same?

ANSWER: Yes, quite suitable.

3. Would you kindly give directions for erection?

ANSWER: Get a clear run of about 600 yards or more in the direction indicated, and lay off the wire supporting the same at frequent intervals, if possible, by masts or trees. If trees are used, keep the wire clear from the foliage. The distant end of the aerial should pass to a 400-ohm resistance, and through to earth. The total height of the aerial should be only a few feet, just sufficient so that it may clear stock, etc. The receiver terminal of the set should be connected to the aerial through a small fixed condenser.

## The "B" Battery Eliminator.

"R.K.," writing from Wellington, states that he has not had success with the "B" eliminator described by "Megohm" some fifteen months ago. He states that he is using ordinary receiving valves as rectifiers, and does not know what to do with the grid terminal. He does not quite understand the connection between the plates of the valves. He has now bought a Raytheon (filamentless type), but cannot understand how to connect this to the eliminator. At the present time he is getting only sufficient current to run a one-valve set, so that there is evidently something radically wrong with his eliminator.

ANSWER: In the first case it would have been advisable for the correspondent to use the special rectifying valves produced by the different makers, for, where any great current is to be delivered, it will be found that the ordinary receiving valve is insufficient to handle the output. This would possibly account for the little current being delivered. The grid of the ordinary receiving valve should be connected to the plate of the valve by means of a short piece of wire on the valve socket. The plates of the rectifying valves are connected one to each end of the secondary winding of the transformer, that is, HT1 and HT2. Other than this, there is no connection between the plates.

To adapt this circuit for use with a Raytheon valve, the two ends of the secondary winding are connected one to each of the filament terminals of the valve socket. This really connects with the two plates of the Raytheon. The third electrode in the Raytheon connects with P of the valve socket, and this takes the place of the filament centre tap of the original circuit. That is, it connects to the high-tension terminal through a radio frequency choke. The filament

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windings may be disregarded or they can be applied to the filament of the power valve of the receiving set. "B" is as before, from the centre tap of the secondary.

#### A Request for a Circuit.

"RELATIVE to your article in this week's issue of the 'Radio Record' on radio frequency amplification and its use on shortwave, should you recommend an all-wave circuit using one stage of screen grid R.F.?"

ANSWER: We have noted this request, and shall endeavour to fulfil it shortly.

#### "Pentode's" Dynamic Cone.

"H. F.B." (Auckland) asks: "Is the ratio of the transformer for the dynamic cone described by 'Pentode' based upon the impedance or the resistance, and what type or make of transformer would you suggest? I have made up the speaker but find a 25 to 1 transformer is unobtainable in Auckland. I have been advised to make one. If I should have to do this, could you give the details of one?"

"My gap for the moving coil is at present 1.16 of an inch. Would it be advisable to increase this?"

ANSWER: A 25 to 1 transformer should be obtainable, for it is understood that one maker at least has such products on our market (Ferranti). If yet, the transformer cannot be obtained and other readers have found this difficulty, "Pentode" will give full constructional details of a suitable transformer.

#### Shielding a Receiver.

"A. J.S., of Nelson, writes: 'I have a five-valve neutrodyne (factory-made), and I wish to shield it, but I am not clear about the coils, which are mounted on the moving condensers, and are set at an angle of 56 degrees. Could I use these, and, if so, would I leave them as they are or would I shift them and set them as described in the 'Record'?"

ANSWER: There is no need to shift them merely remove the condenser from the panel, drill a corresponding hole in the shield box, and reinsert the condenser as described in the "Record." The coils, however, could be removed and set down as described.

#### The Capacity of a Condenser.

MY condensers consist of six moving plates and five fixed plates. What are their capacities? How many plates are there in a .0005 condenser? asks "A.J.S."

ANSWER: The number of plates for any one capacity is not definite, but the condenser in question is in all probability a .00025. A .0005 condenser has usually 13 moving plates, and 14 fixed plates.

#### An Amplifier for Volume.

"D. S." (Market Cross) asks if the amplifier described by "Pentode" (push-pull) would give more volume than the amplifying stages of his set.

ANSWER: This cannot be stated, unless the particulars of the amplifier in the set are known, but it would be fairly safe to assume that the number of valves and their characteristics being the same, the push-pull would be the better amplifier.

COULD the volume of "Pentode's" amplifier be increased by using more expensive transformers than those specified?

ANSWER: Generally speaking, more expensive transformers than those used by "Pentode" would tend to improve quality rather than volume.

COULD another stage be added to the amplifier?

ANSWER: No, it is not practical.

I WISH to supply a dance hall from four dry batteries. Would the push-pull amplifier be sufficient?

ANSWER: It should be, yes, for "Pentode" has used the same amplifier for this purpose many times.

## A Corner for Beginners

#### The Neutralisation Process.

BETWEEN the grid and the plate of the valve a capacity erect known as the anode grid capacity is set up, and unless there is some method of preventing the energy so generated from feeding back into the aerial, the set is going to act as a transmitter, and all the neighbourhood will be interfered with.

To combat this, in the radio frequency stage, a method known as neutralisation is employed. This is quite frequently referred to as balancing. The object of balancing is to provide a second feed-back between the various other external circuits to connections outside the valve. The second feed-back is arranged so that energy passing through it is equal in amount to the valve feed-back but is opposite in phase or polarity. The effect of the valve feed-back is then exactly balanced by the external feed-back. The result of combining these two feed-backs is to destroy the effect of both, so that regeneration and oscillation are prevented.

A simple analogy may make this clearer. If an acid is split or taken internally, the simplest method of preventing its action is to neutralise it by an alkali which, though in itself as dangerous as the acid, when applied to the acid neutralises its effect or kills it. Exactly the same thing happens when the set is balanced.

Principally, there are three methods of balancing. Of these the most popular balanced circuit was the neutrodyne. From the condenser that tunes the grid coil of the aerial circuit a lead was taken to a tap near the filament end of the secondary winding of the following transformer. This connection was broken by a neutralising condenser. Thus the feed-back from the grid was intermingled with the feed-back from the transformer which was opposite in polarity, and so one destroyed the other.

The Roberts method is very similar except that the balancing energy is secured from a special winding in the radio frequency transformer, and the balancing condenser is adjusted so that it allows enough feed-back to just compensate for the internal feed-back of the valve.

The Rice method of balancing requires a centre tap on the grid coil of the aerial circuit which is connected to the filament negative. The plate of the radio frequency valve is then connected to the lower end of the grid coil through a balancing condenser.

The Neutrodyne method is that generally used and is the one employed with the Browning-Drake.

#### Adjusting the Balance.

IT can be readily seen from the foregoing that the amount of feed-back from the secondary of the second R.F. coil must be equal to the feed-back from the valve, and this must be regulated by the balancing condenser.

Thus the capacity of a balancing condenser is proportional to the internal capacity of the valve. It is rare that the internal capacity of one valve is similar to that of another valve, so that it is only to be expected that the capacity of

SHOULD I connect the terminals of the dynamic cone speaker direct to the "A" battery?

ANSWER: Yes, if this is of the type the field of which is excited by direct current of 6 volts. These field terminals are connected directly to the A battery.

WOULD a small amplifier connected to my set cause it to howl?

ANSWER: If carefully constructed, there is no reason why it should not, especially if a radio frequency choke and by-pass condenser are incorporated in the detector circuit.

the balancing condenser has to be altered every time a new valve is inserted in the radio frequency socket. Very few radio enthusiasts realise this, and very unsatisfactory reception following the change of radio frequency valve is quite common. Receivers that howl or whistle very frequently require reneutralisation.

With all the circuit connections properly made, and with a neutralising condenser, set at about one-half of its total capacity, signals from a station on about 300 metres are tuned in to a maximum. All the signals must come from the antenna, so remove the antenna and decide if this is the case. If not, tune to a weaker station.

The filament of the valve to be balanced is turned out by turning off its rheostat, by removing the filament control resistance, or by disconnecting a wire from one of the filament terminals. No other changes are made, and no other valves turned out, and the tuning controls are left unchanged. The signals from the station previously tuned in will still be heard with fair volume, because of the energy that passes through the internal capacity of the valve. The balancing condenser is then carefully adjusted until the signals are not heard or until they are at a minimum. This means that the internal capacity of the valve has been neutralised by the feed-back from the second coil. The set is now neutralised, and when the valve is turned on again, the signals will come in at far greater strength, and there will be an absence of noise caused by feed-back.

The procedure should now be gone over again with a different station, preferably one with a higher wavelength, then on one with a lower wavelength. If it requires a great deal of alteration to the balancing condenser an adjustment should be made so as to strike a happy medium.

When two stages of radio frequency are to be neutralised the stage nearest the detector should be neutralised first and quite separate from the first stage.

#### Batteries! Batteries! Batteries!

QUITE frequently from this corner the need of watching the batteries is stressed, but there are still very large numbers whose trouble can be traced down to this very simple cause. A radio service man tells the story of a happening just within the last few days.

A set of his installation commenced to cause trouble some while after it had been installed. Unfortunately,

the owners were that evening entertaining some friends, and when the set refused to function, the radio man was called. His first suggestion was: "How are your batteries?" The batteries were all right! They had only been in use two or three months. When it was suggested that they should be tested, it was explained that they could not possibly be at fault; there must surely be something else. To satisfy the family, the radio trader travelled many miles with a considerable amount of radio gear, including a voltmeter. His first action was to test the "B" battery. One registered 0 volts, the other 18 volts. Again the radio trader asked the man how long he had had his batteries, and then, and not until then, did he realise that the batteries had done eight months' service.

#### The Grid Bias Cells.

THE "C" or grid bias cell is one which usually receives little or any attention at all, although it certainly requires the least of the three. It must be remembered that a dry battery does not last for ever, even if no current be taken out of it. In fact, a life of twelve months under these conditions is all that can reasonably be expected.

The electrolyte in the battery gradually dries up completely in the course of time, rendering the cell useless, even if it is not used at all during the time, so that the grid bias battery should be renewed as a matter of course every nine months. The voltage, as shown on a meter, will decrease gradually owing to the increase of resistance of the battery, due to drying up of the electrolyte.

If the grid bias to the audio amplifier valve is too small, or becomes too small, serious distortion will be noticed, and a serious drain on the "B" batteries will take place. Also, the life of the valves will be materially shortened. It would not be out of place to point out the great importance of carrying out the valves manufacturers' advice as to providing the correct grid bias for each stage of amplification.

The usual all-purpose valves require in the vicinity of 9 volts grid bias, with 135 volts on the plate. But if a power valve is to be used in the last stage it will be found that the manufacturer recommends 15 to 22½ volts bias.



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# The Book Review The Radio Alphabet Work of Announcing Broadcasting in U.S.A.

## QUIET CITIES.

Joseph Hergesheimer.

THE title encourages hope that amid burden and heat of the day—and general uproar—there may be discovered mental and spiritual oasis. This, however, is not the case. In these tales Mr. Hergesheimer has gathered material from stirring and lawless days of an America long past: a land where battle, murder and violent death were the rule, not the exception, mixed races predominant, and the sacredness of human life non-existent plank of social platform.

Amid varying grades of American fiction-makers Mr. Hergesheimer ranks high, being suave psychologist, skilful analyst of humanity's motives, and brilliant in visualisation of periods both ancient and modern.

Most of the narrative concerns violence, and warring of many nations and creeds. Episodes of grim horror are cheek by jowl, so to speak, with shadowy loveliness of old, dim cities and lure of wide prairies. Sylvester Dering, gambler, soldier of fortune, ever ready with rifle or rapier, is one day beckoned by some mystery of the spirit, casts evil communications and sinister river of ill omen, and seeks peace and ensues it in a City Beautiful, "where walks were set with lemon and orange branches, black-green magnolias and tulip trees." There, listening to melodious singing of pious negro doggerel, with his pocketful of dollars and new-found content, the rake and murderer discovers soul of goodness in things evil.

Destiny which has no mercy on contrite hearts, finds him out in his high green bluff, resurrecting his past in person of vile, beautiful quadroon, who in malice fouls his retreat and shatters dreams. Nothing for it then but the river and the roughs, to whom a repentant sinner returns to preach gospel of beauty and peace that passes understanding.

In noisome and blood-curdling narrative of the slave-trade we renew acquaintance with the three Black Pennys, protagonists in earlier brilliant novel; while in contrasting genre is tale of Nicholas Ellisset and son Ambrose, who, even as sons do now, falls in love with the wrong girl. There is an admirably etched impression of Brook Farm; from which sanctuary of plain living and hard work the damsel is lured by simple, subtle, strategic lure of necklace of emeralds, the wicked green fire of which extinguishes enthusiasm for simple life; as has been the way with many a maid since those days of Brook Farm, Louisa Alcott and George Washington.

Deft is Mr. Hergesheimer, with ear attuned to quaint dialogue and fancy to vivid exploitation of past period of romance; but, in the opinion of many, the American short story still lags far behind the best that emanate from other countries.—R.U.R.

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NEW PLYMOUTH  
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(By Philip Williamson, Whangamata.)

A stands for Aerial, it comes from a mast,

Which after much toil we erected at last.

B stands for Batteries, both dry and wet,

Which give us the power for working the set.

C stands for Crystal, let there be no deception,

A crystal set's only for local reception.

D stands for Distance, sometimes called DX.

There's a club for enthusiasts whatever their sex.

E stands for Earth, there are various types,

Though many prefer to use just water pipes.

F stands for Fading, and oh! what a pity

That the worst place for this is the Capital City.

G stands for Grouzers, who love to complain

That the broadcasts from stations afford them much pain.

H stands for Howlers who cause us displeasure.

Why can't they give their receivers some leisure?

I stands for Inductance, a technical term,

Which is used by the man from the radio firm.

J stands for Jumble, a mixture of noise,

That comes out of sets when they're treated as toys.

K stands for Knobs adorning each set,

Which by twisting and turning the stations you'll get.

L stands for Loudspeaker, the emitter of sounds,

A piece of equipment which costs a few pounds.

M stands for Microphone, often called "Mike."

Which to face is an ordeal that many don't like.

N stands for Night, when the concerts are broadcast.

Also the following day's weather forecast.

O stands for Ohms, to do with resistance.

If you know about this it will be of assistance.

P stands for Phones, which sit tight on the head.

Hospital patients wear them in bed.

Q stands for Query—"What station is that?"

"A Yunk, or a Jap, or our neighbour's tom cat?"

R's for Reception, which is sometimes erratic.

Frequently caused by—

S, which is Static.

T stands for Terminals, "Earth" and "Antenna."

Sets not wanting these cost more than a "tenner."

U stands for Uncles who give great delight

To hundreds of kiddies at six every night.

V stands for Valves, which cause much vexation,

Whenever they break into loud oscillation.

W the Wavelengths to stations allotted,

By tuning to these the signals are spotted.

## Women Not Suitable

DURING the month of November the British Broadcasting Corporation, after testing a number of women who applied for posts as announcers, decided to adhere to the policy of using men only for full time announcing before the microphone.

The suggestion by the corporation that women might be employed for announcing purposes, led to the receipt of a considerable number of applications from women. They were then invited to Savoy Hill and given tests under broadcasting conditions. The capabilities of the women applicants were carefully considered by the British Broadcasting Corporation before coming to a decision, and on November 9 the following official statement was made:—"There are no vacancies for announcers—male or female—and the corporation does not contemplate appointing women to full-time announcing posts in the near future. Among those women tested no suitable candidate was found. The total number of whole-time announcers employed at the central station at Savoy Hill is six. Women are employed before the microphone part-time, to announce programmes during the afternoon, in the children's hour, and at the provincial stations."

In commenting upon the result of these tests the New South Wales Broadcasting Company, Limited, says it does not come as a surprise to controlling authorities in the Commonwealth that women should fail to pass the tests for announcing. Their opinion is that women are not suited to the arduous duties of an announcer, the difficulties of whose work are not apparent to the general public. The conditions of announcing, they consider, place the work within a sphere peculiar to men. Announcing calls for a large degree of showmanship, and to get the best result out of a programme the announcer has at times to marshal considerable numbers who are to perform either in solo or concerted items during a session.

No matter how carefully the management may map out a programme the timing is apt to go wrong. A boxing or wrestling contest may end much sooner than was expected, some condition might arise which calls for a considerable alteration in the programme in an outside show, or the land line between the studio and the pick-up point might go wrong. Then it is that the announcer has to estimate the capabilities of the forces at his disposal, and see an impromptu programme through.

THE fact that a valve filament is intact does not necessarily mean that it is in good order, for it may have lost its emission.

X is a letter that often is found

In the call sign of stations on American ground.

Y stands for YA, New Zealand's call sign.

The programmes they broadcast are certainly fine.

Z stands for Zonophone, a record well known.

Having found this for Z we shall leave it alone.

THE overseas representative of the New South Wales Broadcasting Company, writing under date of December 20 from New York, makes interesting reference to the progress of radio in the United States of America during 1928, and also deals with the prospects of broadcasting during the new year. He says:

"As the year 1928 draws to a close, it may be of interest to review the growth of radio in America during the preceding twelve months. The year 1928 has been exceptionally good for the radio business here. In the first place, the transition period of 1927, during which manufacturers were changing over from the battery-operated sets to A.C. receivers, has now passed, and the latter type of receiver has been brought to a point of compactness and simplicity which has materially helped in gaining the public confidence. A.C. operated receivers now outsell other types at the rate of about 10 to 1. The Presidential election was another factor in increasing the interest in and sales of radio sets and components during recent months. In addition, the high standard of the programmes over the various chain systems has contributed to a great extent to the continued growth of the industry."

## No Saturation Point.

"EACH year the question of 'saturation point' crops up, but the actual figures—for this year, at least—show that the problem need not be considered for some time to come, if at all. A very large percentage of the present sales are replacements. In this direction the public opinion is being moulded both by the advertisers and by the Radio Commission to the realisation that those owning receivers of 1924-5 vintage are receiving all the quality of that period. The older sets were not designed to reproduce the lower frequencies and overtones which distinguish the high-grade receiver of to-day. There are no radical changes in sight that will tend to make obsolete the sets now on the market. Television is still some years ahead as far as the public is concerned. Such changes as the use of the dynamic speaker and the new screen-grid valves, both of which will be featured in the 1929 receiver, are of minor importance."

## Optimism the Keynote.

"THE quality of the better type of receivers and of the transmitting equipment is of such a high order that I doubt if it can be improved upon for some time to come. The speaker, however, is still the weak point in the chain, and it is to this that we must look for future improvements. Even value, as exemplified in the wide selection of period furniture, has been another factor in enlarging the sales of receivers. In some quarters art consoles are being sold in greater quantities than are table models. A highlight in the broadcasting schedule for 1929 will be the Presidential inauguration ceremonies. In addition, the broadcasting companies are making arrangements for several series of operatic and symphonic presentations that augur for the continued development along the programme side. Taking the above facts into consideration, it is not surprising that all sections of the trade are optimistic with regard to the continued growth of business in the new year."



# Annotations of Annabel

## Children's Sessions

## Cookery Nook

### DEAREST:

House coats, like oysters, are in. Arising out of vogue of that faithful ally, the thrice blessed bridge coat, comes this utilitarian and attractive habiliment. In the chilly days of winter that gloom upon us, in long sleeves and common sense we shall go clad decently and in order. Fashioned in velvet of seductive gleam, wallflower or purple or golden green; or perchance in silken folds bordered in pale pastel tints like a dying rainbow; worn over slight, short frock of subservient harmonious note, and aided by one of the new button-holes of these buds and blossoms, this is a garment to seek and ensue, and by good fortune, not beyond achievement of unskilled sartorial striver.

**RICHARD**, describing characteristics of two sisters, finds one good but not pretty, and the other pretty but not dull. Unnecessary to inquire his preference, the solid virtues continuing a drug in the masculine market. Which platitude has wider application than to the female of the species. Take food, for example. The wholesomeness of Victorian rice pudding of blessed memory is unassailable, pressed as it was ad nauseam upon a rising generation; but how violently inarticulate youth rebelled against its too, too solid worth, and abjured at first opportunity that singularly nasty comestible.

In present enlightened decade is youth bullied into consuming that which is distasteful to infant palate? One gathers this discipline is omitted, together with other precept that, with advantage, might be inculcated. Round-eyed, curious, bad-mannered, the New Zealand child often proves a champion of the art of observation; and would, I shouldn't wonder, outstare Jove himself if met in a tramcar. How all eyes focus on the latest comer, as she stumbles to her seat, greets a friend, searches for purse and, if unlucky, drops a coin and fumbles. Is it the home or the school curriculum that encourages such inquisition?

**MAKING** tour of gaily bedizened lounge of Capital City's newly repainted D.L.C., fed and refreshed and replete with coffee and concomitants pleasantly served in huge luncheon room, easily one could imagine oneself transported to veritable Flowery Land on magic carpet, into gaudiness of which little feet voluptuously sink. Around walls are ranged pictures, many good and others better, donated by painters in our midst for good cause of new Gallery. Two by Marcus King imprison mid-day sparkle of sea and sand; low-toned composition by Gwyneth Richardson appeals; Miss Stoddart is represented in sedate beauty of an old garden; Nugent Welch by a painting in different genre from that to which we have grown accustomed; and very lovely is a handful of nasturtiums, by Miss D. K. Richmond, looking as though just plucked from the banks flanking the

Kelburn tram. Having cast bread upon the waters in shape of one small art union ticket, purchased for what is familiarly known as a bob, hope against hope persists that, when the numbers are up, my lucky star will dance, and those gem-like flowers flame upon the too white walls of a small city flat, beside amber silk curtains, yet to be achieved.

**ALL** the world read Margaret Kennedy's brilliant novel anent that irresponsible and gifted vagabond crew, the Sanger family. An inspiration in fictional form; passionately appreciated by all who have sighed and smiled over vagaries of temperamental artists of all sorts and conditions. Now before us, in the film version, we have Sanger himself, his three adorable daughters, the beloved and difficult genius, Lewis Dodd, and the rest.

Even Evangeline, who despises the picture industry, root and branch, was all admiration for this British production, and interested, even touched, by Miss Mabel Poulton's impersonation of Tessa, that dear and devoted child; first as winsome maid in exquisite setting of Tyrolean mountains, later in incongruous conventional environment, with, as arbiter of her destiny, the handsome, hidebound, soignée Florence, uncomprehending wife of the moody musician. The latter was admirably played by Ivor Novello, whose handsome face and lounging insouciance were always in the picture, and the rest of the cast remarkably true to type; but always pretty Tessa goes to the heart, wistful, wayward and doomed.

**BY** happy fate and remembrance of a friend—who, so ready is her generosity, so pliable her purse-strings, I fear will end her days in some home for decayed gentlewomen—I am possessor of a copy of "The White Wallet," companionable compilation by the late Viscountess Grey. Unique and charming, this is unlike all other anthologies; exploring many ramifications of literature, and casting fresh light on facets of apprehended truths and fallacies. Interspersed is occasional comment by Pamela Grey, some snatch of verse or excursion into the occult. Apt and catholic are the selections:—

"They quarrel and part," said the woman.

"That is friendship," said the man.

"We quarrel and don't part," said the woman.

"That is love," said the man.

Again—

A good woman died, and they found in her bosom an old love-letter.

Out of the slum they dragged the body of a very bad woman, indeed; and they found in her bosom an old love-letter.

Another version of the Colonel's lady and Judy O'Grady.

Your

ANNABEL LEE.

### AT 1YA.

**TUESDAY, MARCH 26.**—Good news to-night! Uncle George has a Hawaiian quartet with him, playing popular airs, and John Willie is coming, too, so there is a jolly hour to look forward to.

**WEDNESDAY.**—What have you for us to-night, Uncle Tom? More jolly songs and stories and birthday greetings, also cousins with songs and recitations.

**THURSDAY.**—Here is Peter Pan again, and perhaps he will have some of his cubs with him. Anyway there will be songs from Cousin Ngaire, and look out for catches and puzzles.

**FRIDAY.**—"Here we are, here we are again." That is what Nod's and Aunt Jean's opening chorus says, and sure enough here here they are with an hour brimful of good things.

**SATURDAY.**—Cinderella on deck, cousins playing solos and duets. Be prepared to think hard, for there are problems and puzzles for you to work out to-night, and of course stories and birthday greetings.

**SUNDAY.**—Children's Song Service conducted by Uncle Leo, assisted by cousins from Mt. Albert Methodist Sunday School.

### AT 2YA.

**MONDAY, MARCH 25.**—Uncle Jeff to-night. He will be assisted by Cousins Eva, Roma and Bill with songs, recitations and mouth organ solos respectively, ending with the usual puzzles and goodnight song.

**TUESDAY.**—Splendid news. We are to have items from the pupils of Mrs. Ransom Myers—so we should have a happy hour, also a fairy message says that Mr. T. P. Sewell, of Christchurch, is coming to give us a nice talk. Last, but not least, will be Uncle Jim to wish you all many happy returns of the day.

**THURSDAY.**—Uncle Len to-night, assisted by lots of clever cousins who will sing "Slumber Song," "The Fairy Pipers," "Night Nursery," "Butterfly Wings," etc., etc.

**SATURDAY.**—This evening we are going to have the usual bright hour—with Cousins Joyce and Jean to help with their recitations and songs—and, of course, being Saturday, Uncle Toby will be there with cheery words and will perhaps have his mouth organ. Also Cousin Phyllis with a story.

**SUNDAY.**—The Children's Song Service will be conducted by Uncle George—assisted by St. Aidan's Sunday School Choir under Mrs. Wahlers.

**BEFORE** stowing drills away give them a rub over with petroleum jelly or a little oil on a rag, as a rusty drill loses its cutting edge quickly.

### Sweetbreads Savoury.

- |                    |                                    |
|--------------------|------------------------------------|
| 1 pair sweetbreads | 1½ cupfuls water                   |
| ½ cupful butter    | ½ cupful cream                     |
| 1 chopped onion    | 1 teaspoonful grated lemon rind    |
| ½ teaspoonful salt | 4 tablespoons "Anchor" milk powder |
| Pinch of pepper    |                                    |
| ½ cupful flour     |                                    |
| Dash nutmeg        |                                    |

To make the milk—Mix the water and the milk powder according to directions given.

Method—Parboil the sweetbreads, remove the skin, and separate into pieces. Melt the butter, and in it cook the onion half a minute. Add the sweetbreads and cook one minute; sprinkle with the salt, pepper, and flour. Blend well, and add the milk. Stir until thick and smooth. Add the cream, nutmeg, and lemon rind, and serve at once.

### Liver with Creamed Fried Onions.

- |                           |                                    |
|---------------------------|------------------------------------|
| 1 lb. slices calf's liver | Salt                               |
| 1 lb. onions (sliced)     | Pepper                             |
| 4 tablespoons flour       | 2½ cupfuls water                   |
| 5 slices bread            | 3 tablespoons "Anchor" milk powder |
| 2 eggs yolks              |                                    |

To make the milk—Mix the water and the milk powder.

Cut the liver into pieces, cover with boiling water, let stand 5 minutes. Drain and remove skin and veins. Sprinkle with salt, pepper, and broil or saute 5 minutes. At the same time fry onions in small amount of fat, adding more as needed. When light brown, and add 2 cupfuls of the milk and stir until the mixture thickens. Season with salt and pepper, and serve around the liver on French toast.

# You Can't Fry Over a Valve



But a Radio Set can be a great help to the cook for all that. The other night's Broadcast suggested that housewives should send for the new "Anchor" Recipe Folder. Simply write "Anchor," Box 344, Auckland.

# ANCHOR SKIM MILK POWDER

# Next Week's Features

## 1YA Features

**DIVINE** service on Sunday evening will be broadcast from the Beresford Street Congregational Church, the Rev. Lionel Fletcher being the preacher; Mr. William Gemmell, the musical director; and Mr. Alf Eady the organist. Stainer's "Crucifixion" will be rendered during the evening by the Congregational Church Choir, assisted by Mr. W. Gemmell and Mr. W. Littler.

**ON** Tuesday evening the "Lyric Quartet" in conjunction with Miss Alma McGruer will perform a programme of operatic excerpts, including the "Pilgrims' Chorus" and concerted and solo items from Gounod's opera "Faust." The Auckland Trio will render a number of instrumental selections while Miss Mollie Wright will contribute a 'cello solo, "Taran-telle" by Van Goens. Orchestral excerpts will also be relayed from the Majestic Theatre, where the orchestra is under the baton of Mr. J. Whiteford-Waugh. Continuing his talks on "The Maori," Mr. A. B. Chappell will tell "more about the Maori's games."

An interesting item on Tuesday evening's programme will be the second of a series of gramophone lecture-recitals by Mr. Karl Atkinson, President of the Auckland Gramophone Society. Mr. Atkinson has chosen for his subject "Devotional Music," and his gramophone illustrations include selections from "Elijah," Mendelssohn, and "Parsifal," Wagner.

**BAND** music is particularly suited for broadcast purposes and the appearance of the Auckland Artillery Band on Wednesday evening will be

welcomed by all listeners. Their numbers include "Musical Switch" (Alford), "Albion March" (Rimmer), "Lustspiel Overture," "Maritana Fantasia," and selections from "No, No, Nanette." Interspersing the band items will be a selection of bright solos, duets and quartets contributed by Miss D. Yond, Miss M. Williamson, Mr. Lambert Harvey, Mr. Geoffrey Colledge and Mr. Clinton Williams.

**THE** main vocalists on Thursday evening's programme will be Madame Mary Towsey's Quartet, who will present a programme of Old English songs. These old favourites have an appeal which is felt by all classes of listeners and the presentation of items such as "Simon the Cellarer," "My Mother Bids Me Bind My Hair," "My Pretty Jane," "Where the Bee Sucks" and "Home, Sweet Home," should prove very popular. The orchestra will include among its selection "Glory of Russia," "Kreen," "Washington Post March" (Sousa) and Paderewski's "Minuet in G." Two artists who will make a welcome reappearance after a long absence from the microphone will be Mrs. J. J. Sullivan (soprano), and Miss Doris Binns (pianiste).

An outstanding item on this programme should be Mr. J. F. Montague's rendering of Thomas Bracken's fine poem, "Rewi's stand at Orakau."

**FRIDAY** being Good Friday, Station 1YA will be on the air at approximately 10.45 a.m. to relay a special morning service from St. Mary's Cathedral, the preacher being Canon Percival James and the organist, Mr. Edgar Randall. The evening service will be broadcast from the Beresford Street Congregational Church, the Rev. Lionel

Fletcher being the preacher, and Mr. William Gemmell the choir-master.

**A** VERY diversified programme will be broadcast on Saturday evening, the artists including the popular baritone, Mr. Fred Barker, whose items include "Laugh, Clown, Laugh" and "Jeannine, I Dream of Lilac-time." Miss Edna Langmuir's versatility will be displayed in two monologues, "Having it Out" and "Just Her Way," and the jazz piano solo, "Nola." Included among the orchestras items will be Coleridge-Taylor's "Hiawatha Suite," "Waiata Poi" (Hill) and selections from "Mikado" (Sullivan). Humour will be provided by Mr. Fred Barker.

## 2YA Notes

**ON** Monday evening a varied and interesting programme will be presented. The vocalists will be Madame Emily Briggs (soprano), Mr. John Prouse (baritone), Mrs. W. J. Coventry (contralto), and Mr. Herbert F. Wood (tenor). This will be Mr. Herbert Wood's first appearance at the studio and as this popular tenor is already well and favourably known to listeners through the good work he has performed at band concerts which have been relayed. His items are bound to provoke a great deal of interest.

By request, Madame Emily Briggs will sing "Die Lorely," an old folk song based on a German legend of the Rhine. Further items by Madame Briggs will include Bemberg's "Hindoo Song" and "Come, Dance the Romika," by Liza Lehman. Mr. John Prouse, one of New Zealand's leading baritones and a one-time pupil of the late Sir Charles Santley, will be heard to advantage in the recitative and aria from Gaul's "The Holy City," "Thus Saith the Lord" and "A New Heaven and Earth," and in a bracket of two numbers, Marzial's "The River of Years" and Hill's "My Fairest Child."

Mrs. W. J. Coventry is a mezzo-contralto who has already performed at 2YA successfully and has also appeared as soloist with the Harmonic Society. Mrs. Coventry's voice is of pleasing quality and she can be relied upon to do consistently good work. Her items will be Bohm's "Still as the Night," Del Riego's "Homings," Willeby's "Summer Rain," and a little number by Leoni, "The Birth of Morn." Mr. Herbert Wood will be heard in two old favourites, the evergreen "Take a Pair of Sparkling Eyes" and "I Like You in Velvet." These numbers will be coupled with two "theme" songs which were sung recently by Mr. Wood at the De Luxe Theatre, "Little Mother" and "When Love Comes Stealing."

Mr. Victor S. Lloyd, the popular entertainer, will relate another of his experiences and the uncanny incidents seem only to admit of a psychic explanation, but he confesses that he does not agree altogether with such a way of explaining or accounting for them.

He therefore invites his listeners to use their wits in an endeavour to make a more plausible explanation of the apparent mystery that he will relate. Explanations, which may be humorous or otherwise, should be addressed to Mr. Victor S. Lloyd, c/o 2YA, not later than April 1.

**A** LIGHT popular programme has been arranged for Tuesday. The items will comprise tenor solos by Mr. G. Austin Blackie, popular fox-trot numbers by Mrs. Mildred Keen's Steel Guitar Trio, humorous items by Mr. Henry Desmond and popular songs by Mrs. Mabel Jackson. Mr. Blackie has chosen three numbers which should suit his type of voice admirably, viz., "Who is Sylvia," "Daphne" and "Long Long Ago." Mrs. Mabel Jackson, whose work continues to prove very popular, will be heard in "Ol Man Sunshine" and "There's a Rainbow Round My Shoulder." Mr. Henry Desmond will provide the humour of the evening and his items are bound to appeal to a large number of listeners.

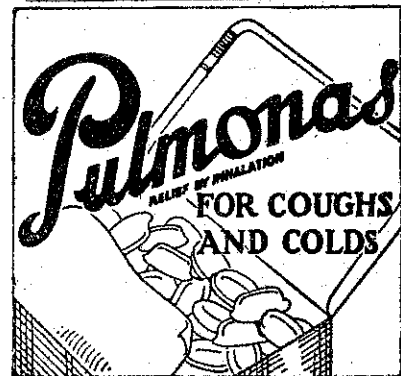
**THURSDAY** evening's programme will consist of band items by the Wellington City Silver Citadel Band, under the conductorship of Mr. Scotney, and vocal items by the popular Mellow Fellows Quartet. The humorous part of the programme will be provided by Miss Maude Farrant, a well known local artist.

**ON** Good Friday there will be a programme in keeping with the day. In the morning a relay of the morning service of St. Andrew's Presbyterian Church will be carried out and in the afternoon a relay from St. Gerard's Redemptorist Church of the ceremony of "The Stations of the Cross." At 7 o'clock a relay of Stainer's "The Crucifixion" from St. Thomas's Church, Newtown, will be carried out. The choir of this church will be under the conductorship of Mr. W. A. Gatheridge, the soloists being Messrs. Will Goudie (baritone) and Chas. Williams (tenor). At 8.15 p.m. approximately from the studio, the Island Bay Wesley Church Choir will give the sacred cantata, "From Olivet to Calvary." This choir won the Wellington Competitions Society's Choir Championship and have already given a concert from the studio, which was the subject of favourable comment. The soloists will



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**ALL 'KODAK' DEALERS**



be Miss Gretta Stark (soprano), Mr. Seon Brown (tenor), Mr. Wilbur Davies (baritone) and the organist, Mr. Arthur Crisp. Miss Dorothy Tighe will act as pianiste. The choir will be under the baton of Mr. Roy Dellow. Suitable items in keeping with the occasion will be rendered by the orchestra.

ON Easter Saturday a bright programme will be rendered, the contributing artists being Miss Decima Morgans (soprano), Mr. Lad Haywood (mandola), Mr. Harry Matthew (baritone) and Mr. Austin Peters (entertainer). Mr. Austin Peters has appeared with marked success on the stage and has also been successfully broadcast by 3LO, Melbourne, 5CL, Adelaide, and other leading "A" class stations in Australia. He has also at various times appeared with such firms as Union Theatres, Ltd., and J. C. Williamson, Ltd.

ON Easter Sunday at the conclusion of the evening service, a studio concert will be given by the Etude Quartet. Their items will comprise excerpts from "The Seven Last Words" (by Dubois) and from the "Messiah" (by Handel). Gramophone records suitable to the occasion will be included in the programme.

### 3YA Features

THE programme which is to be given by the Woolston Band on Monday evening will include Ord Hume's march, "Brilliant," Donizetti's overture, "Anna Bolena," the humoresque "Slidin' Thro' the Rye," two selections, "Norma" and "Largo" (the former by Bellini and the latter by Handel), the fox-trot, "'Appy Land," the valse "Confidence," and the march "Sons of the Wild." Popular pieces will also be played by the Studio Trio.

The vocal programme for Monday evening will be of a very popular type. The "Mexican Serenade," which is to be sung by Mrs. Moana Lawrence, is particularly bright. She will also sing two jazz songs. Making her first appearance in radio will be Miss Rose Horrell, who is a professional vocalist and teacher of singing in Rangiora. Her items will be "Parted," "Somewhere a Voice is Calling," and "Coming Home." Mr. Robert Allison will sing "Captain Mac" and "When the Sergeant Major's on Parade."

A further talk on "Tree Trimming" will be given by Mr. D. E. Parton, district telegraph engineer.

A programme of a miscellaneous nature, including many operatic numbers, will be broadcast on Wednesday. Concerted numbers by the Dulcet Quartet will be "Moonlight" and "Beleaguered." A duet will be "Where the Chestnuts Bloom." Miss Hilda Hutt's solo items will be "Down the Vale" and "Nymphs and Fauns." Miss Nellie Lowe will sing "In the Great Unknown" and "Like to the Damask Rose." Mr. T. G. Rogers, tenor, will sing Massenet's "Elegie" and Leoncavallo's well-known "On with the Motley." Mr. A. G. Thompson, whose artistry is so greatly enjoyed, will sing Tchaikowsky's "To the Forest" and R. A. Horne's "A Requiem." Mr. Horne is manager of the "Bristol," Christ-

church. Pianoforte solos will be played by Miss Lucy Fullwood.

"PICKED up from Anywhere" is the title of one of the contributions from the Rev. D. Dudley, F.R.A.S. There will be much entertainment in the oddments which come under that heading. Mr. Dudley's other subject, "The Wonders of the Southern Cross," is a further instalment of his series of astronomical lectures.

Wednesday night will see the Studio Orchestra again before the microphone in one of its always welcome fortnightly performances. The conductor, Mr. Harold Beek, has arranged a programme of a very bright nature.

THE Melodious Four will be the vocalists for Thursday evening, and as usual they will present an excellent concert programme of solos, duets, and quartets. Miss Bessie Pollard will be the piano soloist. One of her numbers will be a composition by Alfred Hill, "Berceuse." Other instrumental items will be provided by the Studio Trio and by some specially selected records.

### 4YA Notes

THE Rev. Albert Mead will be the preacher at the evening service to be relayed from the Moray Place Congregational Church on Sunday, March 24. Following this there will be a relay of the concert by the St. Kilda Municipal Band.

ON Tuesday evening the choir of St. Paul's Cathedral, under the direction of Mr. E. Heywood, F.R.C.O., will give a rendition of Maunders's beautiful cantata, "Olivet to Calvary," the soloists being Miss I. Heywood (mezzo-soprano), Mr. H. Drake (tenor), Mr. L. M. Cachemaille (baritone), and Mr. E. G. Bond (bass). A short studio concert will follow, when Miss Agnes Guy (mezzo-soprano) will sing "Break, Break, Break" and "Homing." Miss Joyce Hould (elocutioniste) will be heard in "Christ in Flanders" and "The Day is Done."

THE St. Kilda Municipal Band, so very successful at the recent Wanganni Band Contest, will give the main portion of the programme on Wednesday, March 27. Their numbers will include the selection, "Pirates of Penzance," "Jeannie," and other fine items. Miss Mary Teviotdale (mezzo-soprano) will sing "Love is Meant to Make Us Glad," from "Merrie England," and "Wanderer's Night Song" (by Schubert). Miss Stasia McCreedy (contralto) has included in her selection, "Hark What I Tell to Thee" (by Haydn) and "Caro Mio Ben" (by Giordani). Other performers will be Miss Roberta Williams (elocutionist) and Mr. Edward Bond (bass).

THERE will be a very fine programme of sacred and classical music on Good Friday. Mr. F. M. Tuohy will be heard in two oratorio solos, "O God Have Mercy" (from Mendelssohn's "St. Paul") and "Pro Peccatis" (from Rossini's "Stabat Mater"). The solos chosen by Miss Mae Matheson are Gounod's setting of "Ave Maria" and Tchaikowsky's beautiful number, "A Legend," while

Miss Mollie Andrews will sing "There is a Green Hill" (by Gounod) and "Beyond the Dawn." The instrumental portion of the programme will be supplied by the 4YA Broadcasting Trio. Amongst their items will be the violin solo (played by Miss Eva Judd), "Nobody Knows de Trouble I've Seen," a Negro Spiritual arranged by Kreister, and Schubert's wonderful number, "Am Meer," to be played by Mr. P. J. Palmer (cellist).

IN addition to the relay of the Octagon Theatre Orchestra on Saturday, March 30, vocal solos will be given by Miss Muriel Bagar (soprano), Miss Dorothy Skinner (contralto), Mr. Geo. Crawford (tenor), and Mr. J. Ferguson (basso). Miss Sheila Neilson and Mr. J. B. McConnell will supply the elocutionary portion of the programme, whilst Mrs. Ernest Drake will be heard in pianoforte solos.

than 100,000,000 records were manufactured—an increase of 23 per cent. over the year 1925.

This appreciation is attributed to the growing popularity of the outstanding musical artists on the air. Thus the world-famous singers of the opera and concert stage, regularly broadcasting each Sunday night in the Atwater Kent Radio Hour, over a network of 29 stations, are said to have an audience running into the millions. Their radio introduction into the homes of the gramophone has resulted in an increased demand for their records.

Except for the piano and organ statistics above, the census report shows a 45 per cent. decrease in the sale of all other musical instruments, which is commonly attributed to the rapidly increasing popularity of radio.

## Radio Advertising

### Musical Instruments Displaced

### Different Methods

### Sales of Gramophone Records Increased

A WRITER in the London "World Radio" writes:—

"Of course, there is advertising and advertising. There is the miscellaneous advertising, with which some stations interlard their programme items; there is the minor kind of 'sponsored' programme, which opens and closes with a lengthy and detailed eulogy of the product whose marketers are providing the entertainment. There is, on the other hand, the advertising which consists merely in coupling the name of the 'sponsors' with the programme, thus: 'The Burbo Hour,' to imagine an instance. The announcer would open the programme with an introduction something like this, 'I have pleasure, ladies and gentlemen, in presenting to you the Burbo Hour, which is provided by the proprietors of the well-known Burbo products.' Nothing more in the way of advertising during the course of this programme. This is the method of commercial publicity followed by the National Broadcasting Company of America as well as by others of the principal broadcast organisations in America and Canada. Such a programme will, very likely, include highly-paid talent, and may be simultaneously broadcast by one or more groups of the N.B.C.'s associated stations.

THE influence of radio upon the musical interests of the country is revealed in statistics just made public by the United States Census Bureau, covering the production of musical instruments.

The organ alone has retained its popularity in spite of the inroads of radio into the American home. The production of organs last year showed an increase of 31 per cent. over 1925. The value of the output at the factory was 14,262,688 dollars.

Organ music lends itself readily to broadcasting, and some of the outstanding makers have regularly broadcast organ recitals. Pianos, on the other hand, fell off 29 per cent. last year, over the preceding census of manufacture.

The outstanding barometer of radio influence is shown to be the gramophone record. As was true with the publication of sheet music, records show an enormous increase. Last year the American public apparently spent more than 50,000,000 dollars for records. The census report shows more

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CHRISTCHURCH

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# Full Programmes for Next

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## Sunday, March 24

### 1YA, AUCKLAND (333 METRES)—SUNDAY, MARCH 24.

- 3 p.m.: Afternoon session—Selected studio items.  
 4:0: Literary selection by the Announcer.  
 4:8: Studio items.  
 4:30: Close down.  
 6:0: Children's session, conducted by Uncle Leo.  
 6:55: Relay of service from Beresford Street Congregational Church. Preacher, Rev. Lionel Fletcher. Organist, Mr. Alf. Eady. Mus. Director, Mr. William Gemmell.  
 (During the evening Stainer's "Crucifixion" will be rendered by the Beresford Street Congregational Church Choir and Messrs. W. Gemmell and W. Littler, soloists.)  
 The following items will be performed:—  
 Tenor recitative—"And They Came to a Place Named Gethsemane."  
 Chorus—"Jesu, Lord Jesu."  
 Tenor recitative—"And They Led Him Away."  
 Bass recitative—"Art Thou the Christ?"  
 Chorus—"Fling Wide the Gates."  
 Tenor solo—"How Sweet is the Grace."  
 Chorus—"Then On to the End."  
 Bass recitative—"And When They Had Come."  
 Hymn—"Cross of Sorrow."  
 Bass solo—"He Made Himself Of No Reputation."  
 Tenor solo—"King Ever Glorious."  
 Bass—"And as Moses Lifted Up."  
 Chorus—"God So Loved the World."  
 Duet—"So Thou Lifest Thy Divine Petition."  
 Chorus—"Appeal of the Crucified."  
 9:40: Close down.

### 2YA, WELLINGTON (420 METRES)—SUNDAY, MARCH 24.

- 3:0 p.m.: Afternoon session—Selected studio items.  
 4:30: Close down.  
 6:0: Children's Song Service, conducted by Uncle George.  
 6:50: Relay of service from St. John's Presbyterian Church—  
 Preacher: Rev. J. R. Blanchard, B.A.  
 Organist and choirmaster: Mr. C. W. Kerry.  
 8:45 (approx.): Studio Concert.  
 Piano and orchestra—Alfred Cortot and Royal Albert Hall Orchestra, "1st Movement from Concerto in A Minor" (Schumann) (H.M.V. Records DB722-3).  
 Trio—Wellington Ladies' Trio, "Night Hymn at Sea" (Thomson).  
 String quartet—Lener String Quartet, "Menuetto—Quartet in D Major" (Haydn) (Columbia Record 04213).  
 Soprano solo—Miss Nora Gray, "My Heart Ever Faithful" (Bach).  
 Organ solo—Edouard Commettee, "Toccata" (Boellmann) (Columbia Record 0232).  
 Contralto solo—Mrs. J. F. Phythian, "O Divine Redeemer" (Gounod).  
 Violin solos—Efrem Zimbalist, (a) "Ave Maria" (Schubert); (b) "Impromptu" (Aulin) (Columbia Record 04220).  
 Vocal duet—Miss Nora Gray and Mrs. J. F. Phythian, "The Angel" (Rubinstein).  
 Orchestral—Bournemouth Municipal Orchestra, "Pique Dame" (Suppe) (Columbia 02730).  
 Tenor solos—Lewis James, (a) "A Dream" (Bartlett); (b) "Dreams" (Stretelzki) (Columbia Record 01251).  
 Cello solos—W. H. Squire (a) "Lament" (D'Herveloise-Squire); (b) "Rigaudon" (Trowell) (Columbia Record 04223).  
 Vocal duet—Miss Nora Gray and Mrs. J. F. Phythian, "Beyond the Meadow Gate" (Phillips).  
 Band selection—H.M. Grenadier Guards, "Nell Gwynn Dances": 1. Country Dance; 2. Pastoral Dance; 3. Merrymakers' Dance (Columbia Records 01329-30).  
 Baritone solo—Alexander Kisselnurgh, "Danny Deever" (Damrosch) (Columbia Record 02706).  
 Vocal trio—Wellington Ladies' Trio, "A Spring Song" (Pinsuti).  
 Band—Band of the Royal Air Force, "Our Director," march (Bigelow) (Columbia Record 01354).  
 Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SUNDAY, MARCH 24.

- 3:0 p.m.: Afternoon session—Selected gramophone items.  
 4:30: Close down.  
 5:30: Children's Song Service.  
 6:45: Hymn chimes.

- 6:30: Relay of evening service from East Belt Methodist School, (Sunday School Anniversary).  
 Preacher: Rev. Wm. Greenslade.  
 Organist: Mr. L. Richard.  
 Choirmaster: Mr. W. Sherris.  
 8:0 (approx.): Orchestral—Royal Philharmonic Orchestra, "Symphony No. 6 in C Major" 1st Movement (Allegro) (Kurt Atterberg) (Columbia Record 04216-7) (Grand prize work in Schubert Centenary Columbia International Composers' Contest).  
 8:12: Mezzo-soprano solo—Miss Myra Edmonds, "Praise Ye The Lord" (Bantock).  
 8:16: Violin solo—Isolde Menges, "Ave Maria" (Schubert) (H.M.V. Record D1313).  
 8:20: Tenor recitative and aria—Mr. George Fawcett, (a) "Deeper and Deeper Still"; (b) "Waft Her Angels" (Jephthah's Daughter) (Handel).  
 8:24: Piano and orchestra—Ignaz Friedman, "Concerto in A Minor" (Grieg) (1st Movement) (Columbia Record 02702-3).  
 8:40: Contralto solo—Mrs. D. W. Stallard, "Come Unto Me" (Lindsay).  
 8:44: Solo, chorus and orchestra—Tudor Davies, "O Jesu Help! Pray For Me, Mary" ("Dream of Gerontius") (Elgar) (H.M.V. Record D1350).  
 8:48: Mezzo-soprano solos—Miss Myra Edmonds, (a) "Gloria" (Buzzi-Peccia); (b) "Thanks Be To God" (Dickson).  
 8:55: Solo, chorus and orchestra—Tudor Davies, "So Pray For Me My Friends, Who Have not Strength to Pray" ("Dream of Gerontius") (Elgar) (H.M.V. Record D1350).  
 Orchestral—New Light Symphony Orchestra, "Intermezzo" ("Cavalleria Rusticana") (Mascagni) (H.M.V. Record B2377).  
 9:3: Tenor solo—Mr. George Fawcett, "Thou Shalt Break Them" ("Messiah") (Handel).  
 9:8: Organ solo—Herbert Dawson, "Meditation" (D'Ervrey) (H.M.V. Record 1321).  
 9:12: Contralto solos—Mrs. D. W. Stallard, (a) "Resignation" (Lindsay), (b) "Too Late, Too Late" (Lindsay).  
 9:19: Orchestral—National Symphony Orchestra, "Stradella" (Flotow) (Zonophone EE116).  
 9:30: Close down.

### 4YA, DUNEDIN (463 METRES)—SUNDAY, MARCH 24.

- 5:30 p.m.: Children's Sunday service, conducted by Big Brother Bill.  
 6:30: Relay of service from Moray Place Congregational Church.  
 Preacher: Rev. Albert Mead.  
 8:5: Relay from St. Kilda Band Rotunda of concert by the St. Kilda Band under the conductorship of Mr. James Dixon.  
 9:15: Close down.

## Monday, March 25

### 1YA, AUCKLAND (333 METRES)—MONDAY, MARCH 25.

SILENT DAY.

### 2YA, WELLINGTON (420 METRES)—MONDAY, MARCH 25.

- 3:0 p.m.: Chimes of the General Post Office clock.  
 3:1: Selected Studio items.  
 4:30 and 4:55: Sporting results to hand.  
 5:0: Close down.  
 6:0: Children's session, conducted by Uncle Jeff.  
 7:0: News session.  
 7:40: Lecturette—Mr. H. C. South, "Books—Grave and Gay."  
 8:0: Chimes of the General Post Office clock.  
 8:1: Overture—Orchestra, "Mirelle" (Gounod-Borch).  
 8:9: Soprano solo—Madame Emily Briggs, "Die Lorely" (Liszt) (By request).  
 8:13: Pianoforte solos—Mr. Godfrey Sinclair (a) "Romance in E Flat" (Rubinstein), (b) "Melodie in F" (Rubinstein).  
 8:20: Baritone—Mr. John Prouse, recitative, "Thus Saith the Lord" aria, "A New Heaven a New Earth" (from "The Holy City") (Gaul).  
 8:24: Instrumental—Orchestral, "Symphony No. 5 in C Minor" (Beethoven) 1st Movement).  
 8:34: Contralto—Mrs. W. J. Coventry, "Still as the Night" (Bohm).  
 8:38: Violin solo—Erica Morini, "Rondino on a Theme by Beethoven" (Kreisler) (H.M.V. Record EC5).  
 8:41: Tenor solos—Mr. Herbert F. Wood, (a) "Little Mother" (Rapee); (b) "Take a Pair of Sparkling Eyes" (Gilbert and Sullivan).  
 8:48: Instrumental—Orchestra, repeat number.  
 8:56: Weather report.



# Week-all Stations-to Mar. 31

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- 8.58: Mr. Victor S. Lloyd will relate an uncanny experience—"The Voice."  
 9.13: 'Cello solo—Mr. G. Ellwood, "Prelude and Clair de Lune" (Massenet), with orchestral accompaniment.  
 9.19: Soprano solo—Madame Emily Briggs, (a) "Hindoo Song" (Bemberg); (b) "Come Dance the Romalka" (Lehmann).  
 9.26: Violin solo—Erica Morini "Spanish Dance" (De Falla), (H.M.V. Record EC5).  
 9.29: Baritone solo—Mr. John Prouse, (a) "River of Years" (Marzials); (b) "My Fairest Child" (Hill).  
 9.36: Instrumental—Orchestra, "Slavonic Rhapsody" (Friedman).  
 9.44: Contralto solos—(a) "Homing" (Del Riego); (b) "Summer Rain" (Willeby); (c) "The Birth of Morn" (Leoni).  
 9.51: Tenor solos—Mr. Herbert F. Wood, (a) "When Love Comes Stealing" (Pollack); (b) "I Love You in Velvet" (Rubens).  
 9.58: Musical comedy selection—Orchestra, "Lilac Time" (Part 1) (Schubert-Clutsam)  
 10.8: Close down.

## 3YA, CHRISTCHURCH (306 METRES)—MONDAY, MARCH 25.

- 3.0 p.m.: Afternoon session—selected gramophone items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Children's session, conducted by "Scatterjoy."  
 7.15: News session.  
 7.30: Talk—Mr. Charles Buckett, "Physical Culture for Children."  
 8.0: Chimes.  
 Programme by the Woolston Band, and assisting artists.  
 8.1: March—Band, "Brilliant" (Ord Hume).  
 Overture—Band, "Anna Bolena" (Donizetti).  
 8.13: Soprano solo—Mrs. Moana Lawrence, "Mexican Senerade" (Palela Terese).  
 8.17: Humour—John Henry and Blossom, "Blossom's Film Scenario" (Henry and Reeve) (H.M.V. Record B2384).  
 8.24: Instrumental trios—Christchurch Broadcasting Trio, (a) "Moderato"; (b) "Poco Sostenuto"; (c) "Minuet" (Bremner).  
 8.38: Baritone solo—Mr. Robert Allison, "Captain Mac" (Sanderson).  
 8.42: Humoresque—Band, "Slidin' Thro' the Rye" (Truman).  
 8.50: Mezzo-soprano solo—Miss Rose Hurrell, "Parted" (Tosti).  
 8.54: Selection—Band, "Norma" (Bellini).  
 9.6: Weather report.  
 9.7: Talk—Mr. D. E. Parton—Second of Series—"Tree Trimming."  
 9.12: Bass-baritone solos—Peter Dawson, (a) "The Delaware's Farewell" (Capel); (b) "Lorraine, Lorraine, Lorree" (Capel) (H.M.V. Record B2759).  
 9.18: Instrumental trios—Christchurch Broadcasting Trio, (a) "Rondo Alla Turka" (Mozart); (b) "Romance" (Sibelius) (c) "Polonaise in A" (Chopin).  
 9.30: Soprano solos—Mrs. Moana Lawrence, (a) "Last Night I Dreamed You Kissed Me" (Lombardo); (b) "Then Came the Dawn" (Warren).  
 9.37: Vocal foxtrot—Band, "'Appy Land" (Talmon).  
 9.41: Mezzo-soprano solos—Miss Rose Hurrell, (a) "Somewhere a Voice is Calling" (Tate); (b) "Coming Home" (Willeby).  
 9.48: Slow selection—Band, "Largo" (Handel).  
 9.54: Baritone solo—Mr. Robt. Allison, "When The Sergeant Major's on Parade" (Longstaffe).  
 9.58: Valse—Band, "Confidence" (Evans).  
 March—Band, "Sons of the Wild" (Rimmer).  
 10.6: Close down.

## 4YA, DUNEDIN (463 METRES)—MONDAY, MARCH 25.

SILENT DAY.

## Tuesday, March 26

### 1YA, AUCKLAND (333 METRES), TUESDAY, MARCH 26.

- 3 p.m.: Afternoon session—Selected studio items.  
 4.0: Literary selection by the announcer.  
 4.8: Further studio items.  
 4.25: Sports results to hand.  
 4.30: Close down.  
 6.0: Children's session, conducted by Uncle George.  
 7.0: Close down.  
 7.15: Talk—Mr. Geo. Campbell, "Motoring."  
 7.30: News and market reports—Book review.

- 8.0: Chimes.  
 8.1: Relay—Majestic Theatre Orchestra, under Mr. Whiteford Waugh, overture.  
 8.7: Vocal quartet—The Lyric Quartet, "Pilgrim's Chorus" ("Tannhauser") (Wagner).  
 8.11: Instrumental trios—Auckland Trio, (a) "Polacoa" ("Mignon") (Thomas); (b) "Passepied" (Le Roi s'amuse) (Delibes).  
 8.20: Soprano solo—Miss Alma McGruer, "My Hero" (Strauss).  
 8.24: Sketch—Mr. Allan McElwain, some humour.  
 8.29: Relay—Majestic Theatre Orchestra, musical interlude.  
 8.35: Talk—Mr. A. B. Chappell, M.A., "The Maori—More About His Games."  
 8.50: 'Cello solo—Miss Mollie Wright, "Tarantelle" (Van-Goens).  
 8.54: Tenor solo—Mr. Herbert Richards, "Serenade" ("Lilac Time") (Schubert).  
 8.58: Sketch—Mr. Allan McElwain, "The Scene-shifter's Story."  
 9.3: Evening forecast and announcements.  
 9.5: Bass solo—Mr. Ernest Thomas, "Ho, Jolly Jenkin" ("Robin Hood") (Sullivan).  
 9.9: Vocal—Lyric Quartet, excerpts from "Faust" (Gounod), (1) "All Hail, Thou Dwelling"; (2) "Jewel Song"; (3) "Katarina, While You Play."  
 Entrance—Auckland Trio, "Faust" Ballet Music (Gounod); (4) "Stay But a Little Longer"; (5) "Glory and Love"; (6) "Holy Angel."  
 9.34: Lecture-recital—Mr. Karl Atkinson, gramophone lecture-recital, "Mar-tial Music."  
 10.4: God Save the King.

## 2YA, WELLINGTON (420 METRES)—TUESDAY, MARCH 26.

- 3.0 p.m.: Chimes of the G.P.O. Clock.  
 3.1: Selected gramophone items.  
 4.30 and 4.55: Sports results to hand.  
 5.0: Close down.  
 6.0: Children's session, conducted by Uncle Jim.  
 7.0: News session, market reports and sports results.  
 7.40: Lecture-recital—By a representative of the Agricultural Department, "For The Man on the Land."  
 8.0: Chimes of the G.P.O. Clock.  
 8.1: Overture—Orchestra, "Carmen" overture (Bizet).  
 Dance—Orchestra, "Hungarian Dance" (Brahms).  
 8.9: Tenor solo—Mr. G. Austin Blackie, "Who is Sylvia?" (Schubert).  
 8.13: Steel guitar trios—Mrs. Mildred Kenny's Trio, (a) "I Can't Do Without You" (Berlin); (b) "My Blue Ridge Mountain Home" (Robison).

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G.P.O. BOX 830.

WELLINGTON.

- 8.20: Humour—Mr. Henry Desmond, "What I Want is a Proper Cup of Coffee" (Weston and Lee).
- 8.27: Orchestral—Orchestra, "Serenata" (Moszkowski).  
Vibraphone solo with orchestral accompaniment—Mr. L. Probert, "Les Voix Des Cloches" (Luigini).
- 8.35: Popular song—Mrs. Mabel Jackson, "Old Man Sunshine" (Dixon).
- 8.39: Steel guitar trios—Mrs. Mildred Kenny's Trio, (a) "Sweet Hawaiian Girl of Mine" (Perry); (b) "Kentucky Dance" (Smith).
- 8.46: Tenor solos—Mr. G. Austin Blackie, (a) "Daphne" (Coningsby Clarke); (b) "Long and Long Ago" (Turner-Maley).
- 8.52: Instrumental—Orchestra, repeat number.
- 9.0: Weather report.
- 9.2: Song suite—Orchestra and chorus, "Guy D'Hardelot's Popular Songs" (Arrgd. Higgs):
1. Love's Madrigal,
  2. My Message,
  3. In England Now.
  4. In 1822 (an old-world story),
  5. When a Dream is there.
  6. I know a Lovely Garden,
  7. An Old Romance.
  8. Because.
  9. The Dawn.
- 9.14: Humour—Mr. Henry Desmond, "When Poor Old Father Tried to Kill the Cock-a-doodle Doo" (Weston and Barnes).
- 9.21: Popular song—Mrs. Mabel Jackson, "Some Day, Somewhere, We'll Meet Again" (Rapee).
- 9.25: Musical comedy selection—Orchestra, "Rose Marie" (Friml).
- 9.35: "His Master's Voice" Dance Programme:  
Waltz—International Concert Orchestra, "Blue Danube" (Strauss) (Zonophone record EF21).  
Comedian with chorus—Clarkson Rose, "Hippopotamus" (Carlton) (Zonophone 5145).  
Foxtrot with vocal chorus—Shilkret's Orchestra, "Flower of Love" (Dreyer) (H.M.V. EA431).  
Foxtrot with vocal refrain—Shilkret's Orchestra, "Dancing Shadows" (Golden) (H.M.V. EA367).  
Waltz—Paul Whiteman's Orchestra, "Cheerie Beerie Bee" (Wayne) (H.M.V. EA396).
- 9.51: Tenor solo—Franklyn Baur, "Just Across the Street from Heaven" (Newman) (Zonophone EF119).  
Saxophone solo—Rudy Wiedoeft, "Rubenola" (Wiedoeft) (Zonophone EF119).  
Tango Argentino—International Novelty Orchestra, "Y Como Le Va?" (Valverde) (H.M.V. EA364).  
Wurlitzer organ solo—Jesse Crawford, "The Dance of the Blue Danube" (Fisher) (H.M.V. EA404).
- 10.3: Vocal duet—Maurice and Sidney, "Toy-Town Artillery" (Lynton) (Zonophone 5161).  
Dance orchestra—Shilkret's Rhythm Melodists, "Dolly Dimples" (Alter) (H.M.V. EA336).
- 10.9: Baritone solo—Jno. Brownlee, "Sirs! Your Toast" (Bizet) (H.M.V. D1396).  
Wurlitzer organ solo—Jesse Crawford, "I Can't Do Without You" (Berlin) (H.M.V. EA404).  
Waltz—Wurlitzer organ—Chas. W. Saxby, "Janette" (Nicholls) (Zonophone 5094).  
Yale Blues—Rio Grande Tango Band, "A Blue Serenade" (Lyttell) (H.M.V. B5355).
- 10.23: Tenor with cinema organ—Gerald Griffin, "My Irish Song of Songs" (Sullivan) (Zonophone 2989).  
Wurlitzer organ solo—Jesse Crawford, "King For a Day" (Lewis) (H.M.V. EA425).  
Foxtrot with vocal refrain—Nat Shilkret and Victor Orchestra, "Hallelujah" (Robin) (H.M.V. EA253).  
Foxtrot with vocal refrain—Waring's Pennsylvanians, "What Do You Say?" (Yellen) (H.M.V. EA340).
- 10.36: Male quartet—De Reszke Singers, "My Lady Chlo" (Leighton) (H.M.V. EA432).  
Foxtrot—Zez Confrey, "Polly" (Zamecnik) (H.M.V. EA267).  
Foxtrot—Nat Shilkret's Orchestra, "The Kinkajou" (McCarthy) (H.M.V. EA315).
- 10.49: Male quartet—De Reszke Singers, "Absent" (Metcalfe) (H.M.V. EA432).  
Vocal duet with violin and guitar—Dalhart and Robison, "Oh, Suzanna" (Foster) (H.M.V. EA80).  
Hawaiian—Ferrer and Paaluh, "Hawaiian Waltz Medley" (Trdtl.) (H.M.V. B2369).  
Barn dance—Bert Firman's Dance Orchestra, "My Lady Dainty" (Hesse) (Zonophone 5118).  
Waltz—The Troubadours, "La Golondrina" (The Swallow) (H.M.V. EA349).
- 11.0: Close down.

### 3YA, CHRISTCHURCH (306 METRES)—TUESDAY, MARCH 26. (SILENT DAY.)

### 4YA, DUNEDIN (463 METRES)—TUESDAY, MARCH 26.

- 8.0 p.m.: Town Hall chimes.
- 8.1: Relay of instrumental music from the Ritz.
- 4.25: Sports results to hand.
- 4.30: Close down.

- 6.0: Children's session, conducted by "Big Brother Bill."
- 7.0: Town Hall Chimes.
- 7.30: Lecturette—Mr. R. W. Marshall of the Government Tourist Department, "Tourist Resorts."
- 8.0: Town Hall chimes.
- 8.1: Relay of rendition of the Secred Cantata "Olivet to Calvary" (Maunder) from St. Paul's Cathedral, under the direction of Mr. E. Heywood, F.R.C.O., organist and choirmaster.  
Soloists: Miss I. Heywood, mezzo-soprano.  
Mr. H. Drake, tenor.  
Mr. L. M. Cachemaille, baritone.  
Mr. E. G. Bond, bass.
- 9.30: Recital—Miss Joyce Hould, "Christ in Flanders."
- 9.35: Mezzo-soprano solos—Miss Agnes Guy, (a) "Break, Break, Break," (Carey).
- 9.43: Piano with orchestra—Ignaz Friedman, "Concerto in A Minor" (Grieg) 2nd and 3rd movements) (Columbia record 02704-5).
- 9.59: Recital—Miss Joyce Hould, "The Day is Come" (Longfellow).
- 10.0: Orchestra and chorus—Bayreuth Festival Orchestra, "Parsifal—The Grail Scene" (Wagner) (Columbia record L2008).
- 10.11: Close down.

## Wednesday, March 27

### 1YA, AUCKLAND (333 METRES)—WEDNESDAY, MARCH 25.

- 3 p.m.: Selected studio items.
- 4.0: Literary Selection by the Announcer.
- 4.8: Further studio items.
- 4.25: Sports results to hand.
- 4.30: Close down.
- 6.0: Children's session conducted by "Uncle Tom."
- 7.15: News session.
- 7.30: Market reports.
- 7.45: Talk—Mr. Norman Kerr, "Physical Culture."
- 8.0: Chimes.
- 8.1: March—Auckland Artillery Band, "B.B. and C.F." (Hume).
- 8.8: Vocal Quartet—The Olympians, "A Little Stream" (Anon).
- 8.12: Waltz—Auckland Artillery Band, "Jennia" (Allan).
- 8.19: Baritone—Mr. Clinton Williams, "Shipmates o' Mine" (Sanderson).
- 8.23: Soprano solo—Miss Dorothy Youd, "The World is Waiting for the Sunrise" (Lockhart).
- 8.27: Solo and chorus with orchestra—Zonophone Light Opera Company, "Vocal Gems from 'The Mikado'" (Sullivan) (Zonophone Record A323).
- 8.31: Selection—Auckland Artillery Band, "Musical Switch" (Alford).
- 8.41: Bass—Mr. Geoffrey Colledge, "The Trumpeter" (Dix).
- 8.45: Pianoforte solo—Mr. Cyril Towsey, "Andante and Rondo" (Mendelssohn).
- 8.49: Vocal Duet—Misses Youd and Williamson, "The Venetian Carnival" (Varne).
- 8.54: March—Auckland Artillery Band, "Albion" (Rimmer).
- 9.0: Weather report.
- 9.2: Tenor solo—Mr. Lambert Harvey, "O, Mistress Mine" (Quilter).
- 9.6: Waltz—International Concert Orchestra, "Gold and Silver" (Lehar) (Zonophone Record EF22).
- 9.10: Baritone solos—Mr. Clinton Williams, (a) "Bois Spais" (Lully); (b) "An Emblem" (Thompson).
- 9.18: Overture—Auckland Artillery Band, "Lustpiel" (Beler).
- 9.28: Contralto solo—Miss Martha Williamson, "Your Song" (Oliver).
- 9.32: Solo and chorus with orchestra—Zonophone Light Opera Company, "Vocal Gems from 'The Mikado'" (Sullivan) (Zonophone Record A323).
- 9.36: Fantasia—Auckland Artillery Band, "Maritana No. 1" (Wallace).
- 9.44: Vocal Duet—Messrs. Harvey and Colledge, "The Twin Duet" ("The French Maid") (Slaughter).
- 9.48: Selection—Auckland Artillery Band, "No, No, Nanette" (Youman).
- 9.56: Tenor solo—Mr. Lambert Harvey, "Should You Come to Me Again" (Oliver).
- 10.0: Vocal Quartet—The Olympians, "Gonna Have Weather" (Brown).
- 10.4: March—Auckland Artillery Band, "Rimutaka" (Trussell).
- 10.9: Close down.

### 2YA, WELLINGTON (420 METRES)—WEDNESDAY, MARCH 27.

SILENT DAY.

### 3YA, CHRISTCHURCH (306 METRES)—WEDNESDAY, MARCH 27, 1929.

- 3 p.m.: Afternoon session—Selected gramophone items.
- 4.25: Sports results.
- 4.30: Close down.
- 6.0: Children's session conducted by Mother Hubbard and Big Brother.
- 7.15: News session.
- 7.30: Addington stock market reports.
- 8.0: Chimes.
- 8.1: Overture—H.M. Coldstream Guards, "Der Freischutz" (Weber) (H.M.V. Record O1335).
- 8.5: Soprano solo—Miss Hilda Hutt, "Down the Vale" (Moir).
- 8.9: Pianoforte solo—Miss Lucy Fullwood, "Ballade" (Grieg).

- 117: Baritone solo—Mr. A. G. Thompson, "To the Forest" (Tschaiakowsky).  
 121: Recital—Rev. B. Dudley, "Picked up from Anywhere" (MS).  
 8.25: Ballet music—Studio Orchestra under the conductorship of Mr. Harold Beck, "Carmen Ballet Music" (Nos. 1, 2, 3 and 4) (Bizet).  
 8.35: Mixed quartet—Dulcet Quartet, "Moonlight" (Fanning).  
 8.39: Contralto solo—Miss Nellie Lowe, "In the Great Unknown" (D'Hardelot).  
 8.43: Violin and cinema organ—Chas. Williams, "Melody in F" (Rubinstein) (Zonophone Record 5194).  
 8.47: Tenor solos—Mr. T. G. Rogers, (a) "Elegie" (Massenet); (b) "To Mary" (Voefe).  
 8.52: Waltz—International Concert Orchestra, "Gold and Silver" (Lehar) (Zonophone EF22).  
 Contralto with chorus and orchestra—Marie Olczewska, "Ja Die Liebe Hat Bunte Flugel" ("Habanera" from "Carmen") (Bizet), (H.M.V. Record D1386).  
 9.0: Weather report.  
 9.1: Talk—Rev. B. Dudley, F.R.A.S., "The Wonders of the Southern Cross."  
 9.16: Orchestral—Studio Orchestra, (a) "Coronach" (Barratt); (b) Violin solo with orchestral accompaniment, "Valse Bluette" (Drigo) (Soloist, Miss Irene Morris); (c) "Norwegian Dance" (Grieg).  
 9.26: Soprano solo—Miss Hilda Hutt, "Nymphs and Fauns" (Bemberg).  
 9.30: Pianoforte solo—Miss Lucy Fullwood, "Im Walde Fantasiestucke" (Gade).  
 9.33: Tenor solo—Mr. T. G. Rogers, "On With the Motley" (Leoncavallo).  
 9.37: Soprano and contralto duet—Dulcette Duo, "Where the Chestnuts Bloom" (Newton).  
 9.41: Wurlitzer organ solo—Jesse Crawford, "Roses of Yesterday" (Berlin) (H.M.V. Record EA443).  
 Male choral—Lay Vicars of Westminster Abbey, "Stars of the Summer Night" (Cruikshank) (H.M.V. Record B2781).  
 9.47: Orchestral—Studio Orchestra, "Chu Chin Chow" (Norton).  
 9.57: Contralto solo—Miss Nellie Lowe, "Like to the Damask Rose" (Elgar).  
 Baritone solo—Mr. A. G. Thompson, "A Requiem" (R. A. Horne).  
 10.5: Mixed quartet—Dulcet Quartet, "Beleagured" (Sullivan).  
 10.8: Close down.

#### 4YA, DUNEDIN (463 METRES)—WEDNESDAY, MARCH 27, 1929

- 7.0 p.m.: Town Hall chimes.  
 7.1: Request gramophone recital.  
 7.40: News session.  
 8.0: Town Hall chimes.  
 Concert by St. Kilda Band, under conductorship of Mr. James Dixon, and assisting artists.  
 8.1: Waltz—Band, "Druid's Prayer" (Dawson).  
 March—Band, "Umpire" (Greenwood).  
 8.14: Bass solos—Mr. E. G. Bond, (a) "The Fortune Hunter" (Willeby); (b) "Song of the North Wind."  
 8.21: Recital—Miss Roberta Williams, (a) "Old Grey Squirrel" (Noyes); (b) "King of Denmark's Ride" (Norton).  
 8.30: Saxophone solo—Rudy Wiedoeft, "Valse Mazanetta" (Wiedoeft) (Columbia Record 01176).  
 8.33: Tenor solo—Hubert Eisdell, "Ah! Moon of my Delight" (Lehmann) (Columbia Record L1454).  
 8.37: Mezzo-soprano solo—Miss Mary Teviotdale, "Love is Meant to Make us Glad" (German).  
 8.41: Selection—Band, "Pirates of Penzance" (Sullivan).  
 Intermezzo—Band, "Prelude" (Rachmaninoff).  
 8.57: Contralto solos—Miss Stasia McCready, (a) "Hark! What I Tell to Thee" (Haydn); (b) "Caro Moi Ben" (Giordani).  
 9.5: Weather report and announcements.  
 9.7: Overture—Band, "Tancredi" (Rossini).  
 9.15: Mezzo-soprano solos—Miss Mary Teviotdale, (a) "Wanderer's Night Song" (Schubert); (b) "Virgin's Slumber Song" (Regan).  
 9.22: Violin solo—Albert Sammons, "Meditation" (Thais) (Columbia Record 02687).  
 9.26: Recital—Miss Roberta Williams, "Little Tan Shoes" (Anon).  
 9.31: Cornet solo—Band, "When You Come Home" (Squire).  
 Song Waltz—Band, "Jeannie" (Shilkret).  
 9.43: Bass solo—Mr. E. G. Bond, "Song of the Bow" (Aylward).  
 9.47: Contralto solo—Miss Stasia McCready, "The Sands o' Dee" (Clay).  
 9.52: Male Quartet—Seiberling Singers, "A Japanese Sunset" (Deppen) (Columbia Record 01296).  
 9.52: March—Band, "Southern Cross" (Rowlings).  
 10.0: Close down.

## Thursday, March 28

#### 1YA, AUCKLAND (333 METRES)—THURSDAY, MARCH 28

- 3 p.m.: Studio concert—Selected items.  
 3.30: Talk—Miss B. E. Hoyle, "Home Handicrafts."  
 3.45: Studio items.  
 4.0: Literary selection by the Announcer.  
 4.8: Studio items.  
 4.25: Sports results to hand.  
 4.30: Close down.  
 6.0: Children's session conducted by "Peter Pan."  
 7.15: News session.  
 7.30: Market reports.

- 8.0: Chimes.  
 8.1: March—Orchestra, "Washington Post" (Souza).  
 Waltz—Orchestra, "Il Bacio" (Arditi).  
 8.10: Vocal quartet—Madame Mary Towsey's Quartet, "The Lass with the Delicate Air" (arr. West).  
 8.14: Pianoforte solo—Miss Doris Binns, "Study in D Flat Major" (Liszt).  
 8.19: Soprano solo—Mrs. J. J. Sullivan, "I Dreamt that I Dwelt" (Balfe).  
 8.23: Entr'acte—Orchestra, "Minuet in G" (Paderewski).  
 8.28: Vocal quartet—Madame Mary Towsey's Quartet, "Ever of Thee."  
 8.32: Elocution—Mr. J. F. Montague, "Rex's Stand at Orakau" (Bracken).  
 8.39: Baritone solo—Mr. John Bree, "Simon the Cellarer" (Hatton).  
 8.43: Soprano solo—Madame Mary Towsey, "Nymphs and Shepherds" (Purcell).  
 8.47: Cello and Orchestra—Miss Mollie Wright and Orchestra: (a) "Slumber Song" (Squire); (b) "Spanish Dance" (Sarasate).  
 8.56: Vocal duet—"Peaceful Slumbering" (Storace).  
 9.0: Weather report.  
 9.2: Contralto solo—Miss Edna Peace, "My Mother Bids Me Bind My Hair" (Haydn).  
 9.6: Tenor solo—Mr. John McDougall, "My Pretty Jane" (Bishop).  
 9.10: Pianoforte solo—Miss Doris Binns, "An English Waltz" (Scott).  
 9.15: Vocal quartet—Madame Mary Towsey's Quartet, "Golden Slumbers Kiss Your Eyes" (Curwen).  
 9.19: Baritone—Mr. John Bree, "Drink to Me Only" (arr. Quilter).  
 9.23: Humour—Mr. J. F. Montague, "You Do Look Queer!"  
 9.29: Soprano solo—Madame Mary Towsey, "Where the Bee Sucks" (Arne).  
 9.33: Orchestra, "Glory of Russia" (Kreen).  
 9.43: Vocal quartet—Madame Mary Towsey's Quartet, "Home, Sweet Home" (Bishop).  
 9.47: "His Master's Voice" Dance Programme:  
 Overture—Merek Weber's Orchestra, "Vienna by Night" (Komzak) (H.M.V. Record C1507).  
 Foxtrot with vocal trio—Horace Heidt's Orchestra, "Golden Gate" (Jolson) (H.M.V. Record EA359).  
 Foxtrot—Art Hickman's Orchestra, "Dream House" (Foxy) (H.M.V. Record EA434).  
 Foxtrot with vocal chorus—Horace Heidt's Orchestra, "What a Wonderful Wedding That Will Be" (Kahal) (H.M.V. Record EA359).  
 10.5: Tenor solo—John McCormack, "I Hear You Calling Me" (Marshall) (H.M.V. Record DA958).  
 Foxtrot—Victor Arden and Phil Ohman's Orchestra, "Kiddie Kapers" (Shilkret) (H.M.V. Record EA401).  
 Pipe organ, piano, trombone, and harp—Shilkret's Rhythm Melodists, "When You're with Somebody Else" (Gilbert) (H.M.V. Record EA336).  
 Foxtrot—Victor Arden and Phil Ohman's Orchestra, "Rag Doll" (Brown) (H.M.V. Record EA401).  
 10.18: Humour—Norman Long, "Good Little Boy and Bad Little Boy" (Weston) (H.M.V. Record B2454).  
 Guitars and ukulele—Kane's Hawaiians, (a) "Drowsy Waters" (Ailan), (b) "Hilo Hawaiian March" (Zonophone Record 2992).  
 Foxtrot—Rhythmic Eight, "So Tired" (Little) (Zonophone Record BE104).  
 10.28: Tenor solo—Maurice Gunsby, "With All Her Faults I Love Her Still" (Rosenfeld) (Zonophone Record BE87).  
 Wurlitzer organ solo—Jesse Crawford, "Dancing Tambourine" (Ponce) (H.M.V. Record EA301).



# 1929 !

## THE LATEST

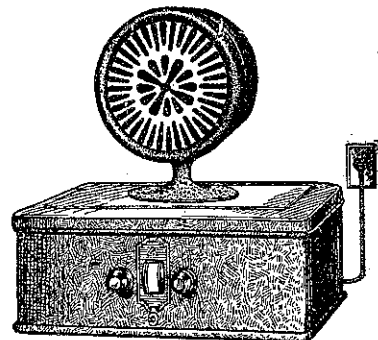
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- 10.38: Humour—John Henry and Blossom, "Joe Murgatroyd Says" (Hendy) (H.M.V. Record B2120).  
 Foxtrot—The Troubadours, "Dream Kisses" (Yellen) (H.M.V. Record EA269).  
 Foxtrot—Jack Hylton, "Souvenirs" (Nicholls) (H.M.V. Record EA297).  
 Waltz—International Novelty Quartet, "Cuckoo" (Jonasson) (Zonophone Record EE67).  
 10.51: Hawaiian—Hilo Hawaiian Orchestra, "Hawaiian Sunset" Waltz (Vandersloot) (H.M.V. Record B2328).  
 Yale Blues—Rio Grande Band, "Every Little Thing I Do" (Hackfort) (H.M.V. Record EA297).  
 Hawaiian Orchestra—Hilo Hawaiian Orchestra, "Sweet Hawaiian Dream" (Coleman) (H.M.V. Record B2328).  
 11.0: Close down.

## 2YA, WELLINGTON (420 METRES)—THURSDAY, MARCH 28.

- 3 p.m.: Chimes of the General Post Office clock.  
 3.1: Selected studio items.  
 4.30 and 4.55 p.m.: Sporting results to hand.  
 5.0: Close down.  
 6.0: Children's session conducted by Uncle Len.  
 7.0: News session.  
 7.40: Lecturette—Miss M. S. Christmas, Organiser, Wellington Federation Women's Institutes, "Women's Institute Work in New Zealand."  
 8.0: Chimes of the General Post Office clock, Wellington.  
 Studio concert by the Wellington City Citadel Salvation Army Band under conductorship of Mr. H. Scotney, and assisting artists.  
 8.1: March—Band, "On to the War" (Leidzen).  
 Selection—Band, "Adoration" (Ball).  
 8.12: Quartet—The Mellow Fellows, "I'm Winging Home" (Tobias).  
 8.16: Popular song—The Fatherly Fellow, "Sonny Boy" (De Sylva).  
 8.20: Meditation—Band, "Home, Sweet Home" (Leidzen).  
 8.28: Character study—The Yorkshire Fellow, "Ah'm Excited" (Tom Foy).  
 8.34: Chorus with Orchestra—Light Opera Company, "Gems from 'Princess Flaria'" (Romberg) (H.M.V. Record BB22).  
 8.38: Light vocal—Miss Maude Farrant, "Our Farm" ("Our Miss Gibbs") (Monckton).  
 8.43: Wurlitzer organ solos—Jesse Crawford, (a) "Roses of Yesterday" (Berlin), (b) "Just a Night for Meditation" (Lewis) (H.M.V. Record EA443).  
 8.50: Quartet—The Mellow Fellows, "Little Mother" (theme song of the film production "Four Sons") (Rapee and Pollack).  
 8.54: Selection—Band, "Welsh Melodies" (arr. Hill).  
 9.2: Weather report.  
 9.4: Songs—The Aussie Fellow, "Australian Bush Songs" (James): (a) "Comrades of Mine," (b) "Bush Night Song," (c) "Stockrider's Song."  
 9.14: Hymns—Band, (a) "Beautiful Star," (b) "He Wipes the Tear" (arr. Hawkes).  
 9.22: Baritone—The Baritone Fellow, "A Shady Tree" (Donaldson).  
 9.26: Saxophone solo with violin, guitar, banjo, and piano, "Rubenola" (Wiedoeft) (Zonophone Record EE119).  
 9.29: Comic songs—Miss Maude Farrant, (a) "Women Cost Less than a Man," (b) "Colds" (Clare).  
 9.36: Duet—Two Fellows, "Meet Me To-night at Twilight" (Harris).  
 9.40: Selection—Band, "The Atonement" (Coles).  
 9.47: Song—The Military Fellow, "Sergeant of the Line" (Weatherly).  
 9.51: Popular song—The Fellows One and All, "That's My Weakness Now" (Green and Stept).  
 9.55: Chorus with orchestra—Light Opera Company, "Gems from 'Bohemian Girl'" (Balfe).  
 9.59: March—Band, "Boston" (Broughton).  
 10.2: Close down.

## 3YA, CHRISTCHURCH (306 METRES)—THURSDAY, MARCH 28.

- 3 p.m.: Selected studio items.  
 4.25: Sports results.  
 4.30: Close down.  
 6.0: Children's session conducted by "Uncle John."  
 7.15: News session.  
 7.30: Talk—Miss B. Tossman, of N. Tossman and Co., third series of talks on "Russian Furs."  
 8.0: Chimes.  
 8.1: Overture—Rebroadcast of 2YA, Wellington.  
 8.6: Mixed quartets—The Melodious Four, (a) "For Music" (Franz), (b) "Request."  
 8.10: Cello solo—Mr. Harold Beck, "Death and the Maiden" (Schubert).  
 8.14: Soprano songs—Miss Frances Hamerton, (a) "The Birds" (Fagge), (b) "Slumber Song" (Quilter).  
 8.19: Pianoforte soli—Miss Bessie Pollard, (a) "Berceuse" (Hill), (b) "Pilgrims' Chorus" (Wagner—Liszt).  
 8.26: Tenor song—Mr. Russell Sumner, "Where'er You Walk" (Handel).  
 8.30: Humour—Will Kings, "Bertram at the Rotary Dinner" (Merry) (H.M.V. Record C1340).  
 8.34: Instrumental Trio—Broadcasting Trio, "Allegro, Animato, Scherzo" (Gade).  
 8.43: Mixed quartet—Melodious Four, "Softly Falls the Shades" (Hatton).  
 8.46: Flute with Orchestra—John Amadio, "Flute Concerto, Finale" (Mozart) (H.M.V. Record C1533).  
 8.50: Contralto songs—Miss Belle Renaut, (a) "Laburnum" (Phillips), (b) "Boat Song" (Ware).  
 Baritone solo—Maurice Elwin, "Just Give the Southland to Me" (Sissle), (Zonophone Record EE117).

- 8.56: Orchestral—Marek Weber's Orchestra, "Vienna by Night" (Komzak) (H.M.V. Record C1507) (Part 2).  
 9.0: Weather report.  
 9.1: Orchestral—Royal Opera Orchestra, "Hungarian Dance No. 5 in F Sharp Minor" (Brahms) (H.M.V. Record C1415).  
 9.5: Tenor and bass duet—The Yeoman Duo, "The Crucifix" (Faure).  
 9.9: Cello solo—Mr. Harold Beck, "Orientale" (Cui).  
 9.13: Bass solo—Mr. T. D. Williams, "My Abode" (Schumann).  
 9.17: Pianoforte solos—Miss Bessie Pollard, (a) "The Holy Boy" (John Ireland), (b) "Nocturne" (Grieg).  
 9.22: Soprano and contralto duet—Dulcette Duo, "Calm After Storm" (Keel).  
 9.26: Male chorus—Victor Chorus, "Pilgrims' Chorus" ("Tannhauser") (Wagner) (H.M.V. Record EA89).  
 9.29: Instrumental trios—Broadcasting Trio, (a) "Canzonetta" from "Concerto Romantique" (Godard), (b) "Gavotte" (Gluck), (c) "Waltz" (Tschalkowsky) from "Sleeping Beauty."  
 9.40: Soprano solo—Miss Frances Hamerton, "My Harp is on the Willow Tree" (Needham).  
 Tenor solo—Mr. Russell Sumner, "Dedication" (Schumann).  
 9.47: Orchestral—Philadelphia Symphony Orchestra, "Toccata and Fugue in D Minor" (Bach) (H.M.V. Record D1428).  
 9.55: Contralto solo—Miss Belle Renaut, "Lullaby" (Keel).  
 Bass song—Mr. T. D. Williams, "Wanderer's Song" (Harrison).  
 10.0: Waltz—International Novelty Orchestra, "Emperor" (Strauss) (Zonophone Record EF22).  
 10.4: Mixed quartet—Dulcet Quartet, "God So Loved the World" (Stainer) ("The Crucifixion").  
 10.7: Close down.

## 4YA, DUNEDIN (463 METRES)—THURSDAY, MARCH 28.

SILENT DAY.

# Friday, March 29

## 1YA, AUCKLAND (333 METRES)—FRIDAY, MARCH 29.

- 10.45 a.m.: Relay of morning service from St. Mary's Cathedral. Preacher: Canon Percival E. James. Organist: Mr. Edgar Randall.  
 6.45 p.m.: Relay of evening service at Beresford St. Congregational Church. Preacher: Rev. Lionel Fletcher. Choirmaster: Mr. William Gemmell.  
 8.30: Special Easter Programme:  
 Orchestral—Bayreuth Festival Orchestra, "Prelude—Act 3, Parsifal" (Wagner) (Columbia record L2012).  
 8.38: Duet and orchestra—Kephis and Wolf with Bayreuth Chorus and Orchestra (Wagner) (Columbia record L2013-4).  
 8.50: Organ solo—Marcel Dupre, "Christ Came to Jordan" (Chorale) (Bach) (H.M.V. record B471).  
 8.54: Church choir—"Through the Night of Doubt and Sorrow" (Dykes) (Zonophone record 5110).  
 8.58: Cello solo—Pablo Casals, "O Star of Eve" (Tannhauser) (Wagner) (H.M.V. record DB1012).  
 9.2: Tenor solo—Jno. McCormack, "Ave Maria" (Schubert) (H.M.V. record DB578).  
 9.6: Orchestral—Philadelphia Symphony Orchestra, "I Will Call Upon Thee, Jesus" (Bach) (H.M.V. record D1464).  
 9.10: Choir—British Broadcasting Choir, "A Few More Years Shall Roll" (Bonner) (Columbia record 01211).  
 9.14: Violin solo—Isolde Menges, "Air on the G String" (Bach) (H.M.V. record D1288).  
 9.18: Easter music—Caruso and Journet, "Crucifix" (Faure) (H.M.V. record DB591).  
 9.22: Choral—Chorus and London Symphony Orchestra, "Jesu! By that Shuddering Dread which fell on Thee" ("Dream of Gerontius") (Elgar) (H.M.V. record D1348).  
 9.26: Choral with organ and descants—Choir of St. Margaret's, Westminster, (a) "Lead Us Heavenly Father"; (b) "Sevenfold Amen." (H.M.V. record B2531).  
 9.30: Close down.

## 2YA, WELLINGTON (420 METRES)—FRIDAY, MARCH 29.

- 11 a.m.: Relay of Morning Service of St. Andrew's Presbyterian Church (Preacher, Rev. R. J. Howie, B.A.; organist, Miss Dorothy Mills).  
 3 p.m.: Chimes of the General Post Office clock.  
 3.1: St. Gerard's Redemptionist Church, Hawker Street, "Stations of the Cross," to be preached by Rev. Father T. O'Connor, O.S.S.R. "Stabat Mater" (arrgd. Mount). "Out of the Depths" (Gondinel). "Adoremus te Christe" (Palestrina). "Eia Mater" (from "Stabat Mater") (Rossini). Conductor, Mr. Frank J. Oakes. Organist, Mr. Henry Mount.  
 7.0: Relay from St. Thomas's Anglican Church, Newtown, of Stainer's "The Crucifixion" by the St. Thomas's Church Choir, under the conductorship of Mr. W. A. Gatheridge. Soloists: Tenor, Mr. Chas. A. Williams; baritone, Mr. Will Goudie. Organist and choirmaster: Mr. W. A. Gatheridge.  
 8.15 (approx.) Orchestra, (a) "Credo" ("St. Cecile Mass") (Gounod); (b) "Ave Maria" (Mascagni); (c) "March Pontificale" (Gounod).  
 8.25: Special studio presentation of Maunder's sacred cantata "Olivet to Calvary" by the Island Bay Wesley Church Choir, under the conductorship of Mr. R. Dellow. Soloists: Soprano, Miss Greta Stark; tenor, Mr. Seon Brown; baritone, Mr. Wilbur Davies. Organist, Mr. Arthur Crisp; pianist, Miss Dorothy Tighe.



- 9.25: Orchestral—Bayreuth Festival Orchestra, Prelude to Act 3 of "Parsifal" (Wagner) (Columbia Record L2012).  
Vocal and Orchestra—Alexander Kipnis, Fritz Wolf, and Bayreuth Festival Orchestra, "Good Friday Music" from Act 3 of "Parsifal" (Wagner) (Parts 1, 2, and 3, Columbia Records L2013-4).
- 9.49: Instrumental—Orchestra, (a) "Madonna" (Mozart-Moses); (b) "Angelus" ("Scenes Pittoresques"—Massenet); (c) "Gloria" ("St. Therese") (Hache).
- 10.0 Close down.

### 3YA, CHRISTCHURCH (306 METRES)—FRIDAY, MARCH 29.

- 11.0 a.m.: Relay of combined church service from St. Andrew's Presbyterian Church (under the auspices of the Ministers' Association):  
Rev. N. L. D. Webster.  
Special Preacher: Rev. S. J. Werren.  
Choirmaster: Mr. J. McClean.  
Organist: Mr. Robt. Lake.
- 8.0: Rebroadcast of 2YA, Wellington (relay from St. Gerard's Redemptorist Church of ceremony of "The Stations of the Cross.")
- 7.30: Relay from Christchurch Cathedral of St. Matthew's "Passion" (Johann Sebastian Bach)—  
Soloists: From Cathedral Choir.  
Grand Choral work by full Cathedral Choir.  
Choirmaster and Organist: Dr. J. C. Bradshaw.  
Close down.

### 4YA, DUNEDIN (463 METRES)—FRIDAY, MARCH 29.

- 8 p.m.: Town Hall chimes.
- 8.1: Prelude—Bayreuth Festival Orchestra, "Prelude to Act 3, 'Parsifal'" (Wagner) (Columbia record L2012).
- 8.9: Baritone solo—Mr. F. M. Tuohy, "O God Have Mercy" ("St. Paul"—Mendelssohn).
- 8.14: Instrumental—Broadcasting Trio, "Romance" (Mozart).
- 8.20: Choir—British Broadcasting Company's Choir, "A Few More Years Shall Roll" (Bonner) (Columbia record 01211).
- 8.23: Soprano solo—Miss Mae Matheson, "Ave Maria" (Gounod).
- 8.27: Violin solos—Miss Eva Judd, (a) "Nobody Knows de Trouble I've Seen" (Negro Spiritual) (Kreisler); (b) "Slavonic Lament" (Schuett).
- 8.33: Duet and orchestra—Alex. Kepnis and Fritz Wolf with the Bayreuth Chorus and Orchestra, "Good Friday Music, Act 3, 'Parsifal'" (Wagner) (Columbia records L2013-4).
- 8.45: Mezzo-soprano solo—Miss Mollie Andrews, "There is a Green Hill" (Gounod).
- 8.49: 'Cello solo—Mr. P. J. Palmer, "Am Meer" (Schubert).
- 8.54: Soprano and chorus—Emmy Bettendorf, "Easter Hymn" ("Cavalleria Rusticana"—Mascagni) (Parlophone record AR1005).
- 9.2: Baritone solo—Mr. F. M. Tuohy, "Pro Peccatis" ("Stabat Mater" (Rossini)).
- 9.7: Weather report.
- 9.9: Instrumental—Broadcasting Trio, "Berceuse" (Godard).
- 9.15: Soprano solo—Miss Mae Matheson, "A Legend" (Tschalkowsky).
- 9.19: 'Cello solo—Mr. P. J. Palmer, "Ave Maria" (Schubert).
- 9.23: Mezzo-soprano solo—Miss Mollie Andrews, "Beyond the Dawn" (Sanderson).
- 9.27: Choral—London Symphony Chorus and Orchestra, "Jesu! By that Shuddering Dread which Fell on Thee" ("Dream of Gerontius"—Elgar) (H.M.V. record D1348).
- 9.31: Choral with organ and descants—Choir of St. Margaret's, Westminster, (a) "Lead Us, Heavenly Father," (b) "Sevenfold Amen" (H.M.V. record B2531).
- 9.34: Close down.

## Saturday, March 30

### 1YA, AUCKLAND (333 METRES)—SATURDAY, MARCH 30.

- 3 p.m.: Afternoon session—Selected studio items.
- 4.0: Literary selection by the Announcer.
- 4.8: Studio items.
- 4.25: Sports results.
- 4.30: Close down.
- 6.0: Children's session conducted by Cinderella.
- 7.15: News and market reports.
- 8.0: Chimes.
- 8.1: Overture—Orchestra, "Stradella" (Plotow).
- 8.11: Baritone solo—Mr. Fred. Barker, "Laugh, Clown, Laugh" (Florita).
- 8.15: Waltz—Jack Hylton's Orchestra, "Spanish Rose" (Pearson) (H.M.V. Record B5481).
- 8.18: Humour—Mr. F. W. Barker, Humour.
- 8.23: Special pianoforte and song recital by Miss Edith Harrry: Pianoforte soli, (a) "Refrain de Berceuse" (Palmgren), (b) "Polonaise in A" (Chopin). Songs, (a) "Mary Magdalene" (Harrry), (b) "Roses for the King" (Harrry).
- 8.35: Orchestral—Orchestra, (a) "Andantino" (Lemare, arr. Bellingham), (b) "Waiata Poi" (Hill).
- 8.44: Waltz—The Troubadours, "When Love Comes Stealing" (Rapee) (H.M.V. Record EA410).

- 8.47: Monologue and pianoforte solo—Miss Edna Langmuir, (a) "Having It Out" (Kent), "Just Her Way" (Aitken).
- 8.54: Baritone solos—Mr. Fred Baker, (a) "Jeannine, I Dream of Lilac-Time" (Shilkret), (b) "My Blue Heaven" (Donaldson).
- 9.2: Weather report.
- 9.4: Suite—Orchestra, "Hiawatha Suite" (Coleridge Taylor): (1) The Wooing; (2) The Marriage Feast; (3) Bird Scene; (4) Conjuror's Dance; (5) Departure; (6) Reunion.
- 9.18: Pianoforte and song recital—Miss Edith Harrry: Pianoforte soli, (a) "Nocturne in F Sharp" (Chopin), (b) "Waltz in E Minor" (Chopin). Songs, (a) "Friendship" (Harrry), (b) "Golden Wattle" (Harrry).
- 9.30: Humour—Mr. F. Barker.
- 9.35: Pianoforte solo—Miss Edna Langmuir, "Molo" (Arndt).
- 9.39: Chorus and orchestra—Victor Arden, Phil Ohman, chorus and orchestra. Selections from "Good News" (de Sylva) (H.M.V. Record BB28).
- 9.43: Musical comedy selection—Orchestra, "The Mikado" (2nd Selection) (Sullivan).
- 9.53: "Columbia" Dance Programme:  
Tenor solo—Seamus O'Doherty, "The Pride of Tipperary" (Lockhead) (Regal Record G20343).  
Band selection—H.M. Grenadier Guards, "In a Clock Store" (Orth) (Columbia Record 9029).
- 10.0: Foxtrot—Ambassadors' Band, "I Just Roll Along Having My Ups and Downs" (Trent) (Columbia Record 01338).  
Foxtrot with vocal chorus—Ipana Troubadours, "'S Wonderful" (Gershwin) (Columbia Record 01306).  
Hawaiian guitar, banjo, and ukulele trio, "My Hawaii" (Lewis) (Columbia Record 3606).
- 10.10: Monologue—Milton Hayes, "Meanderings of Monty—Monty Attends a Board Meeting" (Hayes) (Columbia 01106).  
Male quintet—Singing Symphonies, "My Ohio Home" (Kahn) (Columbia Record 01088).  
Organ solos—G. T. Pattman, (a) "Polly" (Zamecnik), (b) "Janette" (Williams) (Columbia Record 01144).  
Foxtrot—Debroy Somers' Band, "Without You, Sweetheart" (de Sylva) (Columbia Record 01249).
- 10.30: Tenor solo—Hubert Eisdell, "Parted" (Tosti) (Columbia Record 02598).  
Humoresque—Australian Commonwealth Band, "Slidin' Thro' the Rye" (Hawkins) (Columbia Record 01235).
- 10.42: Male quartet—Shannon Male Quartet, "The Sidewalks of New York" (Lawlor) (Regal Record G20298).  
Pianoforte solo—Gil Dech, "Hallelujah" (Youmans) (Columbia Record 01205).
- 10.49: Orchestral—Columbia Symphony Orchestra, "March of the Toys" (Herbert) (Columbia Record 02651).  
Foxtrot—La Nuova Orchestra, "Di Napoli" (Italian foxtrot) (Romani) (Columbia Record 3066).  
Waltz—Eddie Thomas's Collegians, "Beautiful Ohio" (Earl) (Columbia Record 02651).  
Male chorus—Sheffield Orpheus Choir, "There is a Tavern in the Town" (traditional) (Columbia Record 01175).
- 11.0: Close down.

### 2YA, WELLINGTON (420 METRES)—SATURDAY, MARCH 30.

- 3.0 p.m.: Chimes of the General Post Office clock.
- 3.1: Selected gramophone items.
- 4.30 and 4.55: Sporting results to hand.
- 5.0: Close down.
- 6.0: Children's session, conducted by Uncle Toby.
- 7.0: News session, market reports and sports results.
- 8.0: Chimes of the General Post Office clock.
- 8.1: Overture—Orchestra, "Marche Militaire" (Schubert).  
Valse—Orchestra, "Beautiful Ohio" (Shapiro).
- 8.9: Soprano solo—Miss Decima Morgans, "Here's to Love and Laughter" (from "The Sunshine Girl") (Rubens).
- 8.13: Mandola—Mr. Lad Haywood, (a) "The Blue Room" (Rodgers); (b) "The Girl Friend" (Rodgers).
- 8.20: Tenor solo—Mr. Jas. Fordie, "Annie Laurie" (Trdtl.).
- 8.24: Entertainer—Mr. Austin Peters (Prince of Jesters) will entertain for 10 minutes, (a) "Looks" (Merry); (b) "The Road of 10,000 Crosses" (Milton Hayes).
- 8.34: Instrumental—Orchestra "Somewhere a Voice is Calling" (Tate).  
Bell solo with orchestral accompaniment—Mr. Les Probert, "Message of the Bells."
- 8.44: Baritone solo—Mr. Harry Matthes, "The Pirate" (Maley).
- 8.48: Solo and chorus—Zonophone Light Opera Company, "Gems from 'The Mikado'" (Sullivan) (Zonophone Record A323).
- 8.52: Instrumental—Orchestra, repeat number.
- 9.0: Weather report.
- 9.2: Waltz—Jack Hylton's Orchestra, "Spanish Rose" (Pearson) (H.M.V. Record B5481).
- 9.5: Soprano solo—Miss Decima Morgans, "In the Garden of My Heart" (Ball).
- 9.9: Suite—Orchestra, "Monsieur Beaucaire" (Rosse), 1. Intermezzo; 2. Leading Theme; 3. Gavotte; 4. Song of the Travellers; 5. Music of the Love Scene; 6. March Theme.
- 9.20: Entertainer—Mr. Austin Peters (Prince of Jesters) will again entertain, (a) "The Difference" (Kelly); (b) "The Whistling Yarn" (Saulzelle); (c) "Tony Weller on Widders" (Dickens).

- 9.30: Tenor solos—Mr. Jas. Fordie, (a) "Absent" (Metcalf); (b) "Maire My Girl" (Aitken).
- 9.37: Mandola—Mr. Lad Haywood, (a) "Sally of My Dreams" (Kernell); (b) "There's a Rainbow Round My Shoulder" (Dreyer).
- 9.44: Baritone solos—Mr. Harry Matthew, (a) "Tally Ho" (Leoni); (b) "Leanin'" (Bennett).
- 9.50: Solo and chorus—Zonophone Light Opera Company, "Vocal Gems from 'The Mikado'" (Sullivan) (Zonophone Record A323 Part 2).
- 9.54: Musical comedy—Orchestra, "Gloriana" (Friml).
- 10.4: His Master's Voice Dance programme:  
Light Orchestral—Piccadilly Orchestra, "My Beloved Gondolier" (Tibor) (H.M.V. Record B2575).  
Light Orchestral—De Groot and the Piccadilly Orchestra, "If Only I Had You" (Davies) (H.M.V. Record B2713).  
Duet—Maurice and Sydney, "I'm Going Back to Old Nebraska" (Sissle) (Zonophone Record EE117).
- 10.14: Chorus with orchestra—Ever-ready Hour Group, "Down South" (Myddleton) (Zonophone Record EF8).  
Tenor with two pianos—Franklyn Baur, "I'm Away From the World When I'm Away From You" (Clare) (Zonophone Record EE107).  
Wurlitzer organ—Chas. W. Saxby, "Can't You Hear Me Say I Love You?" (Derickson Brown) (Zonophone Record 5094).
- 10.24: Mixed voices with piano—The Revellers, "Gems from 'Tip Toes'" (Gershwin) (H.M.V. Record C1293).

- Foxtrot—Arcadian's Dance Orchestra, "Chilly-Pom-Pom-Pee" (Bryan) (Zonophone Record 5169).
- Foxtrot with vocal refrain—Edwin J. McEnelly's Orchestra, "What Are We Waiting For Now?" (Kortlander) (H.M.V. Record EA322).
- 10.33: Concerted with Orchestra—Light Opera Company, "Gems From Sunny" (Kern) (H.M.V. Record C1293).
- Duet with violin, clarinet and piano—Johnny Marvin and Ed. Smalle, "Mary Ann" (Davis-Silver) (H.M.V. Record EA339).
- Baritone with piano—Jack Smith, "The Best Things in Life are Free" (De Sylva, Brown and Henderson) (H.M.V. Record EA332).
- 10.43: Bass with Orchestra—Paul Robeson, "Down De Lovers' Lane," (Cook) (H.M.V. Record B2777).
- 10.46: Summary sporting results.  
Violin with piano—Kreisler, "Indian Love Call" (from "Rose Marie") (Friml) (H.M.V. Record DA785).  
Wurlitzer organ solo—Jess Crawford, "My Blue Heaven" (Donaldson) (H.M.V. Record EA284).  
Hawaiian Orchestra—Hilo Hawaiian Orchestra, "Aloma" (Bowers) (H.M.V. Record EA310).
- 10.56: Chorus and Orchestra—Victor Arden, Phil Ohman, chorus and orchestra, "Selections from 'Good News'" (De Sylva, Brown and Henderson) (H.M.V. Record EB28).
- Foxtrot with refrain—Nat Shilkret's Orchestra, "Where's My Meyer" (Wolfe Gilbert Profes) (H.M.V. Record EA267).
- 11.0: Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SATURDAY, MARCH 30.

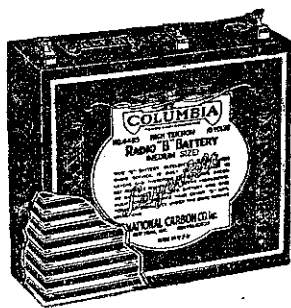
- 11.30 a.m.: Results of Metropolitan Trotting Club's Autumn Meeting at Addington, interspersed with gramophone items.
- 5.30: Close down.
- 6.0: Children's session conducted by Chuckle and Aunt Pat.
- 7.15: News session.
- 7.30: Sports results.
- 8.0: Chimes.
- 8.1: Rebroadcast of 2YA, Wellington.  
(During the evening a description will be given by relay of the N.Z. Inter-University Boxing Tourney) from the Municipal Concert Hall)
- 10.4: Dance programme.
- 11.0: Close down.

### 4YA, DUNEDIN (463 METRES)—SATURDAY, MARCH 30.

- 7.15 p.m.: News session.
- 8.0: Town Hall Chimes.
- 8.1: Relay of Orchestral music from Octagon Theatre, under the conductorship of Monsieur Henri de Rose (Mus. Bac.).
- 8.11: Bass solo—Mr. J. Ferguson, "The Highwayman" (Cowen).
- 8.15: Piano solo—Mrs. Ernest Drake, selected.
- 8.21: Duologue—Miss Sheila Neilson and Mr. J. B. McConnell.
- 8.31: Soprano solo—Miss Muriel Eager, "Scenes That Are Brightest" (Marianita) (Wallace).
- 8.36: Waltz—Jack Hylton's Orchestra, "The Angelus Was Ringing" (Damarrell) (H.M.V. Record B5481).
- 8.39: Tenor solo—Mr. G. Crawford, (a) "My Task" (Ashford); (b) "Alleluia" (O'Connor Morris).
- 8.46: (Approx.) Relay of Orchestral music from Octagon Theatre.
- 8.56: Contralto solos—Miss Dorothy Skinner, (a) "All Through The Night" (Old Welsh), (b) "The Arrow and the Song" (Balfe).
- 9.2: Weather report.
- 9.4: Intermezzo—Ketelbey's Concert Orchestra, "Bells Across the Meadows" (Ketelbey) (Columbia Record 02695).  
Tenor solo—Turner Layton, "Were You There?" (Negro Spiritual) (Trdtl.) (Columbia Record 01248).
- 9.11: Bass solos—Mr. J. Ferguson, (a) "Let Me Lie on the Deep" (Dewey); (b) "Though Faithless Men" (Halevy).
- 9.18: Instrumental Trio—Kreisler, Kreisler and Raucheisen, (a) "Syncopation" (Kreisler); (b) "Marche Miniature Viennoise" (Kreisler), (H.M.V. Record DA961).
- 9.25: Soprano solos—Miss Muriel Eager (a) "Wake Up" (Phillips); (b) "I Wonder If Ever the Rose" (Slaters).
- 9.31: Duologue—Miss Sheila Neilson and Mr. J. B. McConnell.
- 9.41: Tenor solo—Mr. G. Crawford, "Vale" (Kennedy Russell).
- 9.45: Waltz—International Concert Orchestra, "Gold and Silver" (Lehar) (Zonophone Record EF22).
- 9.49: Male Chorus—Victor Male Chorus, "Pilgrims' Chorus" (from "Tannhauser"), (Wagner) (H.M.V. Record EA89).
- 9.52: Contralto Solo—Miss Dorothy Skinner, "Three Fishers" (Hullah).
- 9.56: Orchestral—Royal Opera Orchestra, (a) "Hungarian Dance No. 5 in F Sharp Minor" (Brahms); (b) "The Sleeping Beauty" (Tschalkowsky) (H.M.V. Record C1415).
- 10.4: Close down.

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## Sunday, March 31

### 1YA, AUCKLAND (333 METRES)—SUNDAY, MARCH 31.

- 8 p.m.: Afternoon session—Selected studio items.
- 4.0: Literary selection by the Announcer.
- 4.8: Further studio items.
- 4.30: Close down.

- 6.0: Children's session, conducted by Uncle Leo.  
 6.45: Relay of service from Lewis Bady's Hall—Rev. Jasper Calder, Mission. Preacher: Rev. Jasper Calder.  
 8.30: Orchestra—Philadelphia Symphony Orchestra—"Toccata and Fugue in D Minor" (Bach), (H.M.V. D1428).  
 8.38: Tenor—Mr. Sam Duncan, "Then You'll Remember Me" (Balfet).  
 8.42: Violin—Jascha Heifetz, "Ave Maria" (H.M.V. DB283), (Schubert-Wilhelm).  
 8.46: Soprano—Miss Cecilia Duncan, (a) "Songs My Mother Taught Me" (Dvorak); (b) "Ave Maria" (Gounod).  
 8.54: Choral—Sheffield Choir, "Worthy is the Lamb" ("Messiah"), (Columbia 9068), (Handel).  
 9.2: Bass—Mr. Arthur Colledge, "Thus Saith the Lord" (Spohr).  
 9.6: Organ—Marcel Dupre, "Sleepers Awake" ("Chorale"), (H.M.V. E471), (Bach).  
 9.10: Tenor—Mr. S. Duncan, "Angels Guard Thee" (Godard).  
 9.14: Soprano—Miss C. Duncan, selected.  
 9.18: Orchestra—Philadelphia Symphony Orchestra, "Prelude in E Flat Minor" (H.M.V. D1464), (Bach).  
 9.22: Bass—Mr. A. Colledge, (a) "As Then the Tulip" (Lehmann); (b) Selected.  
 9.30: Choral—Sheffield Choir, "Hallelujah Chorus" ("Messiah"), (Columbia 9068), (Handel).  
 9.34: God Save the King.

### 2YA, WELLINGTON (420 METRES)—SUNDAY, MARCH 31.

- 3.0 p.m.: Afternoon session—Selected studio items.  
 4.30: Close down.  
 6.0: Children's service conducted by Uncle George.  
 7.0: Relay of service from St. Thomas' Anglican Church, Newtown. Preacher: Rev. C. V. Rooke. Organist and choir-master: Mr. W. A. Gatheridge.  
 8.15 (approx.): Studio Concert.  
 Orchestral—London Symphony Orchestra, "The Jupiter Symphony" (1st Movement) (Mozart) (H.M.V. Record D1359).  
 8.23: Soprano solo—Miss Gretta Stark, "I Know That My Redeemer Liveth" ("The Messiah") (Handel).  
 8.27: Organ solo—Marcel Dupre, "Sleepers Awake" (Chorale) (Bach), (H.M.V. DB1428).  
 8.31: Tenor and choir—John McCormack, "The Palms" (Faure) (H.M.V. Record DB984).  
 8.35: Soprano and chorus—Emmy Bettendorf, "Easter Hymn" ("Cavalleria Rusticana") (Mascagni) (Parlophone Record AR1005).  
 8.43: Orchestral—London Symphony Orchestra, "The Jupiter Symphony" (2nd Movement) (Mozart) (H.M.V. D1360).  
 8.51: Contralto solo—Mrs. Ray Kemp, "Give Thanks and Sing" (Harris).  
 8.55: Tenor and quartet—Mr. Will Hancock and Etude Quartet, "Father Into Thy Keeping" ("Seven Last Words" (Dubois).  
 8.59: Organ solos—Herbert Dawson (a) "Christ The Lord Is Risen To-day" (Elvey); (b) "Jesus Lives! No Longer Now" (Gauntlett); (c) "Jesus Christ Is Risen" (Davidica).  
 9.3: Baritone solo—Mr. Ray Kemp, "God My Father" ("Seven Last Words") (Dubois).  
 9.7: Soprano solo—Miss Gretta Stark, "Rejoice Greatly" ("The Messiah") (Handel).  
 9.11: Tenor and choir—John McCormack, "Adeste Fideles" (H.M.V. Record DB948).  
 9.15: Violin solo—Jascha Heifetz, "Ave Maria" (Schubert-Wilhelm) (H.M.V. Record DB283).  
 9.19: Vocal quartet—Etude Quartet, "Thee We Adore, O Saviour" ("Seven Last Words") (Dubois).  
 9.23: Choral—York Minster Choir, "God Is Gone Up" (Gibbons) (H.M.V. Record C1337).  
 9.27: Orchestral—London Symphony Orchestra, "Jupiter Symphony" (4th Movement) (Mozart) (H.M.V. Record D1361).  
 9.35: Choral—Royal Choral Society, "Hallelujah Chorus" ("The Messiah") (Handel) (H.M.V. Record D1108).  
 9.39: Close down.

### 3YA, CHRISTCHURCH (306 METRES)—SUNDAY, MARCH 31.

- 3.0 p.m.: Afternoon session—selected gramophone items.  
 4.30: Close down.  
 5.30: Children's song service.  
 6.15: Hymn chimes.  
 Gramophone recital prelude to church service.  
 7.0: Relay of Easter service from Christchurch Anglican Cathedral. Preacher: Bishop of Christchurch. Organist and choir-master: Dr. J. C. Bradshaw.  
 8.15 (approx.): Studio concert.  
 Choral—York Minster Choir, "God is Gone Up" (Gibbons) (H.M.V. record C1337).  
 Organ solo—Marcel Dupre, "Sleepers Awake" (Chorale) (Bach) (H.M.V. record E471).  
 8.23: Mezzo-soprano solo—Miss Merle Miller, "Hymn to the Almighty" (Schubert).  
 8.27: Orchestral—Philadelphia Symphony Orchestra, "Toccata and Fugue in D Minor" (Bach) (H.M.V. record D1428).  
 8.35: Tenor solo—Mr. Harold Prescott, "The Wondrous Cross" (Podmore).  
 8.39: Soprano and chorus—Emmy Bettendorf, "Easter Hymn" ("Cavalleria Rusticana") (Mascagni) (Parlophone Record AR1005).

- Organ solos—Herbert Dawson, (a) "Christ the Lord is Risen To-day" (Elvey); (b) "Jesus Lives! No Longer Now" (Gauntlett); (c) "Jesus Christ is Risen" (Davidica) (H.M.V. record B2274).  
 8.51: Mezzo-soprano solo—Miss Merle Miller, "Tear Not Ye, O Israel" (Dudley Buck).  
 8.55: Violin solo—Jascha Heifetz, "Ave Maria" (Schubert—Wilhelm) (H.M.V. record DB283).  
 Tenor and choir—John McCormack, "Adeste Fideles" (H.M.V. Record DB948).  
 Orchestral—Philadelphia Symphony Orchestra, "Prelude in E Flat Minor" (Bach) (H.M.V. record D1464).  
 9.7: Soprano solo—Miss Hilda Hutt, "I Know that My Redeemer Liveth" ("Messiah"—Handel).  
 9.11: Choir—Don Cossacks Choir, "Holj Slavenj" (How Greatly our Lord is Magnified) (Bortnjarsky) (Columbia record 02712).  
 9.15: Tenor recitative and aria—Mr. Harold Prescott, (a) "Ye People, Rend Your Hearts," (b) "If With All Your Hearts Ye Truly Seek Him" ("Eljiah"—Mendelssohn).  
 9.22: Soprano solo—Miss Hilda Hutt, "Oh, Divine Redeemer" (Gounod).  
 9.26: Choral—Royal Choral Society, "Hallelujah Chorus" ("Messiah"—Handel) (H.M.V. record D1108).  
 9.30: Close down.

### 4YA, DUNEDIN (463 METRES)—SUNDAY, MARCH 31.

- 5.30 p.m.: Children's session conducted by Big Brother Bill.  
 6.30: Relay of Easter service from St. Paul's Cathedral. Preacher: Canon Nevill. Organist: Mr. E. Heywood, F.R.C.O.  
 8.5 (approx.): Relay from St. Kilda Band Rotunda of concert by the St. Kilda Band, under the conductorship of Mr. James Dixon.  
 9.15: Close down.

## Notes and Comments

By "Switch"

ONE speaker at the Wellington Radio Society's recent meeting, who resides in Newtown, stated that the electrical leakages were so severe in his vicinity as to mutilate reception of 2YA, Wellington. This has been the cause of much annoyance and should have been reported to the district telegraph engineer. Somehow, listeners are reluctant to lodge complaints with the Department. An official of the society has been deputed to wait on the district radio inspector to place the complaints before him.

THE Sunday night programmes by the New Zealand stations, while discreetly and appropriately compiled, cannot be classed as dismal. On a recent Sunday night a listener rang the studios of the New South Wales Broadcasting Company, Limited, and asked the question: "Must Sunday programmes be dismal?" He stated that he had turned on his set to both 2FC and 2BL at various periods throughout the day, and when church services were not being broadcast, dismal music seemed to hold sway. This critic suggested that portion of the day's programme at least should be devoted to bright and entertaining music.

"TERPSI" (Wellington) has dropped "Switch" a line expressing appreciation of the extra dance nights put on by the New Zealand stations. She (for a lady is the writer) says: "These extra dance nights meet a long-needed want, and the character of the dance records evidences a sensible regard to tunefulness in contrast with the noisy, unmelodious stuff we often hear from the Australian stations."

A Wellington listener while holding 4YA, Dunedin, on Wednesday night of last week states that the weather in Wellington that day had been described from 4YA as "rainy," whereas the capital city had enjoyed one of those rarely fine "continuous sunshine" days. This sort of thing is calculated to provoke a civil war.

A FRIEND told the writer recently that he had received a letter from a country correspondent who asked, as he was about to take up listening, whether he should invest in a short-wave or an ordinary broadcast receiver first. An ordinary broadcast receiver, was unhesitatingly recommended. Even the most enthusiastic short-wave listener is convinced that as a means of entertainment for listening in at nights, the short-wave set is likely to prove disappointing. There is relatively little to listen to in the form of entertainment on short waves, in the evenings, whereas a good multi-valve broadcast receiver can rake in a number of programmes every night.

UNDER the rearrangement of short-wave lengths as the result of the recent International Broadcasting Convention held in Washington, the low wave-lengths used by Station 2FC on their short-wave transmissions, viz., 28'5 and 31'5 have now been cancelled, and the new wavelength that has been allotted to the New South Wales Broadcasting Company, Limited for use from its 2FC station is 31.28. Short-wave enthusiasts should make a note of this alteration.

THE number of paid words handled by the Beam Service in both directions between England and Australia averages between 180,000 and 200,000 a week. About 17,000 paid words have been transmitted from Australia by the Beam Service and about 10,000 over the Post Office Imperial cables in connection with the First Test match.

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45-volt Oversize, 13lb. ....	25/-

ROYDS-HOWARD CO., Christchurch

**Dunedin needs more Power.**

I WISH to express my views on 4YA Dunedin. I am at present listening to the above-mentioned station. The set in use is a powerful one, and is quite successful in DX work; it is, however, almost useless to continue listening to 4YA, as it is in an almost continual fade. Now, the R.B.C. has three good stations, 1YA, 2YA, 3YA, and I really do think it is about time for an improvement in our southern station. I am trying to get, or rather to hear, the reception given to the St. Kilda Band on their return home. I guess I will have to resort to 'phones. —STRAINING TO HEAR (Christchurch).

**Church Broadcasts.**

I AM glad to see that apparently steps are to be taken to arrange for a more equitable and systematic relay of church services. If this is done we will not, I hope, have a repetition of what happened a few weeks ago, when no less than three stations broadcasted services from the Church of Christ, which is one of the smallest religious bodies in the Dominion. The writer of the 1YA Church Committee report, in your issue of March 8, tells us that they are "trying to arrange for services to be synchronised." But this is just what we do not want, and evidently the committee has not "synchronisation" in mind, but the avoiding of duplication, which is quite another thing. Why is 4YA to be left out of any scheme for the better arrangement

# Our Mail Bag

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

of church service broadcasts? It evidently is off the air so far as the Auckland committee is concerned.—"VALVES."

**Country Dealer's Protest.**

BEING a subscriber to "Radio Record" and "Licensed Radio Dealer" up to March, 1929, I think as by notice just received from district radio inspector putting the dealer's license up from £2 to £7 10s., it is a very unwise and very unfair move. As there isn't enough in it to stand this exorbitant amount for dealers' licenses, I think there will be quite a lot cut radio out altogether, and instead of having advocates for radio it will get the biggest smack it ever had. Trusting you will see and agree we are quite right and get licensed fee reduced.—J. D. JACKSON (Ngaruawahia).

[Our view is that those dealers who are prepared to stay in the business will rather welcome the higher rate as tending to reduce unreasonable competition and so make it possible for them to do a bigger turnover and more profitable business.—Ed.]

**Published Programmes.**

IN writing on a technical question, "Tiki" (Martinborough), adds, "I do wish, however, that the Radio Broadcasting Company would keep to the programmes published in the 'Record,' especially in regard to gramophone records, as it is rather a nuisance tuning in to a station for the express purpose of hearing a certain record, only to have it changed, without a word of explanation, by the powers that be."

SOME of the points raised by "H.F.B." in his letter in your issue of March 14, deserve sympathy. It is undoubtedly annoying to find that a gramophone record that one has purposely tuned in to listen to, has been deleted, and another substituted. This happens fairly often, and it is hard to find a reasonable excuse for this course of action. The announcing in the afternoon session of the name of the piece broadcasted after, instead of before, its performance from 2YA, is not a success. 1YA's method is preferable. I think, too, that if 2YA would keep the better class music and jazz quite separate, it would suit the convenience of most listeners, as people who dislike jazz (and there must be quite a number of them), would not then be obliged to keep their sets tuned in for fear of missing something they wished to hear.—R. S. W. Hunt (Eltham).

[This question of gramophone records and substitution of others is dealt with by the general manager in the page "The Listener and Service."—Ed.]

**Titles Before or After?**

WOULD you kindly advise me why it is that, in the afternoon sessions, the name and description of the piece played is now given after the piece has been played, instead of before. I have been a close reader of the "Radio Record" for the past few months, and I have never noticed any warning given of the change, or any explanation of it. It is certainly most exasperating and trying to the temper, to have to put up with it. No doubt the great majority of your listeners feel this matter very keenly, as I do, and would welcome an explanation, as to why it has been adopted, and whether it is going to be kept up for long.—"Musical" (Wellington).

[The correspondent is referred to the report of the meeting of the Wellington Amateur Radio Society, who discussed this point.—Ed.]

**Leakages in Kilbirnie.**

SET owners (including the writer) in this locality are being subjected at present to very severe power leakage interference, rendering sets almost useless. This has been going on now for some time in spite of notifications to the radio inspector, G.P.O., and being an enthusiast I feel that lost licenses will result if something is not done to overcome the trouble. You will earn the gratitude of many multi-valve set owners in this locality if you can manage to bring this

matter under the notice of the proper authorities.—A.C., Kilbirnie.

[We have communicated with the authorities urging attention.—Ed.]

**More News Wanted.**

MAY I ask, through your columns, why the session, 7.15 p.m. to 8.45 p.m., from 1YA, Auckland, is called the "news and information" session? I think it is anything but a "news and information" session. Last night it commenced with a talk on motoring by a gentleman who, two years ago, might have interested some; followed by market reports, and ending with a book review. I do not believe many listeners would be interested in the first and last items. During this session I imagine that the town listener has had his tea or dinner, or whatever it is he has at the end of the day, and has settled himself comfortably with the evening paper to wait for 8 p.m. and the concert. What of those who can have no evening paper? I bought a set because I thought it would keep us abreast of the times, and bring us all the news we wanted. We get our mail once a month, and news is eagerly sought after. The wireless hasn't done much as regards giving us information. I refer only to 1YA, our nearest station, and the only one we can get at times. I wonder how many listeners there are who agree that the so-called "news and information" session is nothing of the sort, and that it is a most unsatisfactory session for those who would appreciate a real "news and information" session. That is those who live in lonely places. The time for renewing licenses draws near. Will there be a further drop in the number of listeners? and is the above complaint one of the reasons for a decrease in numbers? I wonder.—ALFRED C. HODGE (Moko Hinou Lighthouse).

**Wireless Telephony****A "Revolutionary" Invention**

IT is stated that another "revolution" in wireless telephony achievement has been demonstrated at the Bridge-water beam station. Speech was transmitted 3000 miles by a multiplex system on the same wave simultaneously with two wireless telegrams which were being relayed at London at the rate of hundreds of words per minute. The invention incorporates a new principle which enables it to be applied to existing beam stations without radical alteration.

Spoken messages are regulated, fading is checked, and uniformity of tone is maintained. Immediately one speaker pauses, an automatic regulator permits the answer to come, but simultaneous speaking jams the communication. The invention secures almost complete secrecy, and listening-in is impossible without a special installation.

If as successful as it is claimed, the system should have a widespread effect on present systems of communication, both from the points of view of rapidity and secrecy. It is an invention that has long been deemed necessary to fully commercialise wireless telephony, for, in the past, speed and accuracy have been the attributes of wireless, but secrecy was impossible.

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**Auditions in Australia****Eclipse of the Sun****Effect on Radio**

A FEW years ago "auditions" implied, to most of those who had personal experience of them, uncomfortable quarters of an hour in cold, empty rooms, where bored men thumped worn-out pianos, whilst hard-eyed managers looked scornfully on. Now an increasing number of people have quite a different experience. The actual procedure to be followed by those who want to have their talents tried out does not vary much, whether it is a musical, dramatic, or variety audition, or a speaking voice test. The applicant turns up at the appointed time, duly armed, as the case may be, with his or her roll of music, trombone or scrip, and is ushered into a studio where a red light over the door signifies to the initiate that the microphone is "alive," though a closed circuit only is being used. This means that sounds from the studio pass through the microphone and so to the control room, but instead of being broadcast they are merely passed back on the wires to a pair of headphones in the control room itself.

On these headphones a tactful member of the staff listens to the test, for the microphone has its own exigencies, and a voice or an instrument that might be beautiful in a hall only too often fails to pass the microphone test. A second hearing is sometimes allowed for nervousness can play havoc with ability, and even hardened performers are often unable to face the microphone without a quail. Talkers particularly can be enormously helped by a few words of expert advice on inflection and the pitch of the voice, and a special list of hints is sent to all of them who pass the test.

SOME, of course, in particular those with a taste for novelty, thoroughly enjoy the whole affair, in fact, in early days there was reason to believe that many people without the faintest hope of ever bursting into the broadcast programmes, came for auditions for the fun of the thing and nothing more. But the "auditor" who had spent weary hours listening to their efforts would at least reap his reward now and again when someone possessing real talent, even to himself or herself unknown, came into his net, or when he got a letter such as that of the gentleman who said: "I must also thank you for the kind way you received me, you must make many friends there."

When the licenses expire in July next, there will be stored in the archives of the company, reports dealing with 20,000 individual tests.

DURING the recent total eclipse of the sun arrangements were made by the Radio Research Board in Great Britain for a number of wireless observations to be made in order that "the effect of the eclipse on wireless could be studied. The experiments were made on long waves (12,000 to 14,000 metres), and on medium waves (300 to 500 metres).

The long wave observations were planned to include respectively signals which crossed the band of totality, those that travelled as nearly as possible along it, and those that were wholly outside of it. Apparatus was used for analysing long-wave propagation to show the relative effects of attenuation, the relation between the phases of the ground and down-coming waves, and any abnormal polarisation of the down-coming wave. The effect of the observations was to show the influence of the eclipse as that of a minor sunset, producing only the preliminary phenomena of a normal sunset, and suggesting that totality did not last long enough to enable the complete effects to occur. The effects were not confined to the totality band, but were noted in the transmission which was outside of it. This is in harmony with an observation made previously in respect to sunset transmission.

WITH regard to the medium waves, the observations showed a great increase in the intensity of the down-coming waves, which was interpreted as being due in part to the increased height of the atmospheric stratum from which the waves were reflected, and in part to the rapid deionisation of the lower layers of the atmosphere on the removal of the ionising agents due to solar rays. The period during which these efforts lasted varied from twenty to fifty minutes at different stations, while it took nearly two hours for the moon's shadow to pass across the sun, suggesting that wireless methods may not be able to detect these effects before quite an appreciable fraction of the sun's radiation had been cut off. For some reasons all the stations showed that on the morning after the eclipse night-time conditions seem to persist for a long time after sunrise.

Direction-finding observations seemed to show that during the eclipse the normal night properties of the reflecting atmospheric layer were temporarily restored, as was suggested independently by the observations on transmissions.—"Sydney Morning Herald."

**THE D.X. CLUB****Views and News.****Stations for Identification.**

CAN you advise me of the whereabouts of a station I have received on several occasions (Friday last at 9.50 p.m.)? Its wavelength is between 2YA and 2FC, approximately 428.8 metres. I have never heard the station "calling," but it appears to carry on two-way communication in a foreign language, and as it is at good loudspeaker strength it is apparently somewhere "near-at-hand."—"RHEOSTAT" (Auckland).

COULD any listener tell me which American station operates on approximately 231 metres, and a call that sounded like KG1 and another letter I could not catch at all, Idaho. Music quite fair strength. At times playing old favourites. Also heard to-night at medium strength K.S.L. Salt Lake City, Utah. KVOO was coming in strongly about a fortnight ago for several consecutive evenings.—L. A. KELLICK (Mangamahu).

**The C. A. Larsen.**

ON Saturday, 9th instant, at 5 p.m., when 2YA closed down, another station came in at great strength on the same readings as Wellington. The talk was all in a foreign tongue, but on three occasions we distinctly heard the call, Hulloo, Hulloo, C. A. Larsen! I would greatly appreciate any information you could give me on the matter.—C. C. KING (Geraldine.)

[This would be the C. A. Larsen, a Norwegian mother whaling ship, which would be at the time a few days off the New Zealand coast, bound for the Panama Canal.]

**Station WEXX.**

CAN anyone tell me where WEXX, America, is situated. I am practically certain the above is the correct call sign, as I heard it twice on the 8th instant from 3 to 4 p.m. on a wavelength of 25.4 metres. They closed down at 4 p.m., and were about equal strength to W2XAF.—J.O.H.T. (Hakataramea).

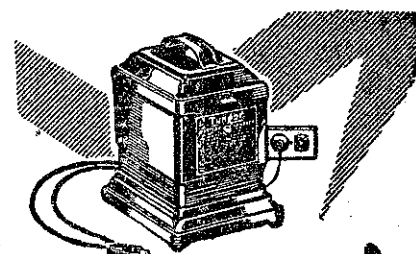
**American Stations.**

I THINK the station KCJJ, California, which "Kauspanka," Hastings, heard is KEJK, California. I heard this station several nights on 260 metres. Has any listener heard a station on about 545 metres? I have heard one there several times, but fail to get his call. From March 1 to 11 I have heard the following stations:—WJAG, 283 metres; KPJA, 526 metres; WDAE, 484 metres; KYW, 294 metres; KPQ, 248 metres; WMBD, 208 metres; WIOD, 242 metres; WOAI, 252 metres; KGER, 219 metres; KHQ, 508 metres; WCCO, 370 metres; WOW, 508 metres; KLX, 341 metres; KGIQ, 227 metres; KWWG, 238 metres; WWAE, 250 metres; WCLO, 250 metres; WAPI, 263 metres. And also 116 other American stations heard since September 1, 1928.—"ANTENNA" (Le Ron's Bay).

**Verifications from America.**

I HAVE just received three verifications from America. The first was KFOX; this station also sent me a page from "Radio Doings," on which particulars of KEJK were printed. KEJK transmits on 256.3 metres, with a power of 500 watts. I also received a letter from KTM, which is the new call-sign of KNRC on 384.4 metres with 500 watts. KTM broadcasts daily from 8 p.m. to 1 a.m. P.S.T. It is situated in Ocean Park, Santa Monica, California.

The station WHER, which I reported, is WAPI. In the "Record" WAPI is said to be situated in Alaska, but (Continued on page 31.)



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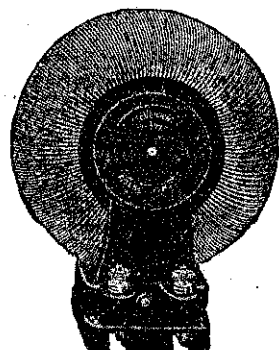
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# Notes and Comments

By  
"SWITCH"

**W**ELLINGTON'S outstanding radio authority, Mr. D. G. Wyles, is on a business visit to Australia. He has no peer in New Zealand for experience in broadcasting matters, both from the transmission as well as the receiving end. Mr. Wyles's lectures on radio have proved intensely interesting, but for some time past he has been so busy that he has not been able to lecture.

**T**HE Sydney "Wireless Weekly," in an article, "Which is Better—Fine or Fee?" says: "In a recent New Zealand paper there appears a statement of the activities of the postal people over there in their search for unpaid licenses. Apparently a very complete organisation exists for recording the receiving sets in use, and the licenses paid, and inspectors are constantly on the warpath."

**T**WO listeners have endorsed the writer's experience in hearing some station broadcasting almost on top of 4QG, Brisbane, on several nights recently. The mysterious broadcast is only intermittent, and at times the talk of a man can be heard. The language is foreign, but the intonation and phrasing seemed distinctly European, as against Japanese "Switch" has a suspicion that the stranger is a Norwegian whaler somewhere in the Antarctic. This would not be the first time one of these whalers has been heard broadcasting.

**C**OMMENTING on the origin and growth of the broadcasting from the Australian racecourses, the Sydney "Wireless Weekly" (of March 1) says New Zealand is the only country in the world where running descriptions of races are denied listeners. It is a regrettable fact that New Zealand "sportsmen" are different to others the world over.

**W**ELLINGTON listeners are enthusiastic about the recent Sunday-afternoon broadcast by 2YA of the presentation of new colours to the Wellington Regiment at the Basin Reserve. The extraordinary sensitivity of the microphones in use permitted the bands to be heard even when they were furthest from the microphones. Every military command came through word perfect, and each speech could have been taken down in shorthand verbatim. This was indeed a triumph for the 2YA staff, not forgetting the announcer, whose running description of the happenings was particularly vivid.

**A** TYPE of circuit which has many hundreds of votaries in Australia is the Reinarly, named after an American inventor, who brought it out some years ago. There are exceedingly few sets with the Reinarly circuit in operation in and around Wellington. It is, after all, a slight modification of the once popular three-coil regenerative circuit, which, through faulty construction and unskilful handling, causes so much interference by howling valves. The P. and T. Department looks with disfavour on this class of circuit, and the operator is always in danger of a prosecution through causing interference.

**W**HEN the Commonwealth Government takes over the broadcasting throughout Australia in July, the supply of the programmes is to be let by tender. A board of control will manage the broadcasting, but this system as adopted in England has given widespread dissatisfaction. The Melbourne "Listener-In" says: "It is assumed by many that the only organisations qualified to tender for the programmes would be J. C. Williamson's Theatres, Fullers' Theatres or Union Theatres, and the question is frequently asked, 'Why should a board or commission ask an outside organisation to provide its programmes with the ever-present possibility of conflict between the board and the party to whom the programme contract is let?' It certainly looks like calling tenders for trouble."

**T**HE failure of the Wellington city electric supply on a number of occasions recently has brought to light an official explanation that the trouble was due to dirty insulators causing a leakage. Now, this leakage is also a serious cause of interference with broadcast listening, and when leakage occurs across insulators supporting high-voltage lines there is bound to be a wide area of disturbance for listeners, as the noise caused by the leakage is apt to follow the reticulation system for miles. And the point of origin is most difficult to locate.

**T**HE quietness of static has occasioned Wellington listeners much satisfaction for some weeks past, and yet we are told summer is the worst period of the year for atmospheric. A peculiarity in reception has been noticeable, however, in the directional effect of the ether. On some nights IYA Auckland has been weak, and 3YA Christchurch has been exceptionally strong, and on another night the reverse effect has been observed, but frequently when 3YA and IYA have been weak the Australians have come through with great volume.

**T**HE exploits of Roald Amundsen are so well known to the world that it is unnecessary to state here who he was and what he did. It will be sufficient to recall that, with the exception of his friend Wisting, he was the only man who had been to both poles, and that he met his end when endeavouring to assist others in distress. In his honour the Norwegians arranged memorial festivals for December 14, when, amongst others, Captain Wisting, Amundsen's partner on both north and south polar expeditions, spoke. In these festivals radio took an important part and listeners had the opportunity of hearing three of Amundsen's intimate friends speaking from different cities—namely, Captain Wisting from Oslo, Professor Sverdrup from Bergen, and Lincoln Ellsworth from New York. Special Amundsen memorial programmes were also broadcast by Stockholm and Berne. The Arctic explorer Carsten Borchgrevink and Professor Axel Hamberg spoke on Amundsen from the Swedish station.

**T**HE dual transmission tests by 2YA, Wellington, produced some curious effects on receiving sets within half

a mile of the station. New and powerful harmonics came to light on various points of the dials where all was silent previously, and the tone of these harmonics was consistently good, excepting for an occasional break in the case of interference from a morse note on one harmonic.

**A** WELLINGTON listener the other day requested "Switch" to publish the postal address of the N.S.W. Broadcasting Co., proprietors of 2FC and 2BL, Sydney. To expedite delivery all correspondence should be addressed to the company, Box 3934v, G.P.O., Sydney, instead of the city location of the company's offices.

**L**JUBLJANA has instituted regular weekly lessons in several of the better known European languages: French, German, and Italian. German and Italian are, of course, the languages spoken in the neighbouring countries. It is interesting to note that a series of lessons in Serbo-Croatian figures also in the programmes. Serbo-Croatian is the language spoken in the greater part of Yugoslavia and, although, when written, it closely resembles Slovene, which is used in Ljubljana, when spoken it presents great divergences.

**M**ENTION was made at the meeting that a certain radio publication had stated that the society was at the back of a movement to ask for a Royal Commission to investigate the profit and loss account of the Broadcasting Co. What really happened was that a member stated that a Royal Commission was to be asked for, but no suggestion was made that the society was sponsoring the move. The meeting decided to refute the published statement with a special resolution which

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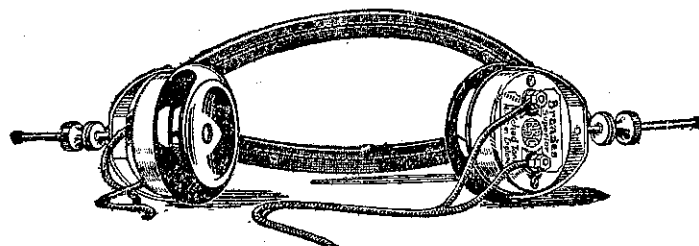
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to carry out your wishes; where there's NO will, there's NO way to carry out your personal desires as to the disposal of your Estate.

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## Radio in Persia

PERSIA is always looked upon as an out-of-the-way place where development has been retarded, principally owing to the distance from the sea and the difficulty of modern culture finding its way there. However, radio has at last gained a footing in this far distant land.

In 1924, when all the rest of the European nations were beginning to realise the use of wireless, the idea of wireless for Persia became a centre of thought for those interested, but the economic and geographical position withheld development of this science for many years, and it was through Russia that finally wireless became known in Persia. The Government approached the Leningrad Government for the installation of a number of wireless transmitting stations. Under the orders of an ingenious engineer, the first difficulties were encountered, and in 1925 the foundation for the first station was laid.

Innumerable difficulties faced this intrepid engineer, for the country was poor, and the means of transport were difficult. Imagine long lines of accessories, even those of the greatest dimensions, moving forward over the desert of this distant country on the backs of the only reliable carrier, the camel. Transport alone took up five or six months. Millions of tons of cement necessary for the construction were carried on the backs of the camel. Modern technique seems out of place in this land of the picturesque Marouf.

The official opening of the station took place on April 26, 1926, the day of the coronation of the Riza Khan. Within the space of six months, five new stations were erected.

One of the most serious difficulties was the training of operators, capable of assuring a regular service from the station. The Persian Minister of War, to whom the Persians are indebted for their stations, was obliged to bring in foreign technicians, but even now the Persian programmes seem poor in comparison with those of Europe. The excessive price of transportation renders good valves and good accessories almost impossible to the public, and what they do get has to come through Russia.

However, the Persians have realised the joys that even a little wireless, even if poor and elementary, can bring to those far distant from civilization.

## Unexpected Notice

THE New York "Radio News" states: Did you ever find the set quite dead, and wonder whether to start "fault-finding," as our British cousins say, or to wait an hour or so for the station to resume after, presumably, an SOS? If there were only one broadcast station in the State, the question would be even more pertinent. The Wellington, New Zealand, Radio Society recently took up the question of

WANTED, Factory Representative to represent leading line of British Wireless Loud Speakers. Only competent persons of well-known business and financial standing need apply. Applications in writing, with full references, to Box No. 254D, G.P.O., Sydney.

## 1YA Play Competition

### Awards by the Committee

THE sub-committee concerned supplies the following fuller details on the 1YA Play Competition:—

The entries for this competition closed on March 1, and we have to report that altogether 35 plays were submitted.

We have read the whole of the plays very carefully, and are pleased to say that many of them were of very good standard indeed, and many of the writers showed marked promise in their work, and they are advised to try again when the opportunity offers.

A number of the plays, though very good, were not suitable for broadcasting purposes, though we believe certain of them would play exceedingly well in a hall or theatre. We shall endeavour to indicate elsewhere which ones we refer to. In some instances the plays, though good, were too slight to be effective, except possibly as sketches; these could hardly be classed as plays at all.

Our placings are as follows:—

**FIRST PRIZE.**—Two plays are bracketed equal: "The Return," or "The Mystery of Devil's Rock" (by "Breeze"). (We advise that this play be called "Devil's Rock.") "The She-Male Bachelor" (Frank Hill). (We advise that this play be given another name.)

**SECOND PRIZE.**—Two plays are bracketed equal: "Interlude" ("Jehosophat"). "No Imagination" ("Crystal").

**THIRD PRIZE.**—"Ebullitions" ("Hemi Pango"). (We advise that this play be called, say, "Leave it to Trixie," and the surname "Ilump" be changed or omitted altogether.)

If the plays are broadcast we advise that certain slight alterations be made in the dialogue, etc., at the discretion of the producer, or by arrangement with the authors.

This refers especially to "No Imagination," "Ebullitions" and possibly "The She-Male Bachelor."

We may add that the actual name of the author of each play has not been disclosed to us, all the envelopes containing the names having been in the possession of the Broadcasting Company, in sealed envelopes.

We shall attach to this report a list of the other plays which we considered are worthy of commendation.

Yours faithfully,

F. F. McCALLUM (Sgd.),

J. F. MONTAGUE (Sgd.),

J. W. SHAW (Sgd.),

(MRS.) CARR-TIBBITTS (Sgd.).

### ONE-ACT PLAY COMPETITION.

The following are the plays we desire to commend highly:—

"Goodwill Towards Man" (name not available).

"5000" by "Suffenus."—R. W. Cumberworth, 39 Stanley Avenue, Palmerston North.

"The Fairway" by "Cyril."—C. R. Allen, Dunedin.

"The Simpler Sex" by "Sandy."—P. V. McNabb, Tasman Street, Collingwood.

The following are the plays we desire to commend:—

"Retribution" by "Navy."—Charles Hill, 47 Third Avenue, P.W.W. Camp, Purewa.

"He Laughs Best" by "Momus."—Miss E. M. Gilbert, 61 Smithfield Road, Wanganui.

"Era of Errors" by "Motor Maniac."—Mrs. W. J. Ward, Thornton Road, Cambridge.

"A Cure for Influenza" by "Vesta."—Margaret Sheehy, 53 Garden Road, Wellington.

"That Awful Tom" by "Berwyn."—Mrs. Beryl Windsor, 1 Gay Street, Ross.

"Stung" by "Honour Dare."—W. Nye, care Box 108, Te Aro.

"An Exciting Night" by "Edenite."—C. McCracken, No. 1 East Avenue, Mount Eden, Auckland.

"Don't Wake John" by "Quo Vadis."—Janet E. Johnson, Whangarei.

The authors of the winning plays are:—

"Breeze."—Miss Betty Kerr, Kingsdown, Timaru.

"The She-Male Bachelor."—Mr. Frank H. Goodey, Wanganui.

"Jehosophat."—Miss Una Currie, care "Sun" Office, Auckland.

"Crystal."—Mrs. Jean Boswell, Grey Lynn, Auckland.

"Hemi Pango."—J. P. Black, 56 Hector Street, Seatoun, Wellington.

asking their local 2YA to hoist a red light on an aerial mast whenever the transmitter unexpectedly shuts down; but one humorist suggested, instead, that a cannon be fired for the benefit of the listeners out of sight of the towers (2YA is a five-kilowatt). The "Radio News" missed the mark, however, in assuming there is only one broadcast station in New Zealand.

## The DX Club

### Further Jottings

#### Byrd Expedition.

COULD some listener kindly let me know what station was broadcasting a talk about the Byrd Expedition about 11.15 p.m. on Thursday, February 7, the wavelength being about 31 metres?—"SHORT-WAVE."

#### Another Station.

HAS any other reader heard station WSOA? This station I hear nearly every night. The frequency is given as 1480 kcs., or 203 metres, and it comes through as loud as CNRV. On February 19 I heard a station on this wavelength with the call WAP, but WSOA has always been on lately so that I cannot pick the former up now. WSOA usually closes down about 8.20, New Zealand time. I could not hear the location of the stations, but last night the announcer said, on closing down, "1480 kcs"—(then followed a long burst of static)—Washington, D.C. Good-night, everybody. This might be the station's location.

Other stations heard since I wrote last are: KFI, KMIC (268 metres), KPO, KVOO, KMTR, KPLA, KSL. I heard KMTR on March 1; they closed down at 8 p.m.; then KPLA came on till 9; it was coming through a bit louder than KPO.—KAUSPANKA (Hastings).

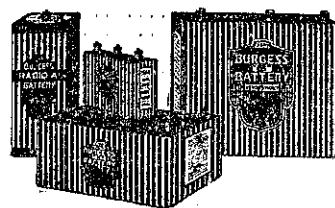
#### What Is It?

LAST evening (Thursday) at 8.45 p.m. I picked up a station one point on the dial above 2YA. Plenty of speech in a foreign language, which I took to be Norwegian. The only speech received in English was at 9.25 p.m., when the following was heard: "Roll her over, captain." After 2YA closed down at 10.10 p.m. I received a further four minutes of foreign speech and then lost the signals altogether. Strength equal to 2YA and very clear. No call sign. Would this be the C. A. Larsen?—HENRY JAKEMAN (Huntly).

#### KOIN, Portland.

MR. A. E. Ireland, Taradale, writes: I have not seen this station listed in the DX Club yet, KOIN, Portland, which I heard last night, Sunday, March 10, at about 7.50, New Zealand time. When I tuned in the announcer stated that they had concluded a relay from the Portland theatre; he then gave their programme for Sunday, after which they closed down. The wavelength is 319 metres and power 1000 watts; strength was fair loudspeaker on a four-valve set.

In H.P.G.'s notes, "Radio Record" for March 1, I notice he lists KGO as 234 metres. Is this correct? I couldn't find him last night, but heard 4ZL, Dunedin, relaying KGO on 240 metres. My list for February gives their wavelength as 380 metres.



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# The Application of the Screen-grid

## Essential Precautions the Constructor must Observe

By "PENTODE"

**I**T has come to the notice of the writer that several constructors have tried out a screen-grid valve in their sets without any further alteration of the wiring or coils beyond moving the grid or plate lead and applying the potential to the screen grid. This is all right when done out of pure curiosity to see what will happen, but to expect all the results that the screen-grid valve is capable of giving is bound to end in disappointment. There are many who have heard of all the wonderful results obtainable from the four electrode valve, but who possess commercially-made sets and do not care to interfere unless they know what they are doing. The object of this article is to give, if possible, that little help where the writer considers it to be most needed. No doubt it will also help to some extent those who are about to design and build a receiver incorporating this valve, and one or two circuits are given to be used with the screen-grid valve.

Without going too deeply into the theory, it is well known that the impedance in the anode circuit must balance that of the valve. Maximum amplification is only obtained in a radio frequency stage when these two impedances are equal. If a valve having a low impedance is inserted in a valve socket of a receiver in which the impedance in the plate or anode lead is high, then the full amplification of the valve is not obtainable. It would need a long article to explain just why this is so, but it can be taken for granted by the reader.

### The Evolution of the Valve.

**B**EFORE dealing with the screened grid valve, let us go over one or two points dealing with the progress of wireless. In America, when broadcasting first began, it was considered advisable to standardise as far as possible, all component parts.

First of all the valve was standardised and the 201A type produced. It was aimed to have one valve suitable for every part of the receiver. Now, to be suitable for audio frequency work the impedance had to be comparatively low. Using this valve in the radio frequency stages, designers had to use a coil of low impedance in its anode, and so the number of turns averaged between five and ten. Fortunately the number of turns for a broadcast coil is usually about 60, and so a voltage step up was possible in the radio frequency transformer, and partly compensated for the low amplification of the valve itself.

At the same time in England valve manufacturers were designing valves with amplification factors of 25 and 30. To do this the impedance of the valve was raised. A larger R.F. coil which possessed no step up effect was used in the anode of these valves, and all the amplification had to be produced by the valve. The tuned anode method of coupling was evolved.

Now compare these two methods. As far as actual amplification was concerned, both gave about the same, but of the two the American method gave far greater selectivity. All commercial

machines adopted transformer coupling in their R.F. stages and were designed for the 201A valve. The substitution of a higher impedance valve resulted in a serious loss of amplification. Fully 95 per cent. of the receivers in New Zealand are of American design, and it will be now clear why it is impossible to use a screened grid valve without fairly extensive alterations. These valves have an impedance of 150,000 ohms, and it is not likely that it will give anything like full efficiency when substituted for a valve of 6,000 ohms impedance. To get the best out of these valves the anode coil has to be tuned and wound so as to reduce all losses to a minimum.

Now look at it from another angle. In a circuit using the three electrode valve the inter-electrode capacities have been balanced and neutralised out. All undesirable capacities in wiring, etc., have been cancelled by the neutralising condenser, but the screened grid valve employs no such devices, nor does it need any, and efficient wiring and screening are needed to exclude all tendencies for the valve to oscillate.

### The Browning-Drake.

**I**N general practice a single stage of screened grid is comparatively easy to build and operate. The use of two stages, however, calls for great care in design, and anyone contemplating substituting two four-electrode valves for two ordinary triodes is strongly advised to either redesign the whole receiver or not to attempt the work. Sooner build a screen-

Glance at Fig. 2 and it will be seen to be the circuit diagram of the radio frequency and detector stages of the well-known Browning Drake. Neutralisation is effected by taking a tapping from one of the turns of the secondary of the regenerative transformer. The aerial connection being indicated as an arrow indicates that this can either be a tapping direct to the grid coil or a small primary adopted. Reaction on the detector valve is obtained by a small adjustable tickler coil. The primary coil inside the regenerative transformer is wound with the correct number of turns to suit the valve preceeding. It is this circuit that we desire to alter in the easiest way, so that a screened grid valve can be used in the R.F. stage.

### Changing Over.

**T**HE first essential is to note the performance of the present receiver and before thinking of changing over make quite certain that the following points are quite in order.

First and foremost, does any interaction take place between the aerial and regenerative coils? "Heaven knows!" will be the answer in most cases, but it can be soon ascertained by the following process.

If the set will not neutralise at all it is one of two causes. Either the neutralising condenser is of the wrong value of capacity or there is an interaction taking place between the two tuning coils. If the receiver is unstable, particularly on the lower wavelengths, it is usually due to an unsuitable neutralising capacity, either too much or too little. Turn the radio frequency valve down and adjust the neutralising condensers until weakest sig-

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Or Ormond .0005 Condensers, each .....	12 0	Or 2 Thordarson Transformers, each .....	25 0
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1 Fixed Condenser, .001, each 1/-, 2/- .....		1 Panel 21 x 7, Ebonite, 10/9; Formica .....	18 8
2 Fixed Condensers, .5 mfd., each .....	3 3	1 Jack S.C. F.C. .....	3 6
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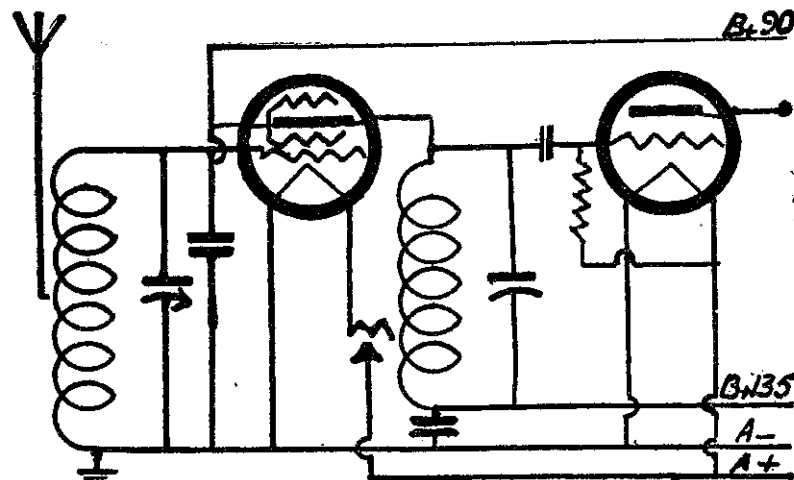


Diagram 1.—The Tuned Anode R.F. Stages.

ed grid "H.F. Booster" as described in this article, as it adds another stage without the addition of further tuning dials.

To owners of Browning-Drakes and other receivers using but a single stage of R.F. the following will make interesting and instructive reading matter, especially if they are thinking of trying out one of these new valves.

nal strength is noted. If, on turning on the valve, the receiver is unstable on the higher wavelengths, then the trouble can usually be traced to interaction between the two main tuning coils. If this is the case, it must be definitely corrected before going any further. Although, by careful arrangement, the coils can be placed so as to prevent interaction, the writer advises screen-



ing. It would be easiest to screen the aerial coil, but in this particular circuit it is preferable to screen the one on which reaction is used.

If this inter-coil coupling is allowed to exist, it will assuredly cause trouble later on, so it is best to make sure in the first place. Whether it is desired to change the valve or not, this practice of screening the regenerative transformer will be found to improve the working of an unstable Browning-Drake; so howlers, please note!

mer. The screening grid is given a positive potential and also needs a bypass condenser of at least .5 mfd. The grid leak on the detector valve, instead of bridging the grid condenser, runs directly to A+, otherwise the high voltage potential from the B battery would be impressed on the grid. Reaction has been omitted to make the diagram more simple. This circuit is the most efficient.

Fig. 3 is a diagram of a modification of the preceding circuit, and is the

vents the direct voltage from passing. Compare this circuit with that of Fig. 2 and points of similarity will be apparent. Instead of the primary winding, a R.F. choke is used and the coupling is obtained via the small condenser.

If a S.G. valve is used with the plate, connection being made on the cap on top, the change over is quite simple, the only additions to the set, besides the valve, being a R.F. choke, a bypass condenser and a mansbridge condenser of at least .5 m.f.d. capacity. These should be screwed down in convenient places so that all wiring will be kept short.

A word about the R.F. choke. If the best results are to be obtained this must be of good quality. Generally speaking, an English R.F. choke will be found to be suitable, as the only purpose, generally speaking, for which a choke is used in America is to obtain reaction by the throttle control method, in which case this component need not have such a high degree of efficiency.

Constructional details for making one's own chokes have been given in the "Record" from time to time (e.g.,

December 21). The control grid lead is connected to the same pin, as in ordinary triodes, and no alteration is here necessary. This is, of course, speaking of the valve on which the plate connection is on the top. Certain makes differ in this respect, and allowance will have to be made when wiring up. The plate connection of the valve socket corresponds to the screening grid, and this will have to be taken from the regenerative primary and connected to B+45 and the .5 m.f.d. condenser. With a length of flexible wire connect the top cap of the valve to one end of the R.F. choke and also to one side of the coupling condenser. The free end of this condenser joins to the grid end of the detector grid coil. The other end of the R.F. choke goes to B+135 and to one side of a 1 or 2 m.f.d. Mansbridge condenser, the other side of which is earthed. It is really quite simple to do the change over, but it is hopeless to try without sticking to an approved circuit. If, when completed, the receiver is unstable, one of the coils will have to be screened, preferably the one embodying reaction.

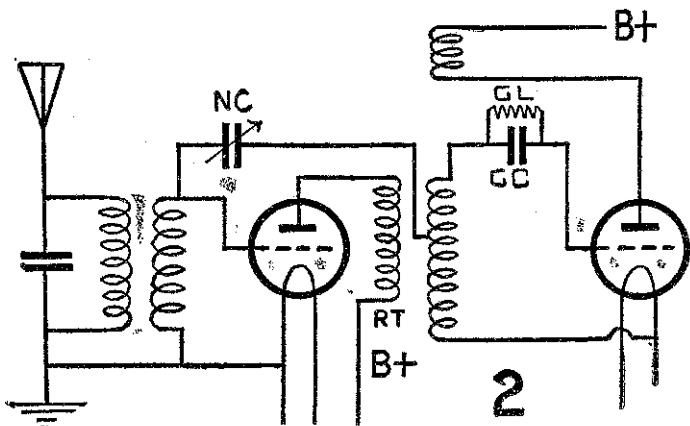


Diagram 2. A three-electrode RF stage (untuned).

If, after screening, reaction is difficult to regulate, either increase the B+ det. voltage slightly or add a few more turns to the tickler coil. Now let us turn our attention to Figs. 1 and 3. These are two circuits of a single stage of R.F. using the screened grid valve. It will be seen that Fig. 1 merely uses the tuned anode method of coupling instead of the R.F. transfor-

mer. one most readily adaptable for the average set. A radio frequency choke in the anode of the S.G. valve allows the direct current to flow, but offers a more or less complete barrier to the radio frequency oscillating. These pass through the small coupling condenser to the grid of the detector valve. No alterations to the grid leak are necessary, as the coupling condenser pre-

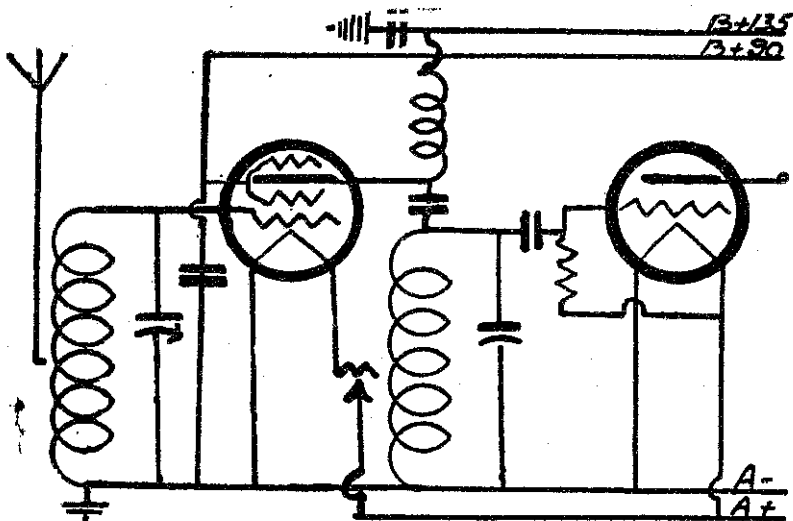


Diagram 3. A variation of tuned anode.

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| <b>BREMER-TULLY RADIO</b>                            | <b>Superadio, Ltd.,</b><br>147 Queen Street, Auckland.                          |
| <b>BURGESS RADIO BATTERIES,</b>                      | <b>All Radio Dealers.</b>   |
| <b>CROSLEY RADIO</b>                                 | <b>Abel, Smeeton, Ltd.,</b><br>27-29 Customs St. E., Auckland.                  |
| <b>CROSLEY SETS</b>                                  | <b>Lewis Eady, Ltd.,</b><br>Queen Street, Auckland.                             |
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### Tuned Anode Coupling.

YET another method of coupling is shown in Fig. 4. This is really better than the one using tuned anode, Fig. 1 and the diagram Fig. 3. The tuned anode suffers from one drawback. It often suffers from objectionable body capacity effects. The best cir-

cuit to try for anyone who would go to the trouble of preparing the coil. For broadcast band, 60 turns on each coil, one being tuned with a .0005 m.f.d. condenser would be found suitable.

Reference was made for a screened grid booster earlier in this article, and Fig. 5 gives the theoretical diagram for this. The whole unit can be made

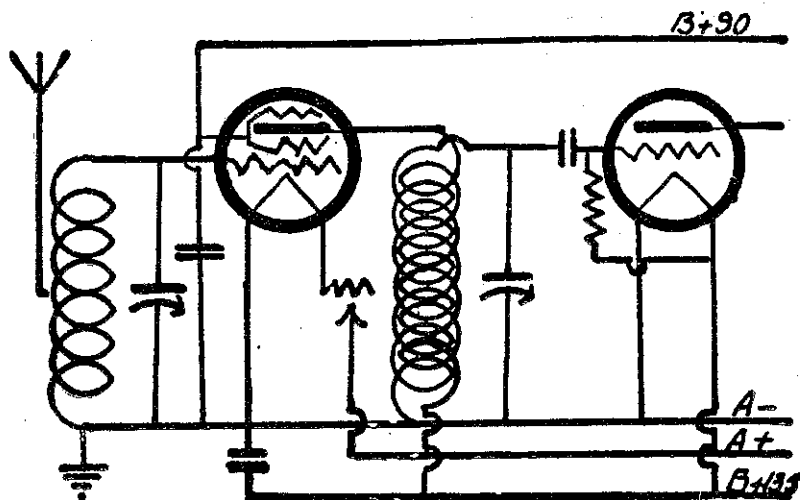


Diagram 4.—Transformer Coupled R.F. Stage.

cuit of all would be one using a 1—1 in a very compact form and stand ratio R.F. transformer with both the primary and secondary tuned. This would add too many tuning controls, but it has been found that if two coils are coupled very tightly together and one is tuned, the other also has the characteristics of the tuned coil. So

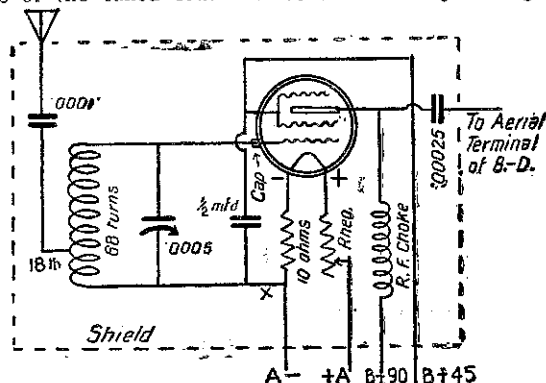


Diagram 5.—The Screen-Grid Booster.

if the primary and secondary were close wound, each having the same number of turns, the secondary being tuned, a very efficient coupling would be produced. In practice this can be accomplished by space winding one coil and winding the other coil in the spaces. Fig. 4 would be an excellent

short as possible, to either the grid tuning condenser. The wire, to lessen direct or to the fixed vanes on the first capacity effects, need be no larger than 24 or 26 insulated, and, if necessary, to shorten the length can be led through a hole drilled in the end of the cabinet.

## The Value of the Grid Leak

### Variation Advisable

IN tracking down distortion, the small inoffensive looking grid leak is often overlooked, but an incorrect value of this is quite frequently at the bottom of much trouble. Fundamentally, the problem of the grid leak is that a high resistance increases signal strength, but also increases distortion while the converse is true of the lower value grid leak. The value of this may vary from time to time according to the volume of the station that is to be tuned in.

Optimum results, therefore, can be obtained then only by varying very frequently the value of the grid leak. This would necessitate the keeping on hand of a very large number of these resistances which would mean an outlay greater than the average constructor would be prepared to meet.

By the introduction of a grid leak clarostat or a variable grid leak with a range of .1 to 10 megohms, adjustment of the value of the grid leak may be made for every condition. At the same time, the inclusion of a variable grid leak acts as a good volume control.

### On the Low Frequency Side.

A PART from the detector, the grid leak has an important function to serve in resistance and impedance coupling. By means of an adjustable resistance, the value can be calculated to a nicety and make possible the employment of larger coupling condensers. The substitution will allow of the desired bass notes to be faithfully reproduced. Resistance coupling responds to low frequencies very faithfully, with the result that there is sometimes set up a low frequency oscillation due to coupling between circuits. This is heard in the speaker like the sound of the exhaust of a motor boat. Consequently the term "motor boating" has been applied. The simplest way to offset motor boating when it occurs is to use a lower resistance of grid leak for one or more stages together with smaller blocking condensers. Often the lowering of the grid leak resistance in the first or second stage will serve the purpose. In this respect the variable grid leak will serve the simple cure.

## Water for Batteries

WATER from the city supply usually contains a certain amount of mineral salts and should not be used in storage batteries or chargers, as it will deteriorate the elements therein, thus shortening their life considerably. Only water free from impurities should be used, first of which is distilled water which may be purchased from almost any drug store. Rain water or melted snow makes a very good substitute for the distilled water, and may be gathered at no expense whatsoever. Rain water if kept in a metal container, will absorb some of the metal. This being the case, water to be used for storage batteries or chargers should always be kept and handled in nonmetallic containers.

## Battery Isolation

### Avoiding Leakage

THERE are many users of wireless sets who religiously isolate their A and B batteries by disconnecting the leads to the set, either at the receiver or battery end, each time the set is to be switched off. They prefer this to an ordinary push-pull switch on the front of the panel, stating that they have experienced trouble in the earlier days as the result of leakage inside the set.

It is not deemed advisable to discuss the pros and cons of the procedure here, but rather to show how this "isolation" idea can be put into operation in an efficient manner, and gives, in addition, the advantage that all connections—A, B, and C (if the last-named is used outside the set)—are broken at the same time with extreme rapidity.

Instead of mounting terminals on the strip of ebonite generally provided for that purpose at the back of the cabinet, fix into the hole positions small panel-mounting sockets, and make the receiver connections for the batteries to the soldering tags at the back of the sockets. The number of sockets required will depend, naturally, upon the number of battery points brought out. As far as the battery leads themselves are concerned, they must be taken to an ebonite strip half an inch wide and a quarter of an inch thick, and whose length is governed by the number of terminals it replaces. On this piece of ebonite must be mounted a number of plugs, the holes being drilled so that they coincide exactly with the socket positions. Connected to the nuts and screws at the back of these plugs we have the various battery leads, either arranged in the form of separate leads or as a multi-way battery cord, whichever fancy dictates.

The strip holding the leads and plugs can be withdrawn bodily from the sockets when the set is finished with, and the set is then completely isolated, and by using good quality ebonite for the strip there is no likelihood of any leakage taking place between the respective plugs. The idea works admirably in practice.

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## Short Wave Helping

(Continued from page 32.)

medium of information. Now, however, we have the personal touch of actually hearing talks and debates on vital European and world questions. And those talks which concern British internal and external affairs cannot help but give a closer feeling of interest in the modern problems of Great Britain. The individual outlook on life is thus broadened in an easy and pleasant manner.

Then again, to those music-lovers who have always wanted to hear the best music performed by the world's most noted musicians, the short-wave receiver offers the nearest approach to reality. For instance, on Tuesday afternoons from 3.30 to 5 p.m. one can hear the very highest musical talent from WGY, Schenectady, New York, relayed through W2XAF. Even the dance music enthusiast will get a thrill. The other morning I heard about six new fox-trots and waltzes that have not yet got out to New Zealand.

Hoping that all short-wavers will have the best of results this winter.

## A Report from Southland

DURING the week "W.G.L." (Wyndham), on his detector and two-stage audio short-wave receiver, has heard:—Friday, 8th: PCJ, who was broadcasting gramophone items, was received at a strength of R9, volume being as loud as a New Zealand station, but decreased after. In the evening RFM was the station heard (R7). On Saturday morning PCJ was received, transmitting good music, strength being R8.

Sunday, the 10th, 2XAF was broadcasting a special programme for the Byrd Expedition, and at 4 p.m., at strength of R7, increasing later to R9. Among the gramophone items was "Hero's Return." During the morning RFM on 33 metres was heard at R9. SLO sent out some good music on Monday morning, while in the evening RFM was heard at 33 metres, as well as 70 metres.

## The D.X. Club

(Continued from page 25.)

the letter stated that the station transmits on 263 metres with 5 kw. from Birmingham, Alabama, with studios at Auburn and Montgomery also. The following is an extract: "We broadcast late programmes, beginning Saturday night about midnight and lasting about three hours. This is the second letter we have received from New Zealand." Yours truly.—KAUSPANKA (Hastings).

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## Our Crystal Corner

By "Galena"

### The Application of Battery Potential

IT has been frequently remarked that a carborundum is improved by the addition of battery potential. In Vo. 2, No. 25, a method was given whereby this may be applied. It now remains to explain the action of this potential, and to give a few constructional hints as to how the potentiometer may be constructed.

#### Calculating Resistance.

THE carborundum crystal, like a valve, has a curve. For example, if 0 volts are applied, about 400 micro amperes will be passed, but with the application of 3 volts, 3000 will be passed, but at this point distortion would take place exactly in the same method as it would take too little grid bias were applied to the valve. The point, then, is to find out exactly how much between 1 and 3 volts is to be applied. This is the function of the potentiometer, for each crystal differs from another.

Potentiometers are usually fairly expensive, but the average constructor can make one for himself very easily. Resistance wire is necessary, and this can be obtained from several dealers in New Zealand. This resistance wire is like ordinary wire made up in several gauges, the range being usually from 36 to 41. According to the make of wire, resistance per yard, or as it is usually expressed, per thousand yards, varies. For example, nickel chrome wire of 41 gauge has a resistance of about 92,000 ohms per thousand yards, that is, 92 ohms per yard. Another type of wire at, say, 40 gauge, may have a resistance of 32,000 ohms per thousand yards, that is, 32 ohms per yard.

The usual resistance for a potentiometer for the type required with a carborundum, is about 400 ohms. Tables are usually given showing the size of wire and resistance per thousand yards at different temperatures. Divide the total number of ohms by 1000, and this will give the resistance per yard. If this figure is divided into 400 (or whatever the resistance required may be) the number of yards of resistance wire will be arrived at.

Take, for example, gauge 41 nickel chrome resistance wire, which is obtainable from Messrs. Lawrence and Hansen, Wellington. The resistance of this is approximately 92 ohms per thousand yards, that is, 92 ohms per yard. 400 divided by 92 comes out to approximately 5 yards. 40 gauge "Advance" wire, supplied by Messrs. Johns, Ltd., Auckland, has a resistance of about 32,000 ohms per thousand feet, or 32 ohms per foot. This would indicate that 12 feet are required for a resistance of 400 ohms. Naturally, one would expect the "Advance" to be more expensive.

### Construction of a Potentiometer.

TO complete construction of a potentiometer, take a good non-conducting substance similar to that used as a base for resistance wire in a potentiometer or rheostat. Cardboard would do if it were covered with a coat of paraffin wax, or given several coats of shellac. The width should not exceed  $\frac{1}{2}$  an inch, while the length will be determined by the gauge of wire used, and the resistance to be obtained. Secure one end, and commence winding, keeping each turn free from its neighbour, unless the wire is covered. When the total length has been wound on, secure the end, and arrange on a suitable mount. The ends should be passed into terminals, and a slider rigged up. The varieties of sliders are so numerous that any constructor will be able to make one from the material on hand. Meccano sets come in handy in this respect.

Now attaching one end of the potentiometer to a 3-volt battery, and the slider to the telephones, the battery is connected to the carborundum.

## Notes of Interest

### The Importance of Good Contact.

TOO much stress cannot be laid upon the importance of good contact, and, as with the crystal set every iota of energy must be utilised, the importance of good contact is paramount. When strong signals are received on a powerful receiver, it is possible that quite a deal of current be lost through bad contact, and yet the station be received at quite pleasant volume. However, with the crystal, the case is altogether different, for if any energy is lost the signals become painfully weak.

All the wires should be securely attached to terminals and, in cases where there are no terminals, solder should be applied. A case was recently brought before the writer clearly exemplifying this point of good contact. The receiver in question was causing a great deal of crackling noise in the 'phones, and the signals were very weak. On examination it was found that of the three terminals two were loose, and one joint was most insecure. Another fault in this receiver that was causing very much trouble was that the 'phone tips had broken off, and the wire nearly twisted round the terminal, with the result that every movement of the listener caused a crackling noise.

Where a sliding contact has to be made, both sides of the contact should be perfectly clean. If the slider is operating on a coil the surface should be touched up occasionally with emery paper.

### Fixing New Telephone Tips.

AFTER a little use, the tips of the telephone cord may break away, or become so damaged that a very bad contact is made, and it thus becomes necessary to replace them. This is quite a simple job, and can be done without a soldering iron, and yet make a very firm contact. If the tips are still available, they may be used, otherwise new ones will have to be purchased. Clean the wire thoroughly for a distance of about one inch. Now, heat the tips in the flame of a candle, or in a hotter flame if available (gas, for example). A red heat is unnecessary, and may cause great damage. When properly hot the solder already in the clips, if they are old, will come away bringing with it the remainder of the old 'phone coil connection.

Now take a roll of resin for solder, and with a pair of pliers cut off about half an inch or a little more. This will just go inside the 'phone clip. Heat this over a flame until it becomes molten. When in this state insert the clean cord tip, and, when cool, bind the end of the insulation with cotton to keep it from further fraying. A little insulation tape now wound around the connection between the cord and the tip will give added strength and durability.

### Crystal Breaks Down.

AN interesting case in which the breakdown of a permanent crystal caused some deal of doubt as to the origin of weak signals has been very recently brought to the notice of the writer. For some considerable time, the strength of signals had been falling off, and everything was blamed, from loose connections to the local station, but all were perfectly innocent. The tuning, too, was very flat, and very little difference was noticed between any two positions of the condenser. Finally the crystal was suspected, and a simple test revealed this to be the case. One end of the crystal was attached to a battery of 22 volts, and the other end to one tip of the telephones. The other tip of the telephones was connected to the end of the battery and a loud click was the result, showing that current was being passed in that direction. On the reversal of the crystal an equally loud click was heard, which showed that current was being passed in the opposite direction, showing that the crystal, passing current in both directions, was not rectifying.

### English Carborundums.

IN the past all carborundum crystals have been manufactured in America, but an English firm has now commenced their manufacture and these are now on the New Zealand market. They are proving equally as good as the American crystal, and certainly nothing could be finer for the listener who desires loud signals with a minimum of trouble.

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**Philips New Short Wave Transmitter.**  
THE "Wireless World" writes: "The new 130 k.w. short wave transmitter at Huizen (Holland) was formally opened on January 16, to carry out a daily Morse service to the Dutch East Indies. Apart from the telegraph transmissions, the station will give a weekly concert on Wednesdays, on a wavelength of 16.88 metres. Huizen's call sign is PHOHL."

This powerful station has been heard in New Zealand. Several tests were carried out recently, the times of which I was advised, but too late for publication. The hours of these tests were inconvenient, but I tried for them twice, without any success.

## Short Waves and the League of Nations.

TO enable the League of Nations to carry out a new series of short wave tests in the spring, the Netherlands Government is again placing the Kootwijk station at the disposal of the Secretariat for one experiment a week. The tests will be in three series. The first will be an endeavour to reach America. Japan will be the goal in the second series, and Australia in the third.

Similar experiments were carried out with varying success last summer.

Reports will be welcomed, and listeners should make such reports as accurate and as comprehensive as possible. They may be addressed to the Short-wave Division of the League of Nations, Geneva, Switzerland.

## Schedule of Transmissions, March, 1929.

Reduced to New Zealand mean time.  
American Continent (in English, French, and Spanish).—March 13, 20, and 27. Time, 9.30 a.m.—10.30 a.m. Wavelength, 38.8 metres.

Japan (in Japanese).—March 13, 20, and 27. Time, 1.10 p.m.—1.40 p.m. Wavelength, 18.4 metres.

Australasia (in English).—March 15, 22, 29. Time, 1.30 a.m.—2 a.m. Wavelength, 18.4 metres.

My log for the past week does not contain much variety; it is as follows:—

## Saturday, March 9.

PCJ commenced at 6.5 a.m. at excellent strength—R.9—with a programme for British India, Egypt, and South Africa. Volume decreased to about R8 by 7.30 a.m. A stranger, on about 81 metres, R.2. 5SW, Big Ben was heard striking 7 p.m. at R8. The talk following was spoilt by rapid fading and static.

PCJ was heard again during the afternoon signing off at 5.25 p.m. Reception was spoilt by a howler nearly all through the transmission.

Both KDKA and 2XAD were broadcasting a political talk by a Senator, through the National Broadcasting Co., and its associated stations. This is to be a weekly feature, so as to keep the American citizens in closer touch with Washington.

KDKA closed down at the conclusion of this talk, at 4 p.m., while 2XAD carried on with a programme of dance music

from the Hotel Saint Regis, New York, closing at 5.1 p.m. (1 minute past midnight). Their frequency was given as 15340 kilocycles, or 19.56 metres.

## Sunday, March 10.

KGO, or to give it the short wave call, W6XN, was tuned in at 2 p.m., at about R2-3. Volume rapidly increased, and by 2.30 p.m. it was possible to follow every word spoken. This portion of the programme was presented by the General Electric Co. till 3 p.m. Then followed the "Lucky Strike Cigarette hour," originated in a New York studio, and carried by land lines throughout America.

At 3.30 p.m. this programme was interrupted owing to line difficulties between Oakland and New York, so they continued from their San Francisco studio till 4 p.m.

The "Singing Peaches" from the Sunshine Orchards of California commenced the next session. This was followed by the weather forecast, and Westminster chimes, the gong being struck at 8.34½ Pacific standard time. After this, they announced that a special programme was being broadcast by 2XAF for the Byrd Expedition, and that they, W6XN, would rebroadcast it. This was received very well, louder than direct from 2XAF, but, as would be expected, not so clear.

KDKA was tuned in at this time, when they were also putting over a Byrd Expedition programme, but different from the one from 2XAF.

After a short rebroadcast, W6XN gave one of a series of extracts from the Golden Legend, this one being "David Garrick." It was very good, but the characters were supposed to be English, and the American accent of the players was out of place, the lady being very noticeable. After their clock striking 10 p.m. (6 p.m. here), it was announced that "The Big Show from KGO," the Pacific Coast broadcasting station of the General Electric, at Oakland, California, would commence. The N.B.C. Trocadarians Orchestra, under Mr. Frank Harris, supplied the dance music, and Captain Bill Royal was master of ceremonies. The broadcast finished at 1½ minutes past midnight (8.1½ p.m. New Zealand time).

This, as far as I am concerned, is a record short wave reception, hearing a continuous programme for six hours, five of which were good speaker strength.

KDKA and 2XAF were both tuned in during the Byrd programme only.

## Monday, March 11.

At 6.15 a.m., the stranger on 31 metres was tuned in, when organ music was heard at R2-3, increasing to R6, but became very noisy, closing at 7 a.m., call not heard. 3LO commenced at 7 a.m., a howler spoiling reception.

Talk was heard from RFM at 10 p.m., at R9. Static was bad.

## Tuesday, March 12.

5SW, at 5.45 p.m., with records, was R9. Later he called W2XO. Could not hear the American, except through 5SW. At 7 a.m. Big Ben was R8. The "Literary criticism" that followed was 100 per cent. readable, being very clear and steady, the best for some time.

Talk again was heard from RFM at 10 p.m., at R8, static being bad.

## Wednesday, March 13.

5SW was not on this morning, at least, I did not hear them, neither did Mr. Morrison.

The 31-metre stranger was very weak, about R2.

Two New Zealand amateurs were heard during the evening, on the 31-

metre band. ZL2BO, Wellington, and ZL2GH, Wanganui.

## Thursday, March 14.

KGO was picked up at 6.25 a.m., being about R4, increasing to R5-6. 5SW, at 7 a.m., was R8. The talk following Big Ben was not readable, except for odd words.

## Friday, March 15.

At 5.45 a.m., a strong carrier only was audible from 5SW. At 5.55 a.m. they announced that they were closing till 7 p.m. this evening.

PCJ commenced at 6.30 a.m., at R8, decreasing at R7-6 by 7.30 a.m. Although speech was 100 per cent. readable, signals were mushy. This also applied to London later on.

5SW, at 7 a.m., was R8, only about 50 per cent. readable.

31-metre station, about R2-3.

## Additional Notes

Mr. A. P. Morrison writes:—

THE Californian shortwave station, W6XN, sw. transmitter, of KGO, Oakland (California), was heard on Sunday, March 10, at good strength. It was first heard at 2.45 p.m. with the jazz item, "Button Up Your Overcoats." W6XN was linked up with New York, and was broadcasting musical items by the Lucky Strike orchestra. At 3.20 p.m. they discontinued the long relay from New York, and continued from the Californian studio. The first item was by Mr. Irvin Kennedy, one of KGO's leading tenors. Following this a saxophone solo, "A Precious Thing is Love." It was then announced there would be items from their San Francisco studio. The first item, was by the Californian San Tan Girl, a vocal item, "The Song I Love," and was followed by an orchestral item, "Henry VIII," a vocal item by Mr. Harry Stanton. The Waitona Harmony Four sang "If You Want the Rainbow." At 4 p.m. there was a very pleasing entertainment by the Sunshine Peaches, from its peach canning company, of California. At 4.35 p.m., New Zealand time, W6XN linked up with W2XAF, Schenectady, New York, which was broadcasting a special programme to the Byrd Expedition in the Polar regions. W6XN closed down at one and a-half minutes past 12 p.m., Californian time, or 8.1½ p.m., New Zealand time. Throughout the whole programme strength and modulation were perfect. At 3 p.m. he was R7, and volume increased to R9 before he closed down. I understood the announcer to say "W6XN, wave in kilocycles, was 15,489R," but I think I got him wrong. There was quite a number of American s.w. stations on the air apart from W6XN. There were W2XAF, W2XAD, Schenectady, N.Y., and KDKA. At 2.15 p.m., our time, W2XAD, on his 19-metre wave, was coming in at good strength; R7, and clear.

THE presence of lumps of sediment in the bottom of the electrolyte of an accumulator is an indication that the cell has been misused and that it needs careful handling or overhauling.

BY dividing the total filament consumption into the actual ampere-hour capacity of your accumulator, you can tell about how many hours the latter should last without recharging.

## Short Wave Helping Empire Friendship

MR. J. O. H. TRIPP, Glen-Cary Station, Hakataramea, writes the following interesting letter:—

Another link in Empire friendship is being forged daily, due to the advent of short-wave receiver. Short-wave reception has come to stay, and the "man in the street" is just waking up to the fact; especially as all the chief stations have regular times of transmission.

Personally I think that 5SW and PCJ are the most pleasant to listen to, especially as they both come in during breakfast. For instance at 7 a.m. this morning Big Ben, in London, boomed from the loudspeaker, then 5SW gave two most interesting talks, followed by some music. They then switched over to Liverpool Cathedral, from whence we had a fine organ recital. Immediately after this we were taken to Glasgow, which was broadcasting "Madame Butterfly," acted by the Carl Rosa Opera Company from Theatre Royal.

All this was at full loudspeaker strength to start with, although the volume gradually decreases as daylight increases. I think that to hear 5SW, Chelmsford, is in itself well worth while paying the price of a set and license. Of course, to anyone hailing from England, 5SW has an added interest.

Another point in favour of the new short-long wave receivers is their economical running costs. A four-valve receiver at four volts low-tension uses only one-quarter the power of the average five-valve broadcast receiver. This is a great saving to those in the back country, where charging facilities are few and far between, as the A battery holds its charge nearly four times as long as with the average five-valve.

I also find that for short-wave reception the ground wire is better left disconnected.

The only point that does not at first appeal to the novice, is that a certain amount of skill is required in tuning in to short-wave stations, however, a week's practice should be sufficient to overcome the difficulty.

I hope that before long it will become a habit for many New Zealanders to listen to London from 7 a.m. onwards.

As a people, New Zealanders are not narrow-minded, but their isolation from the rest of the world does not tend to quicken interest in world affairs, the papers being practically the only

(Continued on page 31.)

**METRODYNE** 7-TUBE SET

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