

THE RADIO RECORD

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Broadcast Music for Coming Week

" 'Tis the deep music of the rolling world,
Kindling within the strings of the waved air—
Aeolian modulations."

—Shelley.

By
Bolton
Woods

From Greig to Grieg.

EDWARD Grieg, three of whose charming songs will be sung at 1YA on Sunday (April 14) by Miss Madge Clague, preferred writing songs of which he left 150, and short piano pieces, which, while wholly original, are often mistaken for elaborations of folk songs. His output of other music is equally impressive. By a strange coincidence, both Grieg and Ibsen, the most prominent men in the latter-day Norwegian music and letters, traced their descent from Scottish ancestors, Ibsen's forbears coming from Fifeshire, whilst Grieg's grandfather, Alexander Greig, was an Aberdeen merchant. Like many others of his countrymen he was concerned in the "Bonnie Prince Charlie" business in 1745, and having to flee his native land, found refuge in Bergen in Norway. The writer has a vivid memory of a holiday visit to Russell Bay of Islands, over twenty years ago when the old capital was not the fashionable spot it now is. There he met an old sailor in his 104th year whose grandfather had to fly from Scotland in 1745, going to Norway where he took the Scandinavian equivalent to the surname Smith. It was a thrilling experience to talk with a man who was a boy at sea, before the mast, the same year in which Queen Victoria was born (1819), and who made visits to the Bay of Islands when whalers thronged the place. The object of these visits was to get ship's spars at the Bay, and the Russell of those days was a busy, prosperous place.

Coming back to Grieg and his grandfather, the latter found it necessary to

change the spelling of his name from Greig to Grieg, to suit the Norwegian pronunciation, and having done this he became a Bergen merchant. Grieg knew all about his Scottish ancestry, and he was deeply interested in Scottish national music, in which he traced many of the characteristics of that of his beloved Norway).

In 1888, when he was 45, Tschai-kowsky met Grieg during a rehearsal. Describing his fellow-composer, Tschai-kowsky, who was so glad to meet the man whose warmly emotional music had won his heart, said:—"There entered the room a very short, middle-aged man, exceedingly fragile in appearance, with shoulders of unequal height, fair hair brushed back from his forehead, and a very slight, almost boyish beard and moustache. There was nothing very striking about the features of this man, whose exterior at once attracted my sympathy, for it would be impossible to call them handsome or regular; but he had an uncommon charm and blue eyes not very large, but irresistibly fascinating."

"Off to Philadelphia"

TWO small, but effective modern Russian compositions, Ippolitov Ivanov's brilliant "March of the Caucasian Chief" and Glazounov's colourful "Dance Orientale," will be played by Philadelphia Symphony Orchestra on Sunday evening next at 2YA. Under the masterful leadership of Leopold Stokowski, this body of musicians has rapidly taken a leading position among the symphony orchestras of the United States. This great organisation was developed from

an amateur orchestra which played under the leadership of Dr. W. W. Gilchrist, an American composer. In 1900 a permanent orchestra was established by Fritz Scheel, who was succeeded by Carl Pohlig, formerly First Court Conductor at Stuttgart. He resigned in 1912, and was succeeded by Stokowski. The orchestra is now almost entirely self-supporting; a pension fund for the personnel has been established and the artistic achievements include memorable performances of Gustav Mahler's "Symphony of a Thousand Voices," and most modern and classical orchestral masterpieces. The gramophone recordings made to date are famous for their realism and beauty, and more than one New Zealand music lover would like to emulate Paddy Leary, and be "Off to Philadelphia" to hear them.

The Wolf.

THIS year marks the centenary of the death of a one-time popular composer, William Shield, who, at the ripe old age of 81, passed to his rest on January 25, 1829. Being a man of Durham his first desire was to be a shipbuilder, but at the end of his apprenticeship he turned his attention from building ships to building tunes. As a theatre conductor in Durham, Scarborough and Newcastle he gained much experience and later joined the London Italian Opera orchestra, from which day he never looked back. His compositions for the stage were of a light nature in opera, pantomime and farce. He published a dozen chamber works, two theoretical books and many songs,

—Continued on page 2.

Broadcast Music

(Continued from front page.)

including "The Heaving of the Lead" and "The Wolf." The latter song, which will be sung by Mr. Frank Sutherland at 1YA on Wednesday next, was introduced into the ballad-opera of "The Castle of Andalusia" in 1798. "The Wolf" succeeded splendidly and retains its hold on the popular fancy mainly because it is an easy and effective exercise for the bass voice, rather than for any musical merit in itself. For the sake of its bravura it is especially dear to amateur bass singers. Shield was a viola player, and in 1817 he became Master of the King's Music. Many will think kindly of him for his fine old song.

Magyar Folk Music.

AT 2YA on Sunday (April 7), Arthur de Grief (soloist) and the Royal Albert Hall Orchestra will play Liszt's Hungarian Fantasia for piano and orchestra, which is composed of Magyar folk-melodies strung together after the fashion of the rhapsodies. H. L. Wilson tells us these works are characterised by the distinctly national atmosphere of the Hungarian Czardas, which consists of two movements—a lasso or slow movement of contemplative nature followed by a Friss, full of wild exuberance and abandon. Liszt has explained

at length his ideas upon the treatment of Hungarian music by the gipsies in one of his works, and names the rhapsodies "the expression of certain states of the soul in which are resumed the ideals of a nation." The composer had, apparently, gathered together a large quantity of Hungarian melodies, which he had learnt from the gipsies, and conceived the idea of uniting them in the creation of what he called "Gipsy Epics."

"These fragmentary, scattered melodies," he wrote, "were the wandering, floating, nebulous part of a great whole; they fully answered the conditions for the production of a harmonious unity which would comprehend the very flower of their essential properties, their most unique beauties—and might be united in one homogeneous body, a complete work, its divisions to be so arranged that each song would form at once a whole and a part, which might be severed from the rest and be examined by and for itself; but which would, nevertheless, belong to the whole through the close affinity of subject-matter, the similar character of its inner nature and unity in development." Krehbiel says: "The gipsies have for centuries been the musical practitioners of Hungary, but they are not the composers of the music of the Magyars, though they have put a marked impress not only on the melodies, but also on popular taste. The Hungarian folk songs are a perfect reflex of the national character of the Magyars, and

some have been traced back centuries in their literature."

This exhilarating and brilliant fantasy (composed for and dedicated to Hans Bulow, the famous pianist) may be described as being brilliant throughout, and thoroughly in keeping with the best Lisztian traditions. In the words of one London critic, it is excellent bank holiday music, and carries the hearer along, thrills him, and makes all things gay, sparkling, and full of joy.

"Elijah" Again.

AT 3YA on Sunday next (April 7) Miss Eileen Grennell sings "Hear Ye Israel," from Mendelssohn's "Elijah." This dramatic song opens the second part of the oratorio, which in some respects is finer than the first. It contains at least as many immortal fragments, and according to Haweis the great danger of monotony is avoided by a variety of new and startling incidents, woven into an elaborate whole, which, if it does not exceed the first part in beauty of arrangement, has evidently made greater demands upon the composer, and astonishes the listener by its sustained power and completeness. In the opening solo the highest pitch of exultation is reached, and all the most brilliant soprano effects which are calculated to express the confidence of a burning impetuosity seem to have been well-nigh exhausted. The clear freshness of "I, I am He that comforteth; be not afraid; I am thy God," "I the Lord will strengthen thee. Be not afraid," electrified the soul whenever it is well sung, and as one of the masterpieces of inspired composition it remains to-day among the classics for all dramatic sopranos.

Negro and Pierrot.

CYRIL SCOTT, pioneer of the moderns in music, is said to have a holy horror of the obvious in melody, harmony, and even in orchestration. He is represented in two absolutely delicious examples of vivid pictorial composition in "Negro Dance" and "Lento," No. 1 of the "Pierrot Pieces," which are to be played at 4YA by Mrs. A. Ernest Drake on Friday (April 12).

The "Negro Dance" has been described by a humorous writer as "the jubilation of a cannibal tribe over the prospect of presently dining on a corpulent missionary." Whatever it may suggest it is the very last thing in wildness and breathless abandon, as if the dancers literally danced themselves, all but to death, with a frantic leap into the air before the final collapse.

In the second solo, "Lento," from "Pierrot Pieces," we find Pierrot in a pensive mood—in a sort of reverie—in which there is much of yearning and emotional contemplation of things that are, and things of his heart's desire. This lovely music has some of the same vague beauty of the same composer's "Lotus Land" in it, but coloured more richly and more definitely defined.

A Grand Old Song.

"My mother bids me bind my hair," by Haydn, will be sung by Miss Nita Hopkins, at 2YA next Thursday (April 11), and the song has its own little history. Of course, for upwards of a century it has had such a hold on English people as to become almost a part of our national treasury of song. It is the favourite of Haydn's twelve canzonets. The words were originally written by Mrs. Hunter to the andante of a sonata by Pleyel, the French composer and founder of the piano business that still bears his name. Pleyel was composer, conductor, piano-maker, publisher, and all-round good friend to music and musicians in his day. As the favourite pupil of Haydn he followed in his teacher's footsteps with no less than 29 symphonies, five books of quartets, an opera, and a prodigious number of smaller works. Haydn reversed the order of the stanzas of this song, so that the second verse, as it stands now, was originally that which to Pleyel's music stood first.

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Conditions of Radio Abroad

Interesting Review by Melbourne Trader

MR. A. J. SCOTT, of the Scott Electrical Company of Melbourne, has given the Melbourne "Listener-In" something of his experiences during a six months' trip, from which he returned a week or two ago.

Radio In Central Europe.

MR. SCOTT spent the greater part of his business holiday in Europe visiting most of the principal cities in Germany, Austria, and Holland. He spent a little time in England, and stayed in the United States both going and coming.

Mr. Scott came back full of enthusiasm for the methods, the equipment, and the general practice of radio on the Continent, particularly in Germany. Wireless is very popular throughout Germany. There are something like three and a half million listeners paying 24s. each in license fees, and with this huge revenue the wireless branch of the Post Office is giving a fine service.

Automatic Modulation Control.

THE outstanding factor in their broadcasting is the automatic control of the modulation, rendered possible by a combination of the Reiss microphone and the Telefunken valves. This, of course, does away with the need of a monitor in the control room. The quality of the transmission is beautiful, and there is absolutely no background. The broadcasting stations, however, do not allow the listener to suffer from any gaps of dead silence during broadcasting hours. All the pauses between items are filled in, each station having its own "stop-gap."

Some have a delightful little bell-chime, some use a metronome, and others simply a clock.

Suiting Everybody.

AS to programmes, no one station can please everybody any more there than here, but their system of relay stations, the great network of broadcasting centres that is spread over Central Europe, gives them a tremendous advantage, and any listener with a decent set who cannot get entertainments to suit him is hard to satisfy. You can get an opera practically every night from, say, Berlin, Prague, Budapest, Vienna, or Warsaw; symphony concerts are always available, and good music from a score of hotels, restaurants, and theatres.

Lessons in Foreign Languages.

ONE great feature of the programmes is the lecturette. People of every interest and culture are engaged to give talks, and some of these are excellent. I am quite sure that the dissemination of information and of culture by this means is creating a much better knowledge and understanding between the nations. The increased general knowledge on different languages is helping this. There are always elementary lessons, as well as more advanced readings in English, German, French, Czecho-Slovakian, and so on being given, and some of these are very cleverly and amus-

ingly done. You will hear, for example, a teacher and a student having a lesson—the pupil getting hopelessly mixed, and the master patiently straightening him out.

Three-Valvers for £2 2s.

SO far as reception goes, there are, of course, good and bad sets, but the all-round quality has improved greatly. The crystal set has practically vanished from the radio stores. To popularise the valve set among the poorer classes, manufacturing companies have put receivers on the market at a very low price. One firm turns out a tremendous number of three-valve sets at 40s., including the valves. The Australian listeners wouldn't look at them, but they are quite efficient for local reception and serve to educate the public in the use of valve sets.

The screen grid hasn't yet come into general use. The valve itself is all right, it is a matter of designing the right set. The valve has great possibilities, for the marvel of yesterday is the commonplace of to-day, and another marvel is just a day ahead of us. The all-electric has been gradually evolved by way of the battery eliminator, and soon we shall have little else where the current is available.

Truck Loads of Receivers Auctioned.

IN America radio appears to be as popular as in Central Europe. A number of firms of high standing turn out immense numbers of good class standard receivers, but there is, of course, a great deal of what you might term "also-rans" or "also-wouldn't-runs" would perhaps be better. To go into the area in, say, New York, devoted to the sale of cast-off sets and see truck loads of radio junk being sold by auction is one of the chief amusements of the tourist who is at all interested in radio. America seems to be always shedding old radio sets like leaves in autumn.

Woman Broadcasts Race Results.

IT is rather difficult to compare announcers when one's—what shall I say—linguistic limitations are considered; but my impression was that they were in the main trained men with rather pleasing voices. I am told that they are very largely recruited from the ranks of journalism.

At one or two stations there are women announcers, which reminds me that at a race meeting I heard a speech amplifier of remarkable volume. A woman was announcing the names of the horses and all the details of the race, and her voice carried over a quarter of a mile. I don't know whether she was broadcasting at the same time—probably she was.

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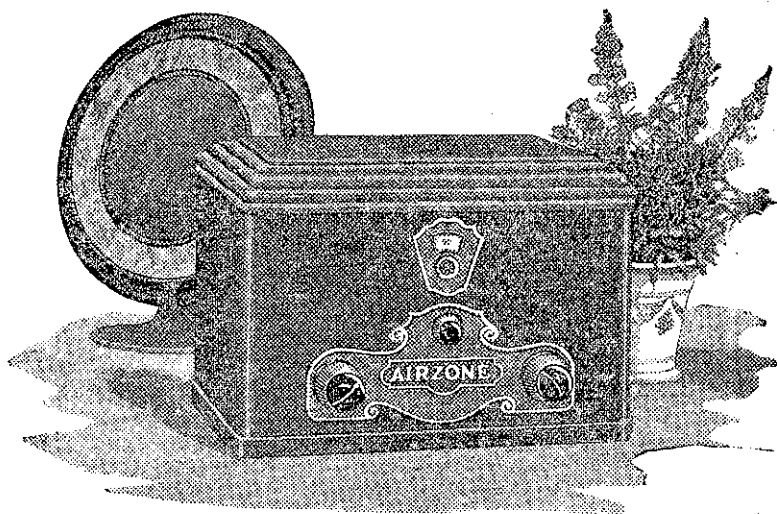
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Australasian Performing Rights

Repudiation of Claim by Copyright Owner

LISTENERS who have closely followed the copyright position and the comprehensive claims made by the Australasian Performing Rights' Association in regard to possessing the copyright of music will read with interest the following article reprinted from "Wright and Round's Brass Band News." This article is self-explanatory.

"It has come to our notice that—withstanding the explicit statement on our catalogues that all Wright and Round's publications are "Free for public performance" anywhere—attempts are being made in Australia to prevent bands from giving public performances of our music, except under a licence from the Australian Performing Rights Association.

"Our remoteness has prevented us from being quickly and fully informed, and this alone has delayed our intervention.

"In November last we observed in the 'Australasian Band News' for September a paragraph from a correspondent reporting a move by the Australian Per-

forming Rights Association, and stating that the 'control of all copyright music' was in the hands of that association. This being merely a news report, and the phrase appearing to be written in good faith by the correspondent, all we could do in connection with it was to write to the 'Australasian Band News,' pointing out that the Australian Performing Rights Association did not control all copyright music; that our copyright music is, as stated distinctly in our catalogue, free for public performance anywhere; and that as the paragraph in the 'Australasian Band News' for September would affect our business adversely and unfairly, we requested a correction of the claim made in the said paragraph, to be published in the first issue after receipt of our letter. This, we trust, has been done. An Australian paper does not reach us until six weeks after publication, and, similarly, our letter would not reach the 'Australasian Band News' until towards the end of December.

"But during December we received a complaint from an Australian band,

which stated that the Australian Performing Rights Association had issued a circular to bands in New South Wales, stating that the association controlled the performing rights of all publications by certain firms it named, and that bands must not play in public any music bearing the names of any of the association was the firm of Wright and Round! The band naturally asked how this could happen in face of our guarantee of 'free public performance' given in our catalogues, on which guarantee they had bought our music.

"On receipt of this definite and specific complaint (for which we thank the band) there was only one course open to us. We at once placed the matter in the hands of our solicitors here, who immediately instructed their law agents in Sydney, New South Wales, to investigate the complaint made by our correspondents, and, if the facts were found to be as stated in the complaint, to at once take whatever legal steps are necessary to defend our business interests and the rights of our customers in Australia.

"And, inasmuch as these instructions could not reach the Australian solicitors for about six weeks, we cabled to the Australian Performing Rights Association as follows:—

"Our name improperly included in your circulated list copyright publishers. Delete forthwith. Publish apology in your next circular. Solicitors writing you.—Wright and Round."

"We view the action indicated in the complaint referred to as a grave infringement of our copyrights, and a serious injury to our business. The goodwill of our customers, built up by 55 years of fair and honest trading is one of our most valuable business assets, and to state that we are members of an association for the extraction of performing license fees from bands to whom we have sold music under a guarantee of "free public performance" is calculated to destroy the goodwill of our customers.

"That point being now in legal hands in Australia, we will leave it there. But, pending whatever legal action may be taken on our behalf in Australia, we desire to minimise as far as possible the injury to our business there which must result from the action of the Australian Performing Rights Association. With that purpose in view, we assure Australian bands:—

(1) That our music is free for public performance in Australia, as elsewhere, and that they need not pay anyone for a license to perform our publications in public.

(2) That we are not, and never have been, in Australia or elsewhere, members of any organisation for the collection of fees for the public performance of our music.

(3) That we have not had any communication with, or from, the Australian Performing Rights Association. When that association was forming, we did receive an inquiry from a third and unofficial quarter, as to whether it was our intention to join this association. Our reply was an emphatic negative, and an assurance that we would not, on any account, depart from the "Free Performing Rights" policy we had proclaimed in our catalogues.

(4) We are the sole owners of the copyrights, including the performing

rights, of all our publications. These rights are under our own exclusive control; we have not delegated any of our control rights to any person or persons in Australia or elsewhere.

(5) We are not people who "run with the hare, and hunt with the hounds," and we hope that Australian and New Zealand bands will, after reading this article, and pending the result of our legal action in Australia, cast out of their minds any distrust of our business methods which has been created by the Australian Performing Rights Association's attempt to over-ride the guarantee of free performing rights which we have been giving for years past in connection with all our music publications—covering not only band music, but also our quartets, trios, duets, solos and string band music.

THIS is not our fight only. It is one which affects the whole amateur band movement, and whilst we do not shrink from fighting our own battle, we hope that bands which are also affected will not fail to help by giving to Messrs. Bradley, Son and Maughan, Queensland National Bank Chambers, Pitt and Hunter Streets, Sydney, N.S.W., the solicitors acting for us, any information they may desire and solicit for the purpose of obtaining redress for ourselves and our customers.

IN Hungary there are more than a million illiterates, and the Budapest broadcasting station is starting a regular course of instruction for adults in reading and writing, which it is hoped will encourage very many to take pleasure in studying their very difficult native tongue, and its orthography, who are too old to be induced by any possible means to go to school. Loudspeakers will be used, and priests, pastors and others will attend in the village inn or schoolroom to help solve difficulties. The programme will consist of three parts—first music, then instruction in reading, and finally a service of interesting news. Only Hungarian words will be used throughout the lessons.

AN experiment is to be tried by station 2FG, Sydney. This is that the announcement of all musical items is to be made in the English language. No two announcers pronounce any foreign title alike, and probably not more than 5 per cent. of listeners understand what the announcer means until the music reaches them. It is pointed out that quite a number of people know that the English translation of "La Donna Mobile" is "Woman is Wayward"; but what about titles like these: "L'Après Midi d'un Faune," "Periglianti Ancor Langue," and "Auf den Wasser zu Singen," which appear on many programmes?

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Uncle Ernest in Canada

Children's Hours to be Arranged

THE Rev. E. R. Weeks (Uncle Ernest of 2YA) is now a visitor in Winnipeg, Manitoba, on his way to England, and has created quite a great deal of interest regarding children's sessions. At the present time these are little known in Canada, but Uncle Ernest has taken opportunity of his wide experience with the Broadcasting Commission to outline the New Zealand system, and make suggestions for the adoption of similar schemes in that country. Judging from the gathering assembled at Winnipeg recently on the invitation of the Department of Education, to hear the Rev. Ernest Weeks talk on the education of children in New Zealand, there is no lack of interest in the subject.

Enthusiasm has been widespread, as evidenced by the following extract from one of the Canadian papers:—

"NO one can listen to Mr. Weeks without being impressed with his gift for enthusiasm, and without doubt this driving power has been a decided factor in putting over New Zealand's effort to make the radio an instrument in child education, not merely a salve to ease an empty hour. New Zealand has kept it up for three years and it is still going strong.

"Judging from Mr. Weeks' testimony, including the description of the children's special service on Sunday, the chief emphasis is upon the inspiration—a good thing if it be the kind that fans the sparks of imagination into a flame that carries the child along to the development of his talents.

"For one listener at least it was a grateful thing to hear that this particular line of extra-mural education had not been landed upon the too often over-burdened teacher. In so many cases, in this country at any rate, when someone somewhere has a brain wave for the immediate bringing in of the millennium, the actual working out of the scheme is placed upon the school and the teacher.

"Apparently New Zealand's radio hour is a forthright attempt of the rest of the community—including (who knows?) perhaps some parents—to put over and carry this idea into practice on their own initiative."

THE report concludes: "It is this opportunity that New Zealand's ex-

ample urges should be grasped. It is evident that the Department of Education of Manitoba is willing to provide the opportunity. It remains to be seen whether there is a sufficient number of persons interested, and with those two previous commodities, time and imagination, who can be found to put it over. If so, a new and valuable element will enter educational life, which will have a certain advantage of having its motive force outside the school, and yet if it be what it well may be, must inevitably enrich the school not only through the children, but by bringing to the teachers the heartening assurance that they are not playing a lone hand. Beside them has sprung up reinforcements."

In order to come to some definite arrangement regarding children's sessions, the Department of Education sent out a circular letter to 150 of Winnipeg's leading citizens, inviting them to attend a conference at which Uncle Ernest outlined the New Zealand system. Preliminary steps were taken for the organisation of a general committee, and this is likely to be formed in the very near future.

Letter from Uncle Ernest.

OF his activities Uncle Ernest writes:—"I found with the exception of two educational hours per week nothing being done through the big Government station for the boys and girls. There is a delightful soul, a Mr. Coates (Uncle Peter), a man after my own heart, who, while managing the Richardson station CTGX, Yorkton, controlled and programmed from Winnipeg—a purely commercial concern—quite on his own, and because of his love for children was making contact with lots of youngsters for half an hour each evening.

This he is increasing, much to the delight of crowds of youngsters away out on the great prairies. I went on one evening with him and received in the following week 150 letters. I have taken up the claim of the child with the Minister of Education, and with others, with the results which are indicated by the enclosure.

Views on Advertising.

CANADA certainly has radio problems all her own. First, she only charges 1 dollar (4s. 2d.) per license, then to the south the U.S.A. has completed commercialised radio, apparent-

ly getting all income from advertising. This is a tremendous pity, and greatly undermines its influence. I have met many people who are irritated and annoyed by the injection of advertising talks on chewing gum, etc., just when they expect to hear other things. One radio enthusiast remarked to me: "Advertising is the curse of radio."

"I noticed in a recent New Zealand 'Radio Record' that in the agreement the Radio Broadcasting Company of New Zealand could sell five minutes an hour for advertising. I am sincerely hoping the day will never dawn when the stations will do this. If New Zealand radio is to keep its enviable position with its splendid programmes and the position it now holds in New Zealand life and thought, then for heaven's sake keep the advertisers off the air.

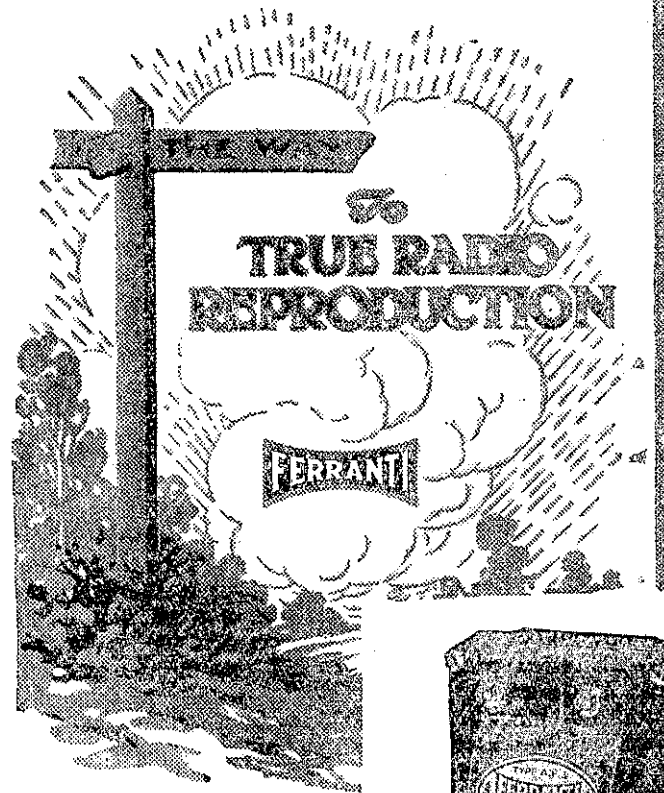
"We have been delayed in our journey, but shall leave for New York on Tuesday next. Sailing Aquitania, March 1, but our extended stay here has given up the opportunity of doing many things we wanted to, and our experiences have been very delightful. The welcome of this warm-hearted city

has been wonderful. It was just like coming home (we spent seven and a half years here, from 1907-1914). The development here is more promising than at any time since 1914. Mineral bearing ores are being found in large quantities north of this province, while the spirit of progress and abundance is to be felt everywhere. The past month has been a cold one, but the sun is strengthening, and a great year is anticipated.

"I have been kept exceedingly busy speaking, lecturing, etc. My programme has been full every day; in fact, we are finding considerable difficulty in getting away from this great warm-hearted city.

"Kindly give my very cordial greetings to all my radio colleagues.—Yours very sincerely, Ernest R. Weeks."

ALTHOUGH with modern valves rheostats are not generally necessary, it is as well to remember that a filament adjustment of the detector valve on a short-wave set is often an invaluable aid to smooth reaction.



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

WELLINGTON, FRIDAY, APRIL 5, 1929.

SPORTING BROADCASTS.

DISCUSSION occurred recently on the part of the Wellington Boxing Association as to the advisability or otherwise of permitting continuance of broadcast descriptions of boxing bouts. Some speakers urged that the past liberal policy of the Association should cease, and that for the future broadcasting of these contests should be banned. No decision was reached, but we think many devotees of the sport will regret, first, that the question has been raised; and, secondly, will be particularly inconvenienced if the suggestion is carried out.

NEVER at any time, at any rate in recent years, has boxing commanded the general support and interest that is now accorded it. There is a widespread interest in the sport, not only in the main centres, but throughout the whole country. It is not claiming too much for radio to assert that apart from the merit of the sport and contestants this revival of interest is largely attributable to the practice of broadcasting descriptions of prominent bouts, and thus exciting on the part of the public a more intense interest and sympathy with the manly sport than has hitherto prevailed. Numerous concrete cases can be cited of direct benefit accruing from broadcast descriptions. In one instance we know of a prominent citizen, who had never before attended a boxing bout, who is now a regular attendant. He is a well-to-do business man with definite musical and artistic tastes. On one occasion he listened to part of a broadcast description of a boxing match. He was interested. On the next occasion he listened to the full description. Again on the next occasion. By this time he was so interested with the quick and exciting portrayal of the contest that he determined to visit the Town Hall and see the next boxing match for himself. Never since has he missed an important boxing bout. Unquestionably his case can be paralleled by scores of others, and those cases lie at the root of the increased spread of interest in boxing.

SOME speakers at the meeting of the Boxing Association contended that they knew of cases where boxing enthusiasts had taken the opposite course, and, instead of now attending the contests, took their pleasure at second-hand over the air. We cannot think that these numbers are material. In any case, we would not use the word "enthusiast" in describing such a gentleman. However eloquent and vivid a description may be, it can never replace the actual sight of a thrilling contest—the quick parry, the clever blow, the rattling exchange of "in-fighting," or the clean knock-out.

ON such a question it is a matter of balance. Will the Association gain a widening circle of newcomers by continuing broadcast descriptions, or will it lose revenue by former patrons relying on a verbal description in lieu of actual sight? As a business principle, it can be effectively demonstrated, we believe, that that sport is the strongest which has the broadest foundation, which appeals most to the greatest number of people. Publicity is the one solid foundation

of all sports. Without publicity no sport can thrive. With publicity the road is open to popularity and prosperity. Therefore, the decision should be to build upon the broad basis of wide popularity and publicity.

THE service rendered by broadcasting to boxing has been, and is, no small one. Prior to the recent Macalister-Griffiths fight in the Stadium at Sydney, the Broadcasting Company had applications from all over New Zealand, and particularly from Dunedin (from which city Griffiths hails) to endeavour to broadcast the bout. Some of the YA stations were successful in so doing. At others, arrangements were made to listen-in to 2BL's broadcast and to summarise the rounds. In July last, it will be remembered that the Broadcasting Company gave a round-by-round description of the Heeney-Tunney fight, and later on rebroadcast a first-hand description of the fight specially issued on the Company's behalf in America. These services have been appreciated by all boxing enthusiasts. Again by broadcast, devotees of the sport in one city have been able to hear and enjoy outstanding bouts in other cities. These services have been available because of the co-operation of the boxing authorities in this country and elsewhere. So valuable is publicity over the air recognised to be that in many countries high payments are made for "time" on the air. Here in New Zealand this "time" and the attendant costs of operating have been given freely to boxing in the case of all important events. Because of that co-operation and assistance, boxing has made advances in the public esteem which otherwise would not have been possible. For the sake of the sport itself and its value to all manly New Zealanders—apart from any question of generosity and recognition of past services—we sincerely hope that the broader view will be taken, not only by the Wellington Boxing Association, but by all Sports authorities in relation to broadcasting of events of public interest. We believe that the time is not distant when the ban of the Racing authorities on the broadcasting of national sports events will be reviewed, and a precedent out of accord with the dignity of that sport removed.

"Rigoletto" on the Air

Popular Tunes Once Whistled Everywhere

WHEN "Rigoletto" was first produced (in Venice) three-quarters of a century ago) some of its tunes were whistled all through the city. Those tunes are as popular to-day as ever, and testify to the great and enduring popularity of "Rigoletto."

Nowadays, when excerpts from "Rigoletto" are sung, one can almost of a certainty hear the Duke's gay song about women, "Questa o quella," telling how one is as good as another to him; his uncomplimentary ballad, "La donna e mobile"—("Woman is fickle"), and the ecstatic "Caro nome," the love song of Gilda, the heroine, when she calls upon the "dear name" of her lover (the Duke, who has pretended to be a poor student). The detached, descending notes at the opening of this song make it easy to identify.

These and other such popular airs run through the opera, the presentation of which commences at 1YA on April 10, and at 2YA on April 12, the opera being produced in four instalments, spread over four weeks.

TO enable listeners fully to appreciate "Rigoletto," the story of the plot will be fully described.

The first instalment will cover Act 1, scene 1, and portion of scene 2, in all seven records. The scene and period of the plot is Mantua, Italy, in the sixteenth century. The Duke of Mantua is a Don Juan against whose attentions no woman is safe. He is indebted for help in his schemes to his jester, Rigoletto. The courtiers naturally have much reason to hate both duke and jester. In the opening instalment of the play, as covered by this programme, the Count Monterone is introduced. He is angry on account of the wrongs done to his daughter. Rigoletto jeers at Monterone, who utters a parent's curse upon both duke and jester. The duke is merely amused, but the jester is terrified. The courtiers plan revenge on Rigoletto. The second instalment shows how the courtiers proceeded to carry out their revenge.

Stations 3YA and 4YA will present the first part of the opera on April 17 and 26 respectively.

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2YA Sunday Band Concerts Resumed

THE pleasing announcement has been made by 2YA that Sunday evening band concerts are about to resume. The first will be on Sunday, April 14, when 2YA will relay from the Grand Opera House a concert given by the Port Nicholson Band, under the conductorship of Mr. J. J. Drew. Arrangements have also been completed for a relay of the band recitals to be given by the Wellington Municipal Tramways Band, from His Majesty's Theatre, in the near future.

Total Wireless Licenses for February

APPENDED are the total number of radio licenses in force on February 28, 1929, and not including 79 licenses which expired on January 31 and which have not been renewed:—

	Receiv- ing.	Dealers.	Trans- mitting and receiv- ing.	Broad- casting. (Private)	Experi- mental.	Special.	Free. licenses.
Auckland	14,758	431	58	2	1	3	90
Canterbury	8,373	287	37	1	—	—	48
Otago	3,033	165	21	4	—	—	28
Wellington	17,751	613	56	3	1	4	31
	43,915	1,496	172	10	2	7	187

TOTAL: 45,789.

Radio Au Revoir

Unique 3YA Broadcast

THE programme organised by the Christchurch Harmonic Society as a farewell to Mr. Victor C. Peters, its conductor, is published in another part of the "Radio Record." Mr. Peters is about to leave for the Old Land to further his musical education, and the society will bid him au revoir from 3YA station. A splendid programme has been arranged, and during the evening the necessary valedictory speeches will be made. The contributing artists will be Miss Jessie Duff, Miss Dorothy Spiller, Miss Marjory Nelson, Miss Vera Martin, Messrs. L. C. Quane, Finlay Robb, Mr. Douglas Suckling, Mr. W. J. Spratt, Mr. Harold Beck (cellist), and Miss Winifred Smith (elocutionist).

Mr. Victor C. Peters is a well-known Christchurch musician, well known to listeners as choirmaster at Oxford Terrace Baptist Church. Incidentally, this church will be on the air on Sunday, April 14, when Mr. Peters will do his final broadcasting in New Zealand.

The Auckland Band

A Correspondent's Views

A CORRESPONDENT to the Broadcasting Company writes:—

A letter signed by Councillor Murray and published in the Auckland "Sun" shows—if any showing were necessary—how utterly unpopular organ recitals are with the public, and that in trying to foist these recitals on you, with the band items, they are trying to sell you a "gold brick." This is, of course, well known to you already, but one of the councillors themselves (who is not afraid to give the

facts) proves your case in respect to the organ recitals at least. Why should you buy something you don't want—and the public don't want—in order to get something you do want?

As to your offer to the band, it should be remembered that whatever you pay the band it is, for the council, so much money "picked up." They are not giving the concerts for you; they are merely allowing you to broadcast what they are giving anyhow, and in making an arrangement with you they are simply getting so much extra revenue.

The question, then, is—will the broadcasting keep many away from the band's concerts? I doubt it very much, especially as a number of their concerts are already free. The broadcasting would certainly be a boon to many thousands in hospitals and public institutions, and to all those country people who seldom or never have an opportunity of hearing the band otherwise.—I am, etc., "Manikau."

Visitors to Studios

THE great interest displayed by listeners in regard to the working of a broadcasting studio has been clearly demonstrated of late. The response to the invitation issued by the general manager of the Radio Broadcasting Company in his recent letter to all listeners has been very heavy. This has necessitated much work on the part of the head office staff in allocating dates. It is safe to say that every visitor to a studio fully enjoyed seeing how a radio concert is produced and managed "at the other end of the wireless."

IF you have trouble when drilling holes which should be in exact alignment through the bit "wandering," try using one of the little rose bits, which ensure the holes being exactly in the punched position.

Leckie's Success

Announced by Radio

RADIO enabled boxing enthusiasts throughout New Zealand to enjoy early advice of the sensational success secured by Johnnie Leckie in his initial appearance on Australian soil on Saturday night, when he knocked out the redoubtable Grime in the fourteenth round. Arrangements were made by 2YA for various listeners to pick up the story as broadcast on shortwave, so that if conditions were not favourable for a full rebroadcast, a summarised story might be given listeners in New Zealand. As things turned out it was not possible to rebroadcast the running account, but the information received was pieced together and broadcast from time to time, and a complete summary given at the earliest possible moment.

To serve listeners, 2YA remained on the air till 11.30—and unquestionably a good many more than the definite boxing enthusiasts remained with them to hear news of the success or otherwise of the plucky and popular New Zealander's adventure!

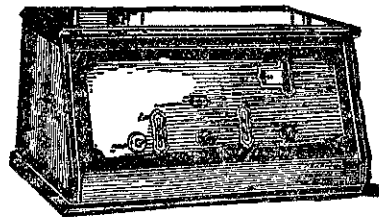
"Big Brother"

"BIG BROTHER" of 3YA children's sessions has resigned. "Big Brother," who is Mr. A. J. McEldowney, secretary of the Christchurch Y.M.C.A., has been on the air nearly every week for over eighteen months, and he now finds that the demands upon his time have become too heavy, and he has regretfully to relinquish his radio duties. He will, however, continue to act as a member of 3YA Children's Session Advisory Committee.

"Effects" in Radio Plays

I NOTICE with some surprise in the Auckland papers during the past three or four weeks that it is claimed for a forthcoming production of "Bird in Hand" here that this will be the first presentation of a John Drinkwater play in New Zealand. This is obviously incorrect, for the credit of first presenting a Drinkwater play in this Dominion must be given to the Broadcasting Company of New Zealand when it accepted my offer to broadcast his great historical play, "Oliver Cromwell," some eight or nine months ago. And judging by the innumerable complimentary letters received from all parts of the Dominion, the production was a remarkably arresting one.

Again, I notice in your issue of March 28 it is claimed that certain effects of rain, wind, sounds, etc., to be used in some forthcoming plays to be done on the air will be used for the first time here. This is certainly not correct, though I have no doubt the statement was made in perfect good faith. All these effects, and many more, which added greatly to the atmosphere in each case, were used by me in "Campbell of Kilmoor," "The Discovery," "Macbeth," and, quite recently, in the presentation of that remarkable play-story, "Galapagos." In the case of this latter, many correspondents in writing to the station and to me specially mentioned the wonderful "effects" used, and declared that they added very greatly to the success of the performance. I have no desire to belittle the work of any other company or performer, but let us at least have credit for what we have done as pioneers of plays-on-the-air in New Zealand. J. F. MONTAGUE.



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Name
Address
..... "R"

Auckland Notes

(By Listener.)

THE Good Friday morning service at St. Mary's Cathedral, which was put on the air by 1YA, rendered a splendid devotional cause in several other churches, where, through the medium of receiving sets, the service from the centre of the diocese was picked up and made audible to many congregations.

THERE is no doubt that there is developing in local programmes a definite and marked improvement. It would be difficult to decide upon any particular phase which marks this trend, but on all hands one hears the cheery comment, "Programmes have been better lately." New artists have certainly appeared and have given excellent items, but it is not to these alone that the improvements are due. There has been a recent betterment of transmission, but the main contributing factor seems to have been a more efficient handling of the programme material so that it is presented with the maximum of attractiveness. In other words, there has been more attention to showmanship, and this has undoubtedly reacted upon listeners. This is indeed a good augury for the new radio year.

UPON this new radio year listeners are speculating. Even the most optimistic do not anticipate that the first month will show for our district a renewal of the fifteen thousand licenses now existing. There are bound to be some crystal set owners who will not renew, and these, in the main will be responsible for a temporary decline, but a decline which will be overtaken in a couple of months. From then onwards we may expect a steady increase, and this postal district alone should reach the twenty thousand mark well before the end of the year. The winter time usually marks a big increase of country listeners in a dairying district. It is only in midwinter that a dairy farmer finds opportunity for holiday, and, during that holiday, for the purchase of many improvements for the home. Wireless sets rank as important items among such improvements, and dealers in the city know well when the milking season has ended.

OWNERS of valve sets, if reports of the radio trade are a reliable indication, must be a rapidly increasing percentage of licensed listeners. Business has been remarkably brisk of late, in many cases the purchasers of valve receivers being those who previously owned only the humble, but efficient, crystal.

There has been a heavy inquiry for A.C. sets, and for the all-wave types, several kinds of which are manufactured locally, and the demand has been so great that difficulty has been experienced in meeting it.

THE last gramophone lecture-recital by Mr. Karl Atkinson demonstrated forcibly how very attractive a well-arranged programme of records, suitably introduced and explained, can be. Even chronic grumblers who find cause for complaint in the use of records over the radio, must have been converted from their pessimism by Mr. Atkinson's hour. A further recital for Friday next will be equally welcome.

THERE has been little of moment for broadcasting of sports during the past two months, and the ban still operates against facilities for describing the Easter racing carnival, but football will soon be resuming, and those who cannot see the actual play will welcome the thrilling descriptions which are a Saturday afternoon feature of 1YA.

TO-NIGHT the City Council will further consider proposals for resumption of broadcasting the Municipal Band. From casual remarks heard, it appears that the Council are still trying to foist upon listeners the acceptance of organ broadcasts. On one point listeners are almost unanimous. They do not want the Town Hall organ, or its generally unsuitable programmes. If the Council does not realise this, and give facilities for relaying the band at moderate charges, much is likely to be heard of the matter at the forthcoming municipal election meetings.

A General Loss

GENERAL regret will be felt in trade circles that Mr. D. G. Wyles, radio engineer of the National Electric Company, Ltd., has resigned his position in order to take up a post in Melbourne with the Philips Lamps (Aus.), Ltd., as radio engineer and sales promotion manager. Mr. Wyles has had a very extensive and valuable experience in broadcasting, and is unquestionably one of the most highly qualified men in the New Zealand trade, both from the technical and business point of view. Mr. Wyles filled the position of president of the radio section of the Electrical Federation, and in that position has played an important part in negotiations of moment to the industry that have taken place in recent years. The best of good wishes from his trade associates and others in New Zealand will go with Mr. Wyles to his new position in Australia.

Reception in Vancouver

Report on N.Z. Stations

A CORRESPONDENT, M. H. Thorau, of Vancouver, writes:—

The heterodyning of 1YA early evening is caused by KHJ, Los Angeles. Here in Vancouver 1YA puts a bad whine into KHJ's wave.

March and April seem the best for reception of your stations here. Last year at this time they were coming in good, and for several nights lately 2YA has been particularly good, with 1YA and 3YA fair at times.

What do you New Zealanders do for radio after 10 o'clock? Maybe you go to bed. There are several stations on the Pacific Coast which are going all night and many until 1 and 2 a.m. Even with the great difference of time I have heard your stations sign off and then tuned in a dozen stations here on the coast.

From a friend who recently visited your part of the world I learn that particularly the Australians retire much earlier than those on this continent. Apparently the "best-sellers" with us to-day are the kits which tune both grid and plate, using shield grid type of valves.

I would be glad to hear from any motion picture projectionist-radio listener (combined) who might care to waste a stamp.—MARVIN H. THORAU, 3281-34 West, Vancouver, B.C.

Looking Backward

"FIFTY years ago I read Edward Bellamy's "Looking Backward," writes a correspondent from Auckland. The gifted writer describes "Wireless" in which one switched on to his particular church for morning and evening service. Listening to the service from St. Gerard's Redemptorist Church in Hawker Street, Wellington, reminded me of looking backward to the early 80's of last century when I read that prophecy and I little thought then that it would be my lot to listen to the Rosary and Benediction at Wellington. Father Robinson's voice was beautifully clear during the Rosary and myself and family joined in with our brethren in Wellington. The reception on the whole was excellent, for the wind came in gusts and the rain came down in heavy showers, but 2YA came through clear and steady, for which we express our deepest thanks. "It is a pity that the Roman Catholic Church does not relay more services for the Catholics of the backblocks where there is no church nearer than twenty miles."

"Wireless, as Bellamy saw it, will be in every home before the next ten years, and will be a necessity and not a luxury, as it is now. It will take the place of the telephone, and newspapers will be broadcast before the century ends. Instead of a studio for broadcasting news culled from newspapers it will relay Australian, English and New Zealand news like the 1YA's broadcast or another now. Newspapers will be a thing of the past and the world's news and music will be on the air."

Race Broadcasts

Referred to Conference

USE of the word "year" for "week" last week in our paragraph announcing the move made by the Broadcasting Company in again approaching the racing authorities in connection with permission to broadcast the more important race meetings, was calculated to give a wrong impression. The position is that a detailed proposal outlining the Company's point of view, and specifying the meetings chiefly desired for broadcasting, was recently submitted to the Executive Committee of the Racing Conference, was considered by its members, and referred to the July conference of racing delegates for decision. This move was made by the Company in order that the position should be clearly understood, and the hope is entertained that the analysis made of the position and objectives will help to a fuller understanding and a favourable outcome.

Thanks to 4YA

Flood-time Service Appreciated

"PLEASE allow me," writes a farmer, "to thank you for broadcasting information regarding 62 sheep which, by mistake, had been left in the sale yards at Milton on the evening of Wednesday, the 20th. I, along with all other wireless listeners-in around the district, received your message, and was able to make arrangements to have the sheep shifted to a good paddock that night. I am positive had we not received your message there would have been several deaths before the next morning, and a serious loss to me, as the night was bitterly cold and wet. The drover had missed them on Tuesday afternoon, so that they had been in the pen one day and night before your message came through. I now realise what a boon wireless and an effective broadcasting station is to country people."

Mr. Sydney Francis Hoben to Broadcast from 3YA

The well-known New Zealand pianist, Mr. Sydney Francis Hoben, will give a series of pianoforte recitals from 3YA, commencing on April 17.

Easter in New York

NEW York's Easter services were heard in New Zealand last week by reason of 2YA on Saturday afternoon (New Zealand time, re-broadcasting 2XAD's Easter performance of "Parsifal." The reception was good, and the effort quite successful. With the growing interest in shortwave activity, such events are specially appreciated, and are calculated to intensify interest in radio.

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Listening to the World on Short Wave

What Russian Programmes Are Like

FROM Mr. R. Leslie Jones comes the following interesting letter regarding shortwave reception of world stations, and in particular of the Russian station RFN:—

THROUGH the courtesy of Mr. L. H. Bowe, of the J. B. Ford Coy., Spring Street, Sydney, who visited my house Thursday evening, March 28, I am now able to give listeners a translation of Thursday's transmission from the Russian shortwave station. Mr. Bowe, who speaks many languages, was, during the war, attached to the Allied Secret Service. He was born of British parents at Moscow 39 years ago. Mr. Bowe left Wellington for Sydney on Good Friday; having been transferred by his firm to Sydney, after having spent some time in New Zealand.

The Russian station was tuned-in at 8.40 p.m. (New Zealand time) Thursday last. Reception was held on loud-speaker; the receiver used being the very latest in screened-grid shortwave receivers; encased in aluminium, the set employing in addition to the screened-grid, a detector, and two stages of audio; and is fully screened. The set was constructed by Mr. Roy Clarke, the well-known amateur transmitter, who transmits under the call-sign of 2AW, Wellington. So far as I am aware, this is the first occasion a New Zealand translation of the Russian transmission has been made public.

Contrary to expectations, the "spoken" parts transmitted, were, for the most part, lectures and news of the day from "round the world." I understand the Soviet Government has cut up (or confiscated) the big farms, and placed same under closer settlement, hence the large amount of propaganda relating to agriculture, which is being broadcast by the Russian stations. I also understand the Soviet does not encourage the Russian populace to instal individual receiving sets, but prefers to, and does, encourage what one might term "community" listening-in.

Many listeners have held the opinion that the Soviet Government regularly and consistently broadcasts "direct, Red propaganda." On this particular occasion, such was not apparently the case, as will be seen by the following: Special advice and educational matter appertaining to agriculture, is, however, a regular feature of the transmission, as was the case Thursday, March 28.

Addresses were given by a lady and gentleman alternately, and these two speakers dealt with the question of "rendering practical help in the villages." Then followed in the order given below the various items (brief details only are given hereunder).

Comparative value of 100 roubles in different localities.

Forming villagers' organisations to raise culture by means of schools; various artisans being mentioned. A large gathering of villagers is to be held next year.

Musical items rendered on the Russian "Garmonika" (accordeon).

Information re the Chinese peasants, 70 per cent. of whom (it was stated by the announcer) were ignorant and unlettered.

Listeners were exhorted to "how to armaments."

Hunger in the Russian villages was due to speculation.

Women "Red" workers were being organised.

At present the peasant proprietors were having more scope, so as to increase grain production.

Music by a "balalaika" (triangular guitar) followed.

An address on land and agriculture, and the "Greater Use of Machinery" were interesting subjects dealt with next.

"Folk" music on an accordeon followed; and then an address on the "Necessity for Organising Workers," a waltz played on a "balalaika" being a pleasant break in the programme.

The next subject dealt with was "Inflammation of the Lungs: Its Symptoms and Effect on Human Beings, also Animals."

A quick waltz tune on an accordeon followed, this being immediately succeeded by a humorous monologue on "Village Life" (one could hardly imagine it).

An orchestra rendered a "Russian Folk Song"; and another short speech was immediately followed by a "Polka" played on an accordeon. The next item was another monologue and a string orchestra played a march, with plenty of "pep."

After a "Gazette" (news item) from Washington, D.C., was read, the Russian station closed down at 9.50 p.m. (New Zealand time) for 15 minutes.

When the station reopened an address on "Cleanliness and Venereal Diseases" was given.

The announcer then stated they would "relay" from station R.A. 97, and that it was then 10.22 Eastern time.

Another address followed, regarding "The Workers' Conference and Meeting of Bookkeepers at Nigni Novgorod"; also "Archangel Forests" being referred to. The speaker then touched upon the "Trading Organisations of Farmers."

A monologue and orchestral music was next heard; then remarks re "Produce and Conveyance by Steamers."

More music preceded an address on "Germany and the Revolutionary and Reformation Movement."

A lady rendered a "Folk Song" with piano accompaniment at 11.10 p.m. (New Zealand time).

News of the day included information regarding the Chinese Civil War, the attack on Hankow (pronounced by the announcer as "Ankoy"), the panic in Canton, troops were massing.

Reference was made to the Japanese Government and the insult to the Emperor.

The speaker next referred to the "Death of Marshal Foch" and the arrests of Communists, mostly French, apparently at the ceremony in connection with the late Marshal Foch.

The English elections were touched upon; also the Liberals' promises; Spain and its Dictator; the sinking of "I'm Alone" steamer—with contraband abroad—by the U.S. Navy.

An announcement was made as follows: "Russian Station R.A. 97 on 70 metres, Sabar time, 20 hours 58 minutes."

The announcer stated further music would follow after an interval. Then there was an interval of 20 minutes.

Mr. friend Mr. Bowe had to return to the city and left my house at 11.50 p.m., therefore further translation was not available that night. Another friend, however, has kindly offered to give me further translations after the holidays, when required.

KDKA (Pittsburg) was in good trim on Good Friday afternoon (our time), also 2XAF, these stations broadcasting the big fight for the world's lightweight championship, of ten rounds, between the holder of the title, "Tommy" Laughran, and the challenger, "Micky" Walker, holder of the world's middleweight championship, held at the fine Chicago Stadium.

The fight was a thrilling and gruelling contest after the third round, and at the end of the tenth round the two boxers were absolutely "done," so fagged out, in fact, as to be unable to do more than "hug" each other. "Tommy" Laughran was declared the winner on points, although, as the announcer said, either of the two men, with a decent punch, could have gained a "knock-out," just at the close of the tenth round. A huge crowd attended at Chicago's beautiful stadium. The fight ended at approximately 4.40 p.m. (New Zealand time).

I obtained reception on the loud-speaker throughout, and after the fight I listened-in to 2XAF until the programme from Albany, New York, comprising organ music and soprano solos, was finished, the closing-down time being given as "three and one-half minutes to 1 a.m." at Schenectady, and that the station would "re-open again Good Friday morning (that is, this morning), at 6.45 a.m." Reception was beautifully clear and steady.

I am very pleased with my new screened-grid shortwave receiver, and I predict there will be a big "fillip" to radio listening, when once the public become aware of the excellent reception obtainable, and interest derivable from shortwave telephony.

Last Sunday afternoon, March 24, I held the American shortwave station, broadcasting messages to Commander Byrd and party throughout the transmission, every word being heard through loudspeaker as "clear as a bell." It is not necessary to sit up half the night to get shortwave reception, as many people probably think.

There are several stations which listeners can hear at reasonable hours of the day and evening, working shortwave transmission. Amongst the stations I have logged during the last week or so, are: PCJ (Holland), Java, working 2ME, Sydney; 5SW, (London), WGY, 2XAF, 2XAD, KDKA, W2XG, WAKNX, PLG (Bandoung), 3LO (Melbourne), RFN, RFM, and RA97 (Russian), also many amateurs, some on 'phone and others on Morse; also South America and Germany, whilst a large number of "Aussies" and ZL amateurs have been heard on both 'phone and Morse. Spasmodic transmissions from a few quarters were also heard; such as the whaler Larsen, the Graf Zeppelin, etc.

I was able recently to listen to 5SW (London) at 8 a.m., through loud-speaker, whilst partaking of breakfast.

Details of Mr. Jones's set and equipment are as follow:—

THE set is a fully screened shortwave one comprising screened-grid, detector, and two stages of audio. The wiring is compact, and is worked in a simple manner, there being one lead-in and one earth served by a

switch in the veranda, and another in the sitting room, with the two-way wiring between sitting-room and veranda so that I can use either sitting-room or veranda at leisure, by simply lifting the shortwave set from room to room and coupling up at a moment's notice. By a simple and effective switch alongside the two sets in the sitting-room, I can change from ordinary broadcast stations to shortwave stations in a fraction of a moment and vice versa. My earth is very short, being coupled up to the water pipe, and I always keep the earth round about that spot moist by letting the water drip from the tap slightly. The new set is immune from hand capacity and other objectionable features found with many shortwave sets; the smoothness of control being ideal. I am working 120 volts B battery, aerial single wire (seven strands enamel), height at south end about 48ft., and about 40ft. north end, running due north-east to south-west, and with lead-in, is about 100ft. It is about 16ft. above my iron roof.

Useful Brackets

Advice to Builders

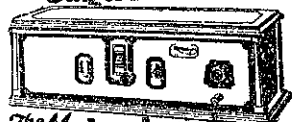
In the assembling of wireless receivers the need often arises for a small bracket which can be used for mounting condensers, certain kinds of drum dials, and other components.

A suitable bracket, sufficiently strong for the purpose, but compact enough to place in the small space which is often available, is difficult to make. Two forms of bracket are available to the home builder. Aluminium angle bars in the form of a strip which can be cut easily and drilled in any desired manner can be obtained cheaply at any large hardware establishment.

Aluminium brackets of this kind possess the advantage of being very strong and light. If included in the receiver circuit they possess high electrical conductivity, and are lacking in magnetic properties, an important feature when the brackets are used to mount certain kinds of audio frequency amplifying transformers.

Another useful bracket is the angle bracket, which forms part of model building kits of the meccano type. These brackets are of steel, and are accurately formed and drilled. If they are employed it should be remembered that they possess marked magnetic properties. If several audio frequency transformers were mounted on a single bracket, it is probable that an undesirable reaction, resulting in a tendency for the receiver to "howl," would be set up between them along the bracket.

7 Tube Set Single Dial Radio



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Broadcasting and Education.

Knowledge at the Fireside

Broadcast Lectures of the W.E.A.

WHEN one of London's streets was being repaved some time ago, a man noticed a nightwatchman sitting in his shelter with the earphones on. He stopped to speak, but the listener put up his hand, and said, "Shh! I'm listening to Desmond MacCarthy!" This is one of the amusing and significant stories related by a special committee set up by the British Broadcasting Company, that illustrate the wide appreciation of the educational lectures broadcasted in Britain. The committee, presided over by Sir Henry Hadow, asked whether broadcasting could so transform education to make it profitable and pleasurable to the mass of hard-working people who like to go home, smoke a pipe, and read a paper or play a game. There was little doubt that broadcasting had tremendous educational possibilities, and that already these possibilities were influencing the standards of cultural appreciation of the people. A member of the committee was talking recently to a farmer in a remote agricultural county, "There is one thing, I've noticed since this wireless came in," said the farmer, "the talk in the bars and round the fires of an evening is on vastly different subjects from what they used to talk about."

The committee proposed that the B.B.C. should associate itself with the work of a National Council for Broadcasting Adult Education. Such a committee would consider the desires of listeners-in of all interests. Broadcast-

ing education would fill many gaps in the existing adult education movement, and there was little danger that it would supplant other educational facilities, especially if the educational bodies took their share in developing it. As a result of the committee's report, since published under the title of "New Ventures in Broadcasting: A Study in Adult Education," an effort has been made to co-ordinate the educational activities by means of "Aids to Study Pamphlets," detailed programmes of "Talks and Lectures" and discussion groups.

IN New Zealand, the Otago Workers' Educational Association has delivered lecturettes since 1925, and now similar work is being done in the other centres.

Aids to Study.

AT first the British Broadcasting Company issued small pamphlets, which were supplementary to the lectures, and which contained summaries of the talks, reference to good books on the subject, questions for discussion, and pictures or diagrams. They provided both a guide to further reading and a permanent record of what had been said. These pamphlets are now incorporated in the "Radio Times." Through the pages of the "Radio Record," the Otago W.E.A. hopes in a similar way to make the lectures more interesting. In the issue before the lectures, which will be given every

Tuesday evening at 7.30 from 4YA, a summary of the lecture will be published, together with questions and books on the subject. Listeners-in are invited to send in written answers to the questions. These will be read carefully and returned with corrections and comments. The first series of four lectures will be given by Mr. Lloyd Ross, M.A., LL.B., on Drama, and will begin on April 23rd, with a lecture on "The People and the Play." Then will follow lectures on "Tragedy," "Comedy," and "Modern Social Drama." Notes on these lectures will be given in a later issue. As a suitable introduction to the talks, listeners could read the W.E.A. Correspondence Courses in "World History," "Pacific Problem," and "Modern Drama."

Correspondence and Discussion Groups.

"THE success of any talk can only be measured by the interest it arouses," says the detailed programme of "Talks and Lectures," issued by the B.B.C., and the purpose of the talks in this programme is to stimulate listeners to further study and discussion of the subject." Many, perhaps, will wish for further information on points raised by the speaker. Many will have criticisms. The Otago W.E.A. therefore is ready to receive correspondence and to answer questions. Letters should be addressed to the "Secretary, Workers' Educational Association, University of Otago, Dunedin," and should be marked "Radio Talks." In England, many listeners wishing to discuss the subjects of the talks have arranged to meet for this purpose, and either form a group to hear the talks through a loudspeaker, or listen in their own homes, and meet subsequently for discussion. The number of these "discussion" groups increases steadily. Should such groups be formed, the Otago W.E.A. is willing to work with them by meeting their wishes on the matter of subjects, and by issuing supplementary material. In any case, it is anxious to receive suggestions for its lectures. Listeners-in are reputed to know what they want and be willing to demand it. Here is their opportunity to make demands from a sympathetic audience. The W.E.A. is eager to assist in any way commensurate with its ideal of spreading the highest knowledge among the people. So let the suggestions, criticisms, complaints and demands flow in to the Secretary, University of Otago.

OTHER forms of static having exhausted their possibilities, seemingly, it is reported from Wiesbaden, Germany, that crackling noises and rumblings in radio reception are due to the action, electrical or radioactive, of the mineral water under that city, which have made it famous as a health resort; and that such disturbances are especially strong after sunset.

DENMARK has followed a new idea in broadcasting, taking the form of programmes addressed to dwellers in specific countries. The first of these transmissions given recently under the title of "Broadcast to England," was designed to interest listeners in the British Isles, and included English music and tales in English on Denmark. The second of the series was a "Broadcast to Germany," consisting solely of talks (in German) on Denmark as a "tourist-land."

DX Club

Concerning the Whalers.

IN this week's "Record" there are some inquiries in regard to stations, one just above 2YA's wave and the other in 4QG's, and both speaking in foreign language. The stations are the two factory ships of the Ross Seas whalers, the Sir James Clark Ross and C. A. Larsen. The Sir James Clark Ross transmitting just above 2YA, and is frequently heard calling the Larsen, and carrying out duplex telephony with it. The language is as a rule Norwegian, but just before leaving their base at Stewart Island for U.S.A. and Norway they were heard in English saying farewell to friends. Both the whalers have powerful transmitters, and here are heard at boisterous strength.—Allan Parcell (Invercargill).

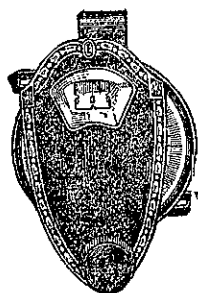
A Mysterious Station.

IN a recent issue of the "Radio Record" "Switch" was commenting on a strange station which is working near 4QG. We have found two strangers about there. One, as "Switch" said, is the whaler C. A. Larsen, but the other is a mystery. He was picked up last night (23rd), playing the latest foxtrot, but as 4QG had motor-cycle races on it was hard to hear, but this is what was heard of the call sign, "Hullo, Hullo, 50," and he then disappeared. Who is it? The whaler Sir James Clark Ross has been heard also. His wave-length is 430 metres, and calls LSXQ.—Mt. Bengor Radio Club (Ettrich).

New Americans.

IN answer to the query from Kellich (Mangamahu) regarding the station on 231 metres, I consider it to be KDYL, Salt Lake City 232.6 metres, or KTBI, Lost Angeles, 230.5 metres. It is probably KTBI that this listener heard, for he said it sounded like KGI, and this is very near to it. Mr. Ireland (Taradale) writes that he has never seen KOIN reported in the DX Club. On consulting my log, I logged this station on December 28, and since have received verification from them; 1000 watts, 319 metres. I logged them on a boxing contest at weak speaker strength. Re KGO, is on 379.5 metres. On Sunday, 24th, he was at full speaker strength, but with heavy fading. The station HPG's logged on 254 metres is 4ZL, relaying KGO. Hope this helps Mr. Ireland. Has Mr. Ireland heard 3RI lately, and have heard this station on short-wave testing on March 11. I have added two more new Yanks to my list in the last three nights—KXO, 249 metres, 100 watts, El Centro, California, on March 24. This, I consider, is not bad for a five-valve set. The other is KDYL, 232 metres, Salt Lake City, at 7.30 p.m., 1000 watts, at weak speaker strength. He signed off at 1 a.m., P.S.T., with time signals. Has any DX listener heard him? How many listeners heard 2XS transmitting on Wednesday, 20th, on 220 metres? This station came through at full speaker strength very clearly, steadily, without fading. The station heard on 2YA wave is C. A. Larsen. He came through here as loud as 2YA on Wednesday, 20th. I thought it was one of the Japs.

The Americans are coming through with great strength lately, so I hope to do some good logging.—S. Ellis (Okato).



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Love of Trees

Valuable Lectures Broadcast by 3YA

Useful Community Work

Valuable community work is being done by 3YA in broadcasting a special series of talks on trees by Mr. D. E. Parton and Mr. Young, curator of the Christchurch Botanical Gardens, on the selection, care, and treatment of hedge and ornamental trees. In a talk on Monday last Mr. Parton explained the objective of the Public Utilities Committee in fathering this work as follows:—

"Mr. Young and I commenced this series of talks on tree life some little time ago, in the hope that owners would become more interested in their own property, and in their regard for public service. It was thought that citizens generally and the younger members of the community in particular might be awakened to the need for learning more about the trees that already exist in the city, and encourage more extensive planting.

"Mr. Young has offered to enlighten owners on matters of planting and pruning, or by means of lectures, and we expected some inquiries to be made in this direction. This unfortunately has not been done in the extent anticipated, and this address is being delivered in the hope that further interest will be aroused. The requirements of Christchurch have been closely studied by the P.U.C., and its investigations prepared in pocket size booklet form. Public bodies in New Zealand and Australia have been supplied with copies, and some valuable and interesting acknowledgments received in return. The booklet is available to Christchurch citizens at nominal cost, and it is intended to enlarge on the subject by broadcast and public lectures as the people increase their interest. These will deal with tree life and planting generally, and lead on at a larger stage to trimming young trees of all descriptions, fruit trees, flowering trees, ornamental trees more suitable for garden purposes, and to roadside trees and trees in parks and other public spaces. The main feature of these talks will cover such questions as:—Care in cultivation, selection of sturdy, well-developed trees, necessity from variety and appearance, determining physical state of soil and its preparation, careful pruning by experts and the special training of others, spacing and freedom for development, regard for service lines and pipes, removal of undesirable species and growth.

"If there is sufficient demand for information in this form, the addresses will be extended, but in the meantime I am content to continue with a general reference to planting, but with a more particular reference to trimming.

"Mr. Young will tell you that the importance of the work being carried out by properly-trained men cannot be over-emphasised. Intelligent gardeners can be taught, but the reason for adopting different methods under different conditions and the various kinds of cuts must be explained to them.

Even the care and use of tools suitable for the work is of great importance, and in the long run it pays to give all the details due consideration."

Tree Trimming.

DEALING then with tree trimming, Mr. Parton said it was essential for success to know something of tree life. This involved selection and planting, preservation and pruning. Where so many public services with overhead wires were concerned the proper care of trees presented some of the most difficult problems confronting city authorities, but the culture of suitable trees in public places need not be restricted even by telephone and electric light wires. There were certain principles that must be observed in producing the right species and in planting to ensure correct development. It would interest householders to know that in their gardens a weakly tree can often be coddled into natural vigour, whereas this was impossible in public streets. Where impure atmospheric conditions prevail the choice of trees was exceedingly limited. Conifers, for instance, were particularly impatient of such conditions and evergreens were unreliable.

Pruning.

IT was often necessary for an expert or even for line authorities to conduct a vigorous campaign against abnormal growth, but it must be realised that this was done for a very good purpose and that it was not always possible to bow to public opinion. Dangerous trees could not on any account be allowed to remain in public places. A nice array of trees properly trained by householders created an excellent impression upon visitors and the present system of the Horticultural Society in rewarding residents who have made special efforts to demonstrate to passers-by what can be done must ultimately lead to such a desirable condition of affairs being extended.

Some owners or their representatives in cutting up an estate or erecting buildings frequently planted trees along the boundaries or in front of each section to encourage a ready sale. Very often the wrong class of tree was planted or they were placed too close together and too near the footpath. Later they attained such dimensions as to interfere with overhead lines and vigorous lopping had to be resorted to in some such cases against the wishes of residents and subsequently charges were made regarding incompetent workmen. If owners would seek the co-operation of those handling tree trimming useless hacking would be avoided. To ensure that branches of trees near to service lines, etc., were not removed in a careless manner and that a proper method of healing the wounds was followed owners were strongly enjoined to get in touch with the engineering branch of the City Council for instructions as to the ways

Australian Stations

Greater Power Urged

NEW ZEALAND listeners will be interested in the agitation in Australia in favour of increasing the power of the "A" class Commonwealth stations.

A writer in the Sydney "Wireless Weekly" says:

"It must be about eighteen months ago since a Royal Commission sat to inquire into the wireless question in Australia. It made many recommendations, and the report was very comprehensive. The cost of the Commission sitting in the various capital cities must have been considerable, but apparently both time and money were wasted (quite a usual thing with Commonwealth Commissions), as not one single recommendation has been carried out, and country listeners are still not catered for. As Mr. Allsop suggests, 5 k.w. stations have not sufficient range to cover the wide distances, especially as the actual aerial power is not 5 k.w., but, according to the tests made, only 4100 watts.

"When the Commission had finished its report we were told that nothing would be done until Mr. Brown returned from the International Radio Conference in U.S.A. He prolonged his absence by many months, remaining in England, and on his return was promptly given a huge increase in salary. The only thing he has done is to announce that the stations are to be taken from private ownership and transferred to Government control and ownership. Listeners, and they are the people who pay, are very much concerned, as Government enterprises generally turn out to bear excessive overhead costs, and are eventually run at a loss. If this happens, both programmes and services will suffer, and certainly improvements will never be made. In a short time Australia would be further behind than ever in broadcast matters.

50,000 Watts Suggested.

I AM quite convinced that if, say, one high-power station of 50 k.w. were erected, say, 100 to 150 miles from the coast in each State, many more licenses would result, and people would have the real pleasure of wireless. To-day one must have a powerful receiver, and even then so many months of the year it is impossible to listen, owing to fading and atmospheric. Curiously enough, yet easy to explain, country listeners use, or try to use, their receivers much more than suburban residents, for the simple reason that they have no other entertainment. Go to any home in the country, at any time of the day, and you will hear the receiver working, and many listeners do not know what it is to receive a programme free from disturbance and

and means of doing the work. The booklet issued by the Christchurch Public Utilities Committee would show how unnecessary mutilation was avoided, how the beauty and symmetry of trees could be preserved and how wounds could be protected against decay. The manner in which branches were cut and the dressing of wounds was of much greater importance than at first appeared and would be dealt with in greater detail later.

fading. They think radio has not developed sufficiently. One day they go to the city or suburbs, and at a friend's house they hear a programme, and are astounded at the freedom from static and fading.

Change of Wave-lengths.

ANOTHER recommendation of the Royal Commission was an immediate re-allocation of wave-lengths. What has been done? Nothing! A correspondent in the same issue raises the point by quoting the fact that our stations are being interfered with nightly by the heterodyne of Japanese stations. I wrote to the P.M.G. a long time ago, also to S.L.O., Melbourne, who passed my letter on to the P.M.G., but from the latter not a word in reply.

"I have here two of the latest and most selective six-valve receivers, and it is impossible to cut the whistle out, simply because the wave-length of the Japanese stations is right on the wave-lengths of 4QG and 3LO, and also 5OL. After these stations close down, the Japanese come in with a roar, on increasing the volume in the receivers.

"The suburbanite can get all he wants from a small 3-valve receiver, which must be selective, but not necessarily sensitive, but the country listener must have a multivalve sensitive receiver to get any reception at all, and if he lives on the southern tablelands he has to put up with distortion, fading, and statics. In four years I have not received a single programme after dark without one or all of these troubles.

"Now, sir, you and your technical men can render great service by hammering away until Mr. Brown does act, and if only the Listeners' League (rather a mysterious body, which never answers letters), were an active co-operation of all listeners, which would assist you, then we might get something done, and thereby place Australian radio on the same plane as that of any other country."

"As regards programmes, well, that is another story, and I will leave the subject over to another occasion."

A Memorable Relay

"Stations of the Cross"

OF the many relays put over by 2YA since its inception, not the least interesting was that from St. Gerard's Redemptionist Church, Hawker Street, on Good Friday, when the ceremony of the "Via Crucis," or, as it is more commonly termed, the "Stations of the Cross," was broadcast.

The "Via Crucis" depicts the final hours of Christ's life, from the time of His condemnation until He was laid in the tomb.

Rev. Father O'Connor, C.S.S.R., detailed the various episodes depicted in the "Stations," and his description of the sufferings and death of the Redeemer must have turned many thoughts to the first Good Friday in Jerusalem, whilst the exhortations of the preacher doubtless found ready response in the hearts of many listeners.

The music incidental to the "Stations" was well rendered by the choir of St. Gerard's under the baton of Mr. Frank Oakes, Mr. Henry Mount being at the organ.

This relay was a particularly interesting one because it is the first time the "Via Crucis" has been broadcast in New Zealand or Australia—possibly the first time in the world.

Filament Emission.

"HOW is it possible for a radio valve to light brilliantly and yet to be 'dead' for use in a radio set?"

ANSWER: There are a number of causes for the refusal of a valve to function while its filament still glows with normal brilliancy. One of these is the short-circuiting (or the making contact not called for in the design of the valve) of two internal elements: as between the plate and the grid or the grid and the filament. In the latter case the filament usually is destroyed immediately the current is turned on; in the former the valve will refuse to function, yet the filament will probably last its normal life.

The most prevalent valve ailment, however, sets in after a valve has been in service for some time, usually a year. At this time a marked weakening of signal strength inability to get remote (DX) stations with the same

It is not necessary to open the window to let in radio waves; they pass through stone, brick, wood, and glass. But, on the other hand, metal, such as structural steel, deflects them and often causes freaks of reception, especially in cities.

ease as when the set was new, and perhaps some degree of distortion, may take place. The cause of this is the burning down of the filament to a point where the amount of the "electrons" it gives off, when heated to complete the "plate" or "B" battery circuit, is considerably lessened, with a resultant drop in the efficiency of operation. As the valve depends upon the filament's discharge of electrons for its operation, the manufacturers coat the filaments with an "element" known as thorium, which aids in giving off electrons for the successful operation of the valve.

After the valve's normal service the thorium is fairly burnt off, thus decreasing the number of electrons flowing from the filament to the plate. It

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Questions and Answers

is this weakening of the filament's operating efficiency which causes the unsatisfactory performance of the set. At times this condition will come upon a practically new valve—a fault known as paralysis. To correct this and also weakening in old valves the process known as rejuvenation is employed. This was dealt with recently in these columns.

Range of a Receiver.

"WHAT is the distance range of a four-valve receiver?"

ANSWER: This is a question often addressed to "Observer," so that it will be of general interest to all readers. No one can say just what distance a certain receiver can cover. There are so many controlling factors that enter into the matter that it is practically impossible for any one to state with certainty the normal range of the receiver. Weather conditions have a good deal to do with distant reception; and so have the condition of the batteries, the valves, the sensitivity, and the tuning ability of the receiver, the quality and condition of the antenna structure, and the efficiency and condition of the ground connection. Furthermore, there are certain areas in the country known as "dead spots," in which reception of anything but powerful local stations is extremely difficult even with the most elaborate receivers. Another controlling and very important factor is the operator. He is responsible to a great extent for the results obtained. Keeping the set and the accessories at maximum efficiency, a good knowledge of the tuning temperament of the receiver, and patience must eventually reward the operator with the desired "DX," as reception of the distant stations is called.

What is an A.C. Valve?

"DOES the A.C. valve operate entirely on alternating current?"

ANSWER: No. Alternating current is used only to light the filament, or the heater element which heats the filament, depending on the design of the valve. As the modern A.C. valve requires anywhere from one and a-half to fifteen volts of alternating current to heat the filament, it is necessary to "step down" the usual 220 volts of the house supply by means of a step-down transformer. However, to supply the "plate" voltage or "B" current, direct current obtained from "B" socket power unit or from batteries must be used.

Because receivers to-day use plate voltage ranging as high as 400 volts, it is necessary that the 220 volts obtained from the house be first "stepped-up" to the required voltage by means of a "step-up" transformer. After this the increased voltage must be rectified from the alternating to direct current, as the receiver cannot function with alternating current on the plates of the valves. After rectifying the increased current we find there is still a noticeable hum present in the speaker, due to the characteristics of the alternating current. This hum is "ironed-out" by an apparatus known as a "filter"—a combination of condensers and choke coils. The entire combination of the step-up transformer, rectifier (usually a valve) and filter system

goes to make up the B voltage supply unit, without which no radio receiver can operate. In the case of the modern A.C. set it is really an integral part of the receiver and is usually so considered.

Care of L.T. Battery.

"WHEN I first took up wireless we used to be told that it was absolutely fatal to short a low-tension battery, and great care was taken to prevent this. But recently I have noticed a tendency among my friends to think that accidental shorting of a battery will not do it any harm at all, and I have, indeed, heard this stated as a fact. What really happens when this occurs, and what is the damage done to the battery, if any?"

ANSWER: Sudden over-discharging is likely to lead to a good many accumulator troubles, though certain modern accumulators are far more "hardy" than their predecessors. Amongst other things, shorting often gives rise to the buckling of a plate and to the loosening or shedding of the active material in the plates. (This latter is due to excessive sulphation, which is accompanied by a certain amount of expansion of the active material in the plates, and if this expansion is greater than the containing grid can cope with, when the sulphate is reduced by the next charge on the accumulator a certain unavoidable loosening and shedding takes place. The over-discharge due to a dead short-circuit or to a short through quite a low resistance is likely to give rise to buckling of the plates and frequent over-discharge may quite easily cause a reversal of the polarity of the plates in one or more of the cells, especially if they are partially discharged to begin with.

Many Battery Leads.

"WHAT is the advantage of having a lot of different 'B' plus terminals? In my last set I only had two and it was perfectly satisfactory, but in the new one which I am thinking of building there are no less than four. Are they really necessary?"

ANSWER: The idea of having a large number of B plus tapings on any set enables each particular valve to have exactly that B voltage which it requires. For very selective and high-quality reception it is frequently necessary to adjust the B battery positive and the grid-bias potentials very accurately in order to obtain the maximum results, and it is impossible to do this for separate valves unless each has a separate high-tension supply. It is for this reason that the B is duplicated or triplicated on many sets, and we think that in general you will find that it is a refinement that is well

Concerning the Moving Coil Speaker.

"W.C.W." (Tirau) writes: Having just about completed the moving coil speaker, described in your issues of March 1 and 8, I would like you to advise me on the following points. Where can I obtain 5-1 output transformer?

A.: Ferranti manufactures one and this may be obtained from their agents or direct from the master agents, A. D. Riley, Ltd., Wiggins Buildings, Wellington.

(2) How is this transformer connected, and what size wire is the best to run from the set to the transformer and the transformer to the moving coil?

A.: The feeds from the set are connected to the two input terminals of the transformer, and the output terminals are connected to the moving coil. Wire ranging from 30 to 18 swg. is quite suitable.

(3) Can this speaker be run from an accumulator simultaneously with the set?

A.: Yes, but the total draw (approximately 1.6 amperes) would be rather heavy, so that if possible a charger should be connected to the battery while it is in operation, i.e., an accumulator should be floated between the charger and the speaker.

(4) Are Philips 609 and 605 valves in the two last stages satisfactory?

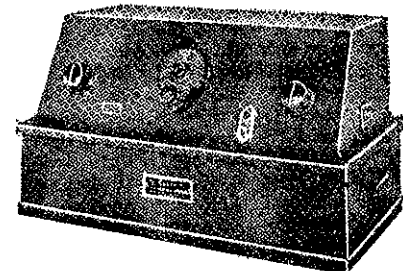
A.: No, at least use 603 in the last stage, 609 or 605 would, however, be quite in order if placed in the second last audio stage.

(5) Will it be satisfactory made up in a cabinet 12in. square?

A.: Yes, if the back of the cabinet is left open or covered with a gauze. A larger baffle board would be preferable as some of the lower notes will be lost when the baffle is restricted in size.

Don't plug an A.C. radio device into a D.C. socket—that is, unless you want to buy a new one.

Following are a few additional notes on this speaker. The speaker coil is designed for the 210 type of valve, which has an impedance of 5000 ohms, and an amplification factor of 8. Where a valve of lower impedance is used, e.g., 603 (1650 ohms), fewer turns will be required on the moving coil. In this latter



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case when working with a 25-1 transformer from 80 to 90 turns on the moving coil would be sufficient.

If any constructor wishes to make his speaker to suit the parts he has on hand, if he will write in stating the transformer ratio, the valve to be used in the last stage, and the anode voltage applicable to it, details will be furnished him whereby he can construct his speaker to match his components.

Difficult to Neutralise.

I AM unable to neutralise my Brown-ing Drake, which has been made strictly to specifications. The turning on of the light switches causes the set to burst into oscillation, which can be stopped only by turning the rheostat controlling the radio frequency valve to a position where music is inaudible. The batteries are O.K."—"Muggins" (Gisborne).

A.: See the reference to "A" battery wiring in screened sets dealt with by "Pentode" this week.

Detector Voltage Too High.

MY 5-valve neutrodyne has not been going too well for some time. A crackling noise is noticeable in the speaker, and on two different pairs of phones. On turning up the rheostat the noise increases. The voltage on the two radio frequency and two audio frequency valves is 90, and I have been using this on the detector. Can you help me to remedy the trouble? asks "C.K.H." (Ngaio).

A.: Check over all "A" battery connections, and apply the test to the transformers as described in Our Beginner Corner some time ago. Reduce the detector voltage to about 30 volts, as a high detector voltage will quite likely cause trouble of this nature.

Oscillation Trouble.

I HAVE a home-made all wave 3-valve receiver, writes "M.C.W." (Auckland), the second stage of which works unsatisfactorily, especially on the short-wave. When tuning in on the long waves the trouble is very slight, except on very loud signals, when it is inclined to mushiness. I am using good components, and have shunted a .001 mfd. capacity condenser across the primary of the second transformer. This has stopped a high pitched whistle when using the 3 valves. Tone and clarity on 2 valves are almost perfect. My "B" batteries are good, but should I use the heavy duty type? The set delivers ample volume, and 4YA comes in on the speaker at good strength, 2YA fills the house on 2 valves, but both 1YA and 2YA become slightly distorted when using the 3 valves.

Would the eliminator described in the "Record" March 23, 1928, be suitable for an all-wave set?

A.: Try 2 meg. grid leak in series with the grid leads of both the L.F. valves. Space the transformers correctly, well apart if possible, so that the axis of

one is at right angles to the axis of the other, or use choke impedance coupling for the last stage, as described in the "Radio Record."

The failure of the set to handle volume may be attributed to very many causes, the most probable being that the last valve cannot handle the output. PM4 is used, whereas it would be advisable to try PM25-4. Then, again, the speaker may be unable to handle the output, for a good speaker is required to deliver the output of 3 valves from the local station. An eliminator would be unsatisfactory for short-wave work. Heavy duty batteries would be more satisfactory.

Dynamic Cone Speakers.

"C.H." (Wellington) requests information on the following points to guide him in purchasing a moving coil loud-speaker:

(1) Which is the best type?

A.: Those operated directly from the lighting mains will repay amply the extra expenditure.

(2) What would such a speaker cost per week to run, say if it were being used for 15 hours?

A.: As it consumes only 20 watts per hour, this would be 1.8 pence at Wellington rate.

Some questions propounded by various writers form the basis of a special article by "Pentode" on page 28, to which these correspondents are referred.

(3) Operated from an A battery, what is the amount of current used?

A.: .6 of an ampere.

(4) What is the best make, and where can I obtain same.

A.: Good makes have been frequently advertised in the "Radio Record."

(5) Do you consider that the extra cost is warranted over the average speaker?

A.: Providing a good amplifier can be used in conjunction with the speaker, yes.

(6) Will they deliver the same volume as a small cone speaker on the same output?

A.: No, they are not as sensitive, but repay in quality.

Push-Pull Amplification.

"C.C.K." (Geraldine), writes: I wish to build an audio amplifier to use with an electric pick-up so that I can use at least two speakers at fair volume. Which of the two amplifiers described in the "R.R." would you advise me to try, Pentode's push-pull or Megohm's amplifier, with super components. If either of these do not happen to be suitable, could you advise me as to the most suitable type?

A.: If from 90-135 volts are available, the push-pull amplifier described by "Pentode" would admirably suit the purpose. A better amplifier would be one

working directly from the electric mains, but this would be both difficult and dangerous to construct, unless an electrician could do the constructional work.

The Beverage Aerial.

"H.N.B." (Hokianga) asks regarding the Beverage aerial described in our issue of March 22, "Would the 600 yards of aerial (18 times the length of an ordinary aerial) would affect the tuning."

A.: Under the conditions described in that issue the tuning was not affected. Providing the aerials are directional, tuning is quite sharp, and the whole band covered by the receiver can be tuned in with ease.

(2) Are the cross wires supporting the aerial insulated or connected to earth?

A.: They should be insulated, otherwise the effect of the aerial would be lost.

(3) Could you tell the wavelength of 22M, Gisborne?

A.: 260 metres, with power 60 watts.

For Beginners

Plate Voltage of Valves.

A CORRESPONDENT this week has had trouble presumably because the voltage on his detector was too high, and this raises the all-important point of the voltages on the plate of valves (anode voltage). In general, very high voltage is needed only in the last, or at most, in the last two stages, for it is only in these valves that a great amount of current has to be handled, and where this is the case adequate voltage has to be provided in order that the set work perfectly.

Most power valves require 150 volts on the plate, and if true reproduction is to be obtained, and the bass notes brought out with all fidelity, full voltage is necessary. This is best supplied through a battery eliminator. If the 250 type of valve can be obtained, and about 350 volts applied to its plate, a tremendous output of 2350 milliwatts can be obtained. This would permit of almost perfect reproduction providing it were used with a suitable amplifier.

With the detector, however, the case is different, and if good reproduction is wanted, voltage should be kept from 20 to 40 volts, and this should in no

wise be exceeded. Exceeding this means that the set is difficult to neutralise and the tone is harsh and unnatural. Signals may, of course, be slightly loud, but loudness without tone has little in favour.

The voltage on the radio frequency valves should be intermediate, unless screen grid type is used; 90 volts without grid bias is a safe medium, and is that usually recommended by makers for use in the R.F. stages.

Push Pull Amplification.

THE purpose of push-pull amplification is to obtain a great increase of volume without overloading the valves. The necessity for push-pull amplification has been lessened with the advent of power valves, for they were able to furnish great volume without distortion, and a single valve only is required, whereas with push-pull two are used in one stage. They are not connected directly in parallel, but are used with transformers of a special design so that one of the valves amplifies one-half of the signals wave, and the other valve amplifies the other half.

For real quality tone, however, there is very little to excel this type of amplifier. Whereas the power valve requires a very high voltage on its plate, the push-pull amplifier will give equal if not better results on a very much lower voltage. Thus, for the owner who is operating his set from dry batteries, the push-pull amplifier will still have a great appeal. With 135 volts on the plate of each of the valves in the last stage, tone and volume equal to that of 180 volts applied to a single valve can be realised.

A push-pull amplifier can be made to replace the existing audio amplifier of the set, or it can be made up separately and used to boost up weak signals. Again, it can be used in conjunction with the gramophone pick-up, and will give reproduction that is equal to that of a very expensive machine.

HONG-KONG'S new broadcast station. It is reported, is to work on 300 metres, using the call GOW, as Hong-Kong is a British colony. In addition to local programmes, the plan is to relay London programmes transmitted by 5SW, Chelmsford, England.

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Next Week's Features

1YA Features

An Evening with Brahms at 1YA.

cluding Miss Lola Solomon, soprano, Miss Madge Clague, contralto, and Mr. Fred Baker, baritone.

2YA Notes

ON Sunday, a studio concert will be given at the conclusion of the evening church service from Vivian Street Baptist Church. The artists will be Miss Isabel Cooper (soprano), Miss Hilda Chudley (contralto), and Mr. Stanley Sayers (baritone). Miss Cooper has a good radio voice, and a fine sense of interpretation. Her items will be Luzzi's "Ave Maria" and two numbers from Wakefield Cadman's "Four American Indian Love Songs." Miss Hilda Chudley, a young contralto, who specialises in songs of a classical nature, has chosen for her items two negro spirituals, and a number by Del Riego entitled "Rest Thee Sad Heart." Mr. Stanley Sayers, a promising young baritone, will be heard in Wooler's "Consider and Hear Me," and in a bracket of two smaller numbers, "God's Garden," and "Linden Lea."

MONDAY evening's programme will be of outstanding interest and merit. There will be four visiting artists—from Palmerston North, Napier, and Nelson. The instrumental numbers



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ANCHOR
SKIM MILK
POWDER

MADAME MARY TOWSEY'S Quartette will contribute the greater portion of the vocal programme on Friday evening. Their items include "How Fair Art Thou," "True Love," "Sapphic Ode," "In Summer Fields," "The Message," and "The Forge." The Studio Trio will also contribute selections including "Three Hungarian Dances" and "Intermezzo Op. 17." Mr. J. F. Montague will contribute elocutionary numbers, including "The Exile's Return," and "Thomas Atkins." Mr. Cyril Towsey's contribution to the Brahms' portion of the programme will be "Andante" from "Sonata in F-Minor."

A **SPLENDID** variety programme has been arranged for Saturday evening, the vocalists including The Snappy Three, Mr. Stan Pritchard, and Mrs. B. Jellard. Orchestral selections will also be played by the Studio Orchestra, while humour will be dispensed by Miss Maisie Carte-Lloyd. The concluding portion of the programme will be given over to dance music until 11 p.m.

THE Church Service for Sunday evening will be broadcast from St. James' Church, the preacher being the Rev. E. R. Harries and the Organist Mr. Walter Impett. Following the church service the programme will be given from the studio, the artists in-

1YA's programme for Friday, April 12, will be "An Evening with Brahms." Brahms ranks as one of the finest of song writers. His melodies have a fine 'line' and his rhythms and harmonies are now sombrely, now exhilaratingly expressive. His emotion is often deep and always true.

The complete musical programme, both vocal and instrumental, will be Brahms' compositions. The singers will be Madame Mary Towsey's Quartet. Madame Towsey will sing "True Love," "In Summer Fields," and "Love is Forever." "The Forge," one of the songs to be sung by Miss Mollie Atkinson, is one of Brahms' most vigorous songs. A maid sings of her lover, the smith, whose cheery hammer rings on the anvil like a peal of bells. As she passes, she sees with admiration his prowess at the forge, where the flames roar and blaze forth around him. The accompaniment, in its bold strokes, suggests the energy of the smith and the clang of his hammer. "The Sapphic Ode," to be sung by Miss Edna Peace, is a memory of the beauty of roses, wet with dew, and of the beloved one's kiss, when two souls are moved with deep emotion. Musically, it is a song of intense beauty. The elegance and perfect shape of the long phrases that compose the melody should be noticed.

Mr. John McDougall, tenor, will sing "Sunday." Sunday is the happy day on which the lover first saw the maiden whom he feels is the one for him, for she has a thousand charms. All the week he will cherish the smile she gave him; but that, sweet as it is, will not content him. "Would to heaven I were with her to-day!" is his fervent exclamation. In "The Message," to be sung by Mr. John Bree, the lover begs the breeze, as it gently fans his beloved, to listen, and, if she should be wondering if he still lives in sorrow, to whisper to her that he was indeed in the depths of gloom, until new hope came to him, at the moment his loved one thought of him.

On the instrumental side of the programme, Mr. Cyril Towsey, pianist, will play the very difficult "Andante" from "Sonata in F-Minor." The Auckland Trio items will include "Three Hungarian Dances." Brahms' interest in Hungarian folk-music was aroused by his going on a concert tour with Remenyi, a violinist partly of Hungarian extraction, who included some of that country's tunes in his programmes. Later, Brahms more than once used the rhythms and melodic peculiarities of the airs in his orchestral works—notably in the last movement of his Violin Concerto, the sprightly vim of which many listeners will recall.

mezzo and soprano voices. This combination will contribute, among other items, selection from Sullivan's light operas, and their initial appearance will be eagerly welcomed by all listeners. Also making their bow to the "mike" will be the "Potted Panto Players" in "Sinbad."

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on the programme have been specially selected by Mr. George Ellwood, the conductor of the 2YA Orchestra, and he will have the assistance of two of his pupils who are coming from Palmerston North. Miss Gladys Seifert, L.A.B., L.T.C.L., who has been studying interpretation for the last eighteen months with Mr. Ellwood, and gained her L.A.B. last year, will play the 1st Movement of the Grieg A Minor Piano Concerto, with orchestral accompaniment. Miss Grete Jespersen will give two numbers, "Orientale," by Oul, to orchestral accompaniment arranged by Mr. George Ellwood, and "Consolation," by Squire. The orchestral numbers will comprise the Overture from Gounod's opera, "Mireille," the well-known O Minor Fantasia by Mozart, for piano, arranged for orchestra by Mr. George Ellwood, the 2nd Peer Gynt Suite (Grieg) "Henry VIII Dances" (Edward German), and the Suite "Monsieur Beaucaire."

THE vocalists will include two visitors to Wellington, viz., Mrs. Edris Spackman, of Napier, and Miss Beatrice Aydon, of Nelson. Mrs. Spackman will sing two Mallinson numbers, "Slow, Horses, Slow," and the "Canoe Song," and Sullivan's "The Sun Whose Rays are all Ablaze." Miss Aydon's numbers will be "Bird Songs at Eventide," and "Five Little Piccaninies." A bracket of two unusual songs by Hughes, "The Goodmen of Elirinn" and "The Moon Cradle," together with Kennedy Russell's "Vale" and Lee's "Who's for Eldorado" will be Miss Nora Greene's items. This popular artiste still continues to please listeners with her consistently good work. Mr. Eric Rishworth, a tenor vocalist who has made a study of classical songs, has chosen for his items three compositions by Schumann, "Cradle of my Sorrows," "The Lotus Flower," and "The Far-Off Land." The "Prologue" from "Pagliacci" is an item that should give Mr. Assheton Harbord an opportunity of displaying his excellent interpretative sense, and vocal powers. Two numbers from Keef's "Salt Water Ballads" will also be sung by Mr. Harbord.

AN elocutionary item with an Indian background, entitled "Retrospection," will be given by that popular elocutionist, Mr. Barton Ginger, on the first half of the programme, and for his second number he will recite a humorous excerpt from the "Grindle" series, by Thomas, entitled "The Day's Good Deed."

FEATURE of Tuesday's programme will be a bracket of two piano solos by Miss Gladys Seifert. The orchestral items will be "The Children's Overture," by Quilter, a dance suite from "The Rebel Maid," and a musical comedy selection from "The Country Girl." Mr. L. Probert will play a bell solo with orchestral accompaniment, entitled "Echo des Bastion," by Kling, and Miss Ava Symons will play as a violin solo with orchestral accompaniment, Vieuxtemps's "Reverie."

OFT In the Stilly Night," a traditional Welsh air, and "Molly Bawn," an old Irish folk song, will be Mr. Austin Blackie's items. Mr. Blackie's pleasing tenor voice will be heard to advantage in these numbers. A humorous Cockney character sketch will be Mr. Will McKeown's first item on the programme, and for his second number he will give an original item

entitled "International Humour." Mrs. Mabel Jackson, a singer whose songs are enjoyed by a large number of listeners, has chosen for her items "Lambie Love" and "When Love Comes Stealing."

ON Thursday evening the Wellington Municipal Tramways Band, under the conductorship of Mr. T. Goodall, will provide a studio concert, assisted by the following artists: Mr. Wilbur Davies (bass-baritone), Mr. Will Hancock (tenor), Miss Edith Buckmaster (contralto), Miss Nita Hopkins (soprano), while Miss Rose Carte and partner will provide two humorous sketches. The outstanding band items will be Suppe's well-known overture, "Morning, Noon, and Night," excerpts from the musical comedy "Katja the Dancer," a selection by Strauss, "My Son, John," and a Romanza "Era Un Re." Other items will include a foxtrot, a waltz, and several marches.

AN excellent operatic programme has been arranged for Friday evening. The orchestral items will include the tone poem "Finlandia," by Sibelius, a grand opera selection from "The Masked Ball," a comic opera selection from "Haddon Hall" by Sullivan, two numbers by Raff, "Tarantelle" (for piano and strings only), and "Rigaudon," and the "Serenade" from Mozart's "Ein Kleine Nachtmusik."

A NEWCOMER to radio in New Zealand will be Mrs. W. Fraser Morrish, who will make her initial appearance before the microphone on Friday's programme. Mrs. Morrish is in the front rank of New Zealand's concert artists, and her items for that reason alone will be looked forward to with the keenest anticipation. For her items, Mrs. Morrish has chosen two well-known operatic arias, "Come e Bello," from "Lucrezia Borgia," and "Far Greater in His Lowly State," from "La Reine de Saba." Mr. John Prouse, who is usually heard on a Monday evening, has changed over to Friday, to enable him to present two operatic numbers with orchestral accompaniment, namely, the recitative and aria, "I Rage, I Melt, I Burn," and "O Ruder than the Cherry" (from "Acis and Galatea," by Handel), and the "Toreador's Song" (from "Carmen").

Mrs. Phyllis Ramsey, contralto, singer with a pleasing voice and a well-developed sense of interpretation, has chosen for her items "My Heart is Weary" (from "Nadeshda," by Goring Thomas), and "When all was Young" (from "Faust," by Gounod). The well-known tenor aria, "Una Furtiva Igrima" (from "The Elixir of Life," by Donizetti) will be sung by Mr. Edwin Dennis as his first item, and for his second he has chosen "A Song of Thanksgiving" (by Allitsen). Mr. Cedric Gardiner will recite Kipling's well-known poem, "The Grave of a Hundred Head," and a humorous number "That Ain't All."

ON Saturday evening, a popular programme will be presented, the orchestral items being the "Plymouth Ho" overture, a musical sketch by Chambers, "Reminiscences of the Plantation," and a song suite of "Old Favourites" arranged by Sereby. The Melodie Four, the vocalists for the evening, will present two concerted numbers, "Johnny Schmoker" (by request), and "Get Out and Get Under the Moon." Mr. Frank Bryant (tenor) will sing "My Prayer," and Mr. R. S.

Allwright (baritone), "Geraldine." An old favourite in the form of a duet, "All's Well," will be sung by Messrs. S. Duncan and W. W. Marshall. Other vocal items will be a tenor solo by Mr. S. Duncan, "I'll Sing Thee Songs of Araby," and a bass solo by Mr. W. W. Marshall, "The Yarn of the Fiddler's Ghost." Mrs. Mildred Kennys Mandolin Band will be heard in some of the latest hits and popular songs. The humour of the evening will be in the capable hands of Mr. Jack Wilkinson, whose comic songs are always popular.

Notes from 3YA

THE service conducted in St. Paul's Evangelical Lutheran Church by Pastor H. H. Bruhn, will be broadcast on Sunday evening, April 7. The local artists for the studio concert, which will follow will be Miss Eileen Grennell, Miss Nellie Lowe, and Mr. A. G. Thompson. A very choice selection of gramophone records will also be presented.

THERE will be two interesting and useful talks on Monday evening: "How to Keep Fit," by Chas. Buckett, physical culturist, and "Tree Trimming," the third of a series of lectures by Mr. D. E. Parton, telegraph engineer.

The Beckenham Male Quartet, one of the most popular of radio combinations on the 3YA air last year, will appear again on Monday. They have arranged another of their humorous and topical choruses, which are such a feature of their programmes. The quartets will include "Little Heather," "Evening Pastoral," "Simple Simon," and "Cause I've Nothing Else to Do." Mr. W. H. Odell, baritone, will sing "Hatfield Bells" and a bass solo by Mr. F. S. Jackson will be "I Do Like to be Beside the Seaside," the quartet singing the choruses. There will be a duet by Messrs. E. R. Pitman and K. G. Archer, "The Garden of Happiness."

THE instrumental music for Monday evening will be provided by the Studio Trio and by Derry's Military Band, under the baton of Mr. J. S. Scott. Many popular numbers will be played.

The Dulcet Quartet will sing "The Message" (by Caldicott) and "The Curfew" (by Thompson) as their concerted numbers on Wednesday evening. A duo by the male voices, "I Wish to Tune my Quivering Lyre" will also be sung. Miss Hilda Hutt (soprano) will sing "Wiegand" (by Brahms) and "The Blackbird's Song." Contralto solos by Miss Nellie Lowe will be an operatic number, "Ye Powers that Dwell Below" (by Gluck), and "A Last Year's Rose" (by Quilter). Mr. F. G. Rogers will sing the operatic solo, "How Pure the Air" and Sanderson's "Lorraine." Mr. A. G. Thompson's solos will be Gounod's "Serenade" and Willeby's "The Fortune Hunter."

AN attraction on Wednesday evening's programme will be the appearance of the Studio Orchestra, under the baton of Mr. Harold Beck.

VERY popular will be Friday evening's programme, the vocal portion of which will be contributed by the Radiolians and Mr. Charles Lawrence, all well known for the bright quality of the entertainment they pro-

vide. Some of the items by the Radiolians will be excerpts from popular musical plays, such as "Kissing Time" and "The Dollar Princess." Mr. Charles Lawrence's songs will be all of the "popular" type. The Studio Trio will be providing the instrumental music.

Notes from 4YA

ON Sunday evening there will be a relay of the evening service from Knox Church, after which the St. Kilda Municipal Band will be heard in a concert from the rotunda, St. Kilda.

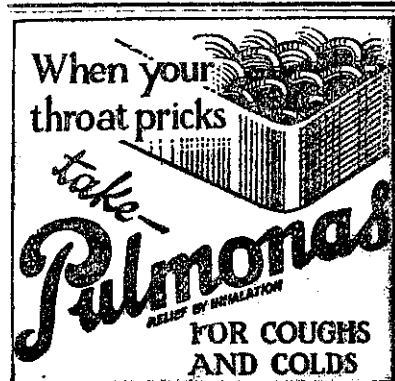
ON Tuesday, April 9, Mr. R. W. Marshall will continue his talks on the Dominion's tourist resorts, while on Friday afternoon, Miss Buccleugh will again speak on fashions.

TWO singers in the persons of Miss Olga Wynne (soprano) and Miss Helen Roy (contralto) will make their first appearance at 4YA on Tuesday, April 9. They will be heard in the duets "The Angel," by Rubenstein, and "Nocturne," by Chaminade, and also in solo numbers. Another singer new to 4YA is a very fine young basso, Mr. William Kershaw, who will be heard in some splendid songs. Dunedin's champion band, the St. Kilda Band, will supply the instrumental portion of the programme, and Miss Joyce Hould, elocutionist, will again be heard.

SO great was the success of "The Mummies" in the pantomime "Sinbad" that they are producing "Bluebeard" (Bobbled) on Wednesday, April 10. Listeners will be sure to appreciate this very clever and delightful comedy. On this programme also will appear Mr. James Paterson, the clever Scottish entertainer, and Miss Betty Roberts, whose songs of the lighter type are always appreciated.

THE presentation of the song cycle, "The Pagoda of Flowers" will be a feature of the session on Friday evening, April 12. The 4YA Harmonists' Quartet never fail to please their public both in solo and concerted items. The 4YA Broadcasting Trio will be heard in a portion of the Ballet music from "Faust" and also in "Marche Miniature Viennoise," by Kreisler, and "Scherzo," by Schubert. The individual members of the Trio will also supply some delightful solos.

THE humorous sketches of Miss Sheila Neilson and Mr. J. B. McConnell are always very welcome, and they will again be associated on Saturday evening. Also appearing on the programme is Miss Constance Poole (contralto), who is making her first appearance at 4YA, and Miss Minna Ahlers, a singer of popular songs.



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Full Programmes for Next

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Sunday, April 7

1YA, AUCKLAND (333 METRES)—SUNDAY, APRIL 7.

- 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: Close down.
 6.55: Relay—Lewis Eady Hall (Rev. Jasper Calder).
 8.30: Orchestral—Royal Philharmonic Orchestra, "Prelude" ("Parsifal"), Columbia L1744-5 (Wagner).
 8.42: Tenor—Mr. R. Errington, "Be Thou Faithful Unto Death" (Mendelssohn).
 8.46: Choir—Don Cossacks Choir, "We Praise Thee, O Lord" (Columbia 9186), (Tschalkowsky).
 8.50: Contralto—Miss Phillis Hazell, (a) "Over the Steppe" (Gretchaninoff); (b) "Before the Dawn" (Lang).
 8.57: Piano—William Murdoch, (a) "Liebestraum" (Columbia 02568), (Liszt).
 9.1: Mr. Arthur Colledge, "Honour and Arms" (Handel).
 9.5: Trumpet and organ—Alex Harris and Harold Dawber, "A Trumpet Voluntary" (Columbia 04020), (Purcell).
 9.9: Tenor—Mr. R. Errington, (a) "Then Shall the Righteous Shine Forth" (Mendelssohn); (b) "The Holy City" (Adams).
 9.16: Contralto—Miss P. Hazell, (a) "Au die Musik" (Schubert); (b) "I Heard You Singing" (Coats).
 9.23: 'Cello—Pablo Casals, (a) "Evening Song" (Columbia 7360), (Schumann).
 9.26: Bass—Mr. A. Colledge, (a) "Consume Them All" (Mendelssohn); (b) "The Holy Child" (Tschalkowsky).
 9.33: Orchestral—Royal Philharmonic Orchestra, "Symphony Antar" (Columbia 04157), (Rimsky-Korsakov).
 9.37: God Save the King.

2YA, WELLINGTON (420 METRES)—SUNDAY, APRIL 7.

- 8 p.m.: Afternoon session—Selected gramophone items.
 4.30: Close down.
 6.0: Children's session conducted by Uncle George.
 7.0: Relay of Evening Service, Vivian Street Baptist Church (Preacher, Rev. F. E. Harry; organist, Mr. Charles Collins; choirmaster, Mr. J. R. Samson).
 8.15 (approx.) Studio concert:
 Orchestra—Sir Thomas Beecham conducting the Royal Philharmonic Orchestra, "Allegro" (Parts 1, 2, and 3), "Symphony No. 6 in C Major" (Op. 31) (Kurt Atterberg) (Columbia Records 04216-7). (This Symphony is the prize work of the Columbia Gramophone Company's International Composers' Contest for £1000 held in connection with the recent Schubert Centenary, for which a large number of the world's leading composers entered.)
 Mezzo-soprano solo—Miss Isabel Cooper, "Ave Maria" (Luzzi).
 Quartet—The Musical Art Quartet, "Allegro Ma Non Troppo" (Parts 1 and 2) from "Quartet in A Minor," Op. 29 (Schubert) (Columbia Record 02783).
 Contralto solo—Miss Hilda Chudley, a bracket of two Negro Spirituals, (a) "Were You There?" (Burleigh), (b) "You May Bury Me in de Eas" (Burleigh).
 Violin solos—Efrem Zimbalist, (a) "The Zephyr" (Hubay), (b) "Tallahassee" (Scott) (Columbia Record 03623).
 Baritone solo—Mr. Stanley Sayers, "Consider and Hear Me" (Wooler).
 Orchestral—Philadelphia Symphony Orchestra, (a) "March of the Caucasian Chief" (Ippolitov—Ivanov), (b) "Dance Orientale" (Op. 52, No. 6) (Glaxounow) (H.M.V. Record B521).
 Mezzo-soprano solos—Miss Isabel Cooper, (a) "From the Land of the Sky-Blue Water," (b) "Far Off I Hear a Lover's Flute" (from "Four American Indian Songs") (Cadman).
 Piano and orchestra—Arthur de Greef and Royal Albert Hall Orchestra, "Hungarian Fantasia" (Liszt) (Parts 1-4) (H.M.V. Records 1306-7).
 Contralto solos—Miss Hilda Chudley, (a) "Rest Thee, Sad Heart" (Del Riego), (b) "A Song of Quietness" (Wood).
 Violin solos—Master Yehudi Menuhin, (a) "Allegro" (Fioco), (b) "La Capricciosa" (Ries) (H.M.V. Record DA1003).
 Baritone solo—Mr. Stanley Sayers, (a) "God's Garden" (Lambert), (b) "Linden Lea" (Vaughan Williams).
 Band—Band of H.M. Coldstream Guards, (a) "Bells of St. Malo" (Rimmer), (b) March, "Semper Fidelis" (Sousa) (H.M.V. Record B2647).
 Close down.

3YA, CHRISTCHURCH (306 METRES)—SUNDAY, APRIL 7.

- 3 p.m.: Afternoon session—Selected gramophone items.
 4.30: Close down.
 5.30: Children's Song Service by Children of St. Paul's Evangelical Lutheran Church.
 6.15: Hymn chimes.
 6.30: Relay of Evening Service, St. Paul's Evangelical Lutheran Church, Worcester Street (Preacher, Pastor H. H. Bruhn).
 (Approx.)
 7.45: Overture—Halle Orchestra, "Rosamunde" (Schubert) (Columbia Record 04197).
 7.53: Baritone solo—Fraser Gange, "O Star of Eve" (Wagner) (Columbia Record 02574).
 7.57: 'Cello solo—Felix Salmond, "Kol Nidrei" (Bruch) (Columbia Record 04190).
 8.5: Contralto solo—Miss Nellie Lowe, "Roll on, Thou Mighty Sea" (Moir).
 8.9: Quartet—Lener String Quartet, "Quartet in D—Andante Cantabile" (Tschalkowsky) (Columbia Record L1803).
 8.17: Baritone song—Mr. A. G. Thompson, "Soul of Mine" (Barns).
 8.21: Orchestral—New Queen's Hall Light Orchestra, "Peer Gynt Suite" (Grieg), (a) "Morning," (b) "Death of Ase" (Columbia Record L1516).
 8.29: Soprano solo—Miss Eileen Grennell, "Hear Ye, Israel" ("Elijah"—Mendelssohn).
 8.33: Band selection—Royal Italian Band, "Garibaldi's Hymn" (Olivieri) (Columbia Record 01182).
 8.36: Contralto and baritone duet—Dulcet Duo, "Dear Love of Mine" (from "Nadeschda") (Thomas).
 8.40: Orchestral—Court Symphony Orchestra, "In Venice" (Sellars) (Columbia Record 896).
 8.44: Contralto song—Miss Nellie Lowe, "My Heart is Weary" ("Nadeschda") (Thomas).
 8.48: Vocal duet—Lombardi and Galeffi, "Il Trovatore—Duet, Act 4" (Verdi) (Columbia Record 04224).
 8.56: Orchestral—New Queen's Hall Orchestra, "Peer Gynt Suite" (Grieg): (1) Return of Peer Gynt; (2) Solveig's Song (Columbia Record 02632).
 9.4: Baritone solo—Mr. A. G. Thompson, "The Rosary" (Nevin).
 9.8: Band selection—H.M. Grenadier Guards, "Onward, Christian Soldiers" (Sullivan) (Columbia Record 0967).
 Male choir—American Associated Glee Clubs, "Adeste Fideles" (Columbia Record 9048).
 9.16: Soprano solo—Miss Eileen Grennell, (a) "Ave Maria" (Kahn), (b) "In the Garden of To-morrow" (Depper).
 9.22: Chorus with orchestra—Grand Opera Chorus, (a) "Lohengrin—King's Prayer" (Wagner), (b) "Lohengrin—Finale" (Columbia Record 02592).
 9.30: March—Royal Italian Band, "Italian Royal March" (Gabetti) (Columbia Record 01182).
 9.33: Close down.

4YA, DUNEDIN (463 METRES)—SUNDAY, APRIL 7.

- 5.30 p.m.: Children's session conducted by Big Brother Bill.
 6.30: Relay of evening service from Knox Church.
 8.5: Relay from St. Kilda Band Rotunda of concert by the St. Kilda Municipal Band under the conductorship of Mr. James Dixon.
 9.15: Close down.

Monday, April 8

1YA, AUCKLAND (333 METRES)—MONDAY, APRIL 8.

SILENT DAY.

2YA, WELLINGTON (420 METRES)—MONDAY, APRIL 8.

- 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 Jeff.
 7.0: News session, market reports and sports results.
 7.40: Lecturette—Mr. H. C. South, "Books—Grave and Gay."
 8.0: Chimes of the General Post Office clock.
 8.1: Overture—Orchestra "Nachtlanger in Granada" (Krentzer).
 8.11: Soprano solo—Mrs. Edris Spackman, "Slow Horses Slow" (Mallinson).
 8.15: Piano solo, with accompaniment—Miss Gladys Seifert, L.A.B. and Mr. Gordon Short, "1st Movement Concerto in A" (Grieg).

Week-all Stations-to Apl. 14

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- 8.25: Baritone solo—Mr. L. M. Assheton Harbord, "Prologue From 'I Pagliacci'" (Leoncavallo).
 8.30: Special Song and Pianoforte Recital by Miss Edith Harrry:
 Pianoforte solos, (a) "Melodie in E" (Rachmaninoff), (b) "Waltz in E Minor" (Chopin).
 Songs, (a) "Mother's Song" (Edith Harrry), (b) "Golden Wattle" (Edith Harrry).
 8.40: Cello with Orchestra—Mr. Geo. Ellwood, "Orientale" (Cui arr. Ellwood).
 8.44: Recital—Mr. Barton Ginger, "Retrospection" (Lyall).
 8.50: Contralto solos—Miss Nora Greene, (a) "The Goodmen of Birinn" (Hughes), (b) "The Moon Cradle" (Hughes).
 8.55: Tenor solo—Mr. Eric Rishworth, "Cradle Of My Sorrows" (Schumann).
 8.59: Instrumental—Orchestra, "Fantasie" (Mozart arr. Ellwood).
 9: Weather report and announcements.
 9.11: Song and Pianoforte Recital by Miss Edith Harrry.
 Pianoforte solos, (a) "Waltz in E" (Chopin), (b) "Nocturne in F" (Chopin).
 Songs, (a) "Mary Magdalene" (Edith Harrry), (b) "Colette" (Edith Harrry).
 9.21: Instrumental—Orchestra, "Peer Gynt Suite" No. 1 (Grieg).
 9.31: Soprano solos—Mrs. Edris Spackman, (a) "The Canoe Song" (Mallinson), (b) "The Sun Whose Rays Are All Ablaze" (Sullivan).
 9.38: Cello—Miss Greta Jespersen, "Consolation" (Squire).
 9.42: Baritone solos—Mr. L. M. Assheton Harbord, (a) "Port of Many Ships", (b) "Trade Winds" (from "Three Salt Water Ballads" (Keel).
 9.48: Mezzo-soprano solos—Miss Beatrice Aydon, of Nelson (a) "Bird Songs at Eventide" (Coates), (b) "Five Little Piccaninnies" (Anthony).
 9.54: Humour—Mr. Barton Ginger, "The Day's Good Deed" (Thomas).
 10.1: Tone poem—Orchestra, "Zorahyda" (Svendsen).
 10.5: Contralto solos—Miss Nora Greene, (a) "Vale" (Kennedy Russell), (b) "Who's For Eldorado" (Lee).
 10.11: Tenor solos—Mr. Eric Rishworth, (a) "The Lotus Flower" (Schumann), (b) "The Far Off Land" (Schumann).
 10.16: Instrumental—Orchestra, "Blue Mazurka" (Lehar).
 10.26: Close down.

3YA, CHRISTCHURCH (306 METRES)—MONDAY, APRIL 8.

- 3.0 p.m.: Afternoon session—Selected studio items.
 4.25: Sports results to hand.
 4.30: Close down.
 6.0: Children's session conducted by "Scatterjoy."
 7.15: News session.
 7.30: Talk—Mr. Chas. Buckett, "How To Keep Fit."
 8.0: Chimes.
 Programme by Derry's Military Band, under the conductorship of Mr. J. Scott, and assisting artists.
 8.1: March—Band, "The Lone Eagle" (Cary).
 Polonaise—Band, "Polonaise" (Chopin).
 8.12: Male quartet—Beckenham Male Quartet, "Little Heather" (Robertson).
 8.19: Humour—Frank Crumit, "No News" or "What Killed the Dog?" (H.M.V. Record EA387).
 8.22: Instrumental trios—Christchurch Broadcasting Trio, (a) "Allegro Guisto," (b) "Andante Con Moto," (c) "Finale" ("Trio No. 1" Op. 380) (Bohm).
 8.32: Baritone solo—Mr. W. H. Odell, "Hatfield Bells" (Martin).
 8.36: Soprano solo—Miss Kathleen Chapple, "Golden Dancing Days" (Conningsby C' rke).
 8.40: Selection—Band, "A Waltz Dream" (Strauss).
 8.51: Tenor and baritone duet—Beckenham Duo, "The Garden of Happiness" (Wood).
 8.55: Male quartets—Beckenham Male Quartet, (a) "Evening Pastorale" (Shaw), (b) "Simple Simon" (Macy).
 9.3: Weather report.
 9.5: Lecturette—Mr. D. E. Parton, third of series of talks on "Tree Trimming" (under the auspices of the Christchurch Public Utilities Committee).
 9.20: Waltz—Band, "Luxembourg" (Lehar).
 9.26: Soprano solos—Miss Kathleen Chapple, (a) "None So Pretty" (Brahe), (b) "The Fairy Laundry" (Phillips).
 9.34: Bass solo and chorus—Mr. F. S. Jackson and Beckenham Quartet, "I Do Like To Be Beside the Sea-side" (Glover).
 9.36: Humour—Norman Long, "Under the Bazunka Tree" (Lee) (H.M.V. Record B2454).
 9.39: Instrumental trios—Christchurch Broadcasting Trio, (a) "Russian Valse" (Bridge), (b) "Hornpipe" (Bridge), (c) "March Militaire" (Bridge).
 9.47: Song melody—Band, "Sanctuary of the Heart" (Ketelbey).
 9.54: Male chorus—Beckenham Male Quartet, Topical Chorus (MS).
 9.59: March—Band, "The Captivator" (Williams).
 10.4: Close down.

4YA, DUNEDIN (463 METRES)—MONDAY, APRIL 8.

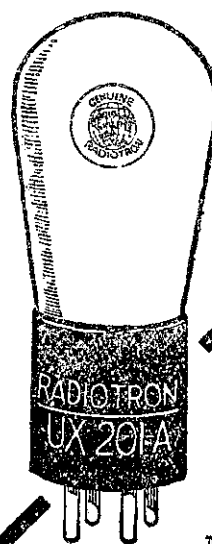
SILENT DAY.

Tuesday, April 9

1YA, AUCKLAND (333 METRES)—TUESDAY, APRIL 9.

- 3 p.m.: Afternoon session—Selected gramophone items.
 4.0: Literary selection by the Announcer.
 4.8: Further gramophone items.
 4.25: Sports results to hand.
 4.30: Close down.
 6.0: Children's session, conducted by Uncle George.
 7.15: Talk—Mr. Geo. Campbell, "Motoring."
 7.30: News and market reports—Book Review.
 8.0: Chimes.
 8.1: Relay—Overture, Majestic Theatre Orchestra, under the direction of Mr. Whiteford-Waugh.
 8.10: Baritone solo—Mr. Thomas Bradley, "Bird Songs at Eventide" (Coates).
 8.14: Contralto solo—Madame Irene Ainsley, "My Ships" (Barrett).
 8.18: Instrumental—Auckland Trio, "Selection from Operas of Offenbach."
 8.28: Talk—Mr. A. B. Chappell, "The Maori—His Food."
 8.43: Orchestra and Organ—International Concert Orchestra, "Tesoro Moi" (Becucci) (Zonophone Record EF15).
 Orchestral—Royal Albert Hall Orchestra, "Pomp and Circumstance" (in D) (Elgar) (H.M.V. Record D1102).
 8.51: Tenor solo—Mr. Jack Maddox, "My Dreams" (Tosti).
 8.55: Pianoforte solo—Mr. Eric Waters, "Polly" (Zamecnik).
 9.0: Weather report.
 9.2: Relay—Majestic Theatre Orchestra, Entr'acte.
 9.10: Soprano solo—Mrs. H. Milburn, "Solveig's Song" (Grieg).
 9.14: Instrumental—Auckland Trio, "Rose Marie Selections" (Stothart).
 9.24: Presentation of excerpts from "Merrie England" (German), produced under the direction of Madame Irene Ainsley.

(The story of "Merrie England" is laid in the glorious days of Queen Elizabeth, who, together with those famous personages of her reign, the Earl of Essex and Sir Walter Raleigh, appear in the opera, the scene of which is laid in the heart of mediaeval England, by the Thames near Windsor.)



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Cast.

Contralto	Madame Irene Ainsley
Soprano	Mrs. H. Millburn
Tenor	Mr. J. Maddox
Baritone	Mr. Thomas Bradley

Quartet, "Love is Meant to Make Us Glad."
 Ballad, "She Had a Letter from Her Love."
 Duet, "When True Love has found a Man."
 Baritone, "Yeoman of England."
 Chorus, "God Save Elizabeth."
 Instrumental—Auckland Trio, "Three Dale Dances" (No. 1) (Wood)
 (On Yorkshire Folk Tunes).
 Contralto, "O Peaceful England."
 Quartet, "It is a Tale of Robin Hood."
 Duet, "It is the Merry Month of May."
 Song, "Don Cupid hath a Garden."
 Instrumental—Auckland Trio, "Three Dale Dances" (Nos. 2 and 3)
 (Wood) (On Yorkshire Folk Tunes).
 Waltz song, soprano, "O Who Shall Say."
 "Quartet, "In England, Merrie England."
10.0: Close Down.

2YA, WELLINGTON (420 METRES)—TUESDAY, APRIL 9.

5 p.m.: Chimes of the G.P.O. clock.
8.1: Selected gramophone items.
4.30 and 4.55: Sporting results to hand.
5.0: Close down.
6.0: Children's session, conducted by Uncle Jim.
7.0: News session, market reports and sports results.
7.40: Lecturette—Representative, Agricultural Department, "For the Man on the Land."
8.0: Chimes of the G.P.O. clock.
8.1: Overture—Orchestra, "A Children's Overture" (Quilter).
8.12: Tenor—Mr. G. Austin Blackie, "Off in the Stilly Night" (traditional).
8.16: Piano—Miss Gladys Siefert, L.A.B., (a) "Impromptu B Flat" (Schubert); (b) "Scherzo B Minor" (Chopin).
8.23: Humour—Mr. Will McKeon, "Blood Orange" (Henry).
8.29: Bell solo with orchestra—Mr. L. Probert, "Echo des Bastion" (Kling).
 Violin solo with orchestra—Miss Ava Symons, "Reverie" (Vieuxtemps).
8.39: Popular song—Mrs. Mabel Jackson, "Lambie Love" (Vanderpool).
8.43: Saxophone solo—Rudy Wiedoeft, "Valse Mazanetta" (Wiedoeft) (Columbia Record 01176).
8.46: Tenor—Mr. G. Austin Blackie, "Molly Bawn" (Glover).
8.50: Instrumental—Orchestra, Repeat Number.
8.58: Weather report.
9.0: Dance suite—Orchestra, "Four Dances from 'The Rebel Maid'" (Phillips).
9.10: Humour—Mr. Will McKeon, "International Humour" (original).
9.17: Popular song—Mrs. Mabel Jackson, "When Love Comes Stealing" (Rapee and Pollock).
9.21: Musical comedy selection—Orchestra, "The Country Girl" (Monckton).
9.31: His Master's Voice Dance Programme:
 Overture—Merek Weber's Orchestra, "Vienna by Night" (Zomzak) (H.M.V. Record C1507).
 Foxtrot with vocal trio—Horace Heidt's Orchestra, "Golden Gate" (Johnson) (H.M.V. Record EA359).
 Foxtrot—Art Hickman's Orchestra, "Dream House" (Foxe) (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).
9.48: Tenor solo—Jno. 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).
10.1: 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" (Allan); (b) "Hilo Hawaiian March" (Zonophone Record 2992).
 Foxtrot—Rhythmic Eight, "So Tired" (Little) (Zonophone Record EE104).
10.11: Tenor solo—Maurice Gunsky, "With All Her Faults I Love Her Still" (Rosenfield) (Zonophone Record EE87).
 Wurlitzer organ solo—Jesse Crawford, "Dancing Tambourine" (Ponce) (H.M.V. Record EA301).
 Baritone solo—Maurice Elwin, "Just Give the Southland to Me" (Sissie) (Zonophone Record EE117).
10.21: Humour—John Henry and Blossom, "Joe Murgatroyd Says" (Henry) (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).
10.34: 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).
10.44: Male voices—The Revellers, "The Varsity Drag" (De Sylva) (H.M.V. Record EA332).
 Tenor with cinema organ—Gerald Griffin, "At the End of an Irish Moonbeam" (Golden) (Zonophone Record 2989).
 Scottish comedian—Sir Harry Lauder, "The Pirate" (Lauder) (Zonophone Record G075).
 Vocal trio—Dalhart, Robison and Hood, "Climbin' Up de Golden Stairs" (Golden) (H.M.V. Record EA332).
 Bass-Baritone—Peter Dawson, "Follow Me 'Ome" (Ward) (H.M.V. Record C1427).
11.0: Close down.

3YA, CHRISTCHURCH (306 METRES)—TUESDAY, APRIL 9.

SILENT DAY.

4YA, DUNEDIN (463 METRES)—TUESDAY, APRIL 9.

5 p.m.: Town Hall chimes.
8.1: Relay of instrumental music from Ritz.
4.25: Sporting results to hand.
4.30: Close down.
6.0: Children's session, conducted by Big Brother Bill.
7.15: News session.
7.30: Lecturette—Mr. R. W. Marshall, "Tourist Resorts."
8.0: Town Hall chimes.
 Concert by the St. Kilda Band, under conductorship of Mr. James Dixon, and assisting artists.
8.1: March—Band, "Dunedin" (Alford).
 Waltz—Band, "Dream of Delight" (Nicholls).
8.16: Contralto solo—Miss Helen Roy, "Sweet Melodies" (Brahms).
8.20: Recital—Miss Joyce Hould, "Spanish Waters" (Masefield).
8.25: Bass solos—Mr. Wilfred Kershaw, (a) "I Will Not Grieve" (Schumann); (b) "The Lute-Player" (Allittsen).
8.32: Selection—Band, "Memories of the Opera" (Rimmer).
8.46: Soprano solo—Miss Olga Wynne, "The Night Wind" (Farley).
8.50: Duet and chorus—Doris Vane and Harold Williams, "Only a Rose" (Friml).
 Solo and chorus—Harold Williams, "Song of the Vagabonds" (Columbia Record 01271).
3.58: March—Band, "Prince of Smiles" (Louka).
9.4: Weather report.
9.6: Duet—Misses Wynne and Roy, "The Angel" (Rubinstein).
9.10: Cornet solo—Band, "I Passed by Your Window" (Brahe).
 Selection—Band, "Maritana" (Wallace).
9.29: Bass solo—Mr. Wilfred Kershaw, "Il Lacerato" (Verdi).
9.34: Recitals—Miss Joyce Hould, (a) "Vive La France," (b) "Overheard on the Promenade."
9.41: Male quartet—Goodrich Silvertown Quartet, "Old Pals are the Best Pals After All" (Bates) (Columbia Record 01296).
9.44: Contralto solo—Miss Helen Roy, "St. Nicholas's Day in the Morning" (Martin).
9.48: Male quartet—Shannon Male Quartet, "Sidewalks of New York" (Lawlor) (Regal Record G20298).
 Solo and chorus—Virginia Perry, "My Hero" (Strauss) (Columbia Record 01173).
9.54: Intermezzo—Band, "Queen of Summer" (Powell).
9.58: Soprano solo—Miss Olga Wynne, "June is Calling" (Sanderson).
10.2: Organ solo—G. T. Pattman, "Polly" (Zamecnik) (Columbia Record 01144).
10.5: Duet—Misses Wynne and Roy, "Nocturne" (Chaminade).
10.8: March—Band, "Pirate King" (Greenwood).
10.13: Close down.

Wednesday, April 10**1YA, AUCKLAND (333 METRES)—WEDNESDAY, APRIL 10.**

8 p.m.: Afternoon session—Selected gramophone 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 and information session.
7.30: Market reports.
8.0: Chimes.
8.1: March—Salvation Army Congress Hall Band, "Glorious of the Combat" (Coles).
 Selection—Band, "Love Divine" (Jakaway).
8.14: Soprano solo—Mrs. L. Parry, "A Spirit Flower" (Tipton).
8.18: Cornet solo—Bandsman N. Goffin, "I Love Him Better" (Leidzen).
8.23: Selection—Band, "Army of the Brave" (Marshall).
8.32: Baritone solos—Mr. Frank Sutherland, (a) "The Wolf" (Shield); (b) "I Am Fate" (Hamblen).
8.40: Selection—Band, "American Melodies" (Broughton).
9.0: Weather report.

- 9.2: Soprano solos—Mrs. L. Parry, (a) "The Last Rose of Summer" (Old English), (b) "The Dove" (Clarke).
 9.10: Band, (a) "Beethoven," (b) "Stille Nacht" (Bohm).
 9.18: Baritone solo—Mr. F. Sutherland, "A Devonshire Wedding" (Phillips).
 9.23: Selection—Band, "Love's Manifestations" (Kitching).
 March—Band, "Triumph of Faith" (Marshall).
 9.35: A special reproduction of the opera "Rigoletto" (Verdi), by the La Scala Opera Company, Milan (H.M.V. Records C1483-6).

Cast:

Gilda (daughter of Rigoletto) Soprano
 Maddalena (Sparafucile's sister) Contralto
 The Duke of Mantua (a titled profligate) Tenor
 Rigoletto (hunchback jester to the Duke) Baritone
 Sparafucile (a hired assassin) Bass
 Count Monterone Baritone
 Count Ceprano Bass

10.3: Close down.

2YA, WELLINGTON (420 METRES)—WEDNESDAY, APRIL 10.

SILENT DAY.

3YA, CHRISTCHURCH (306 METRES)—WEDNESDAY, APRIL 10.

- 3.0 p.m.: Afternoon session—Selected gramophone items.
 4.25: Sports results to hand.
 4.30: Close down.
 6.0: Children's session conducted by Mother Hubbard and Big Brother.
 7.15: News session.
 7.30: Addition stock market reports.
 8.0: Chimes.
 8.1: Overture—Symphony Orchestra, "Oberon" (Weber) (H.M.V. Record D1311).
 8.9: Contralto solo—Miss Nellie Lowe, "Ye Powers That Dwell Below" (Gluck).
 8.13: Tenor solo—Mr. T. G. Rogers, "How Pure The Air" (Donizetti).
 8.16: Humour—Jno. Henry and Blossom, "Joe Murgatroyd Says" (Henry), (H.M.V. Record B2120).
 8.20: Ballet music—Orchestra, "La Source" (Delibes):
 1. Scarf Dance. 2. Love Scene. 3. Dance Circassienne.
 8.28: Soprano solo—Miss Hilda Hutt, "Wiegenlied" (Brahms).
 Vocal quartet—Dulcet Quartet, "The Message" (Caldicott).
 8.35: Orchestral—New Light Symphony Orchestra, "La Poupee Valsante" (Dancing Doll) (Poldini) (H.M.V. Record B2629).
 8.38: Male duet—Dulcet Duo, "I Wish to Tune My Quivering Lyre" (Watson).
 8.42: Recital—Miss Mavis Ritchie, "Castles in the Air" (West).
 8.47: Orchestral—Studio Orchestra under the conductorship of Mr. Harold Beck, (a) "Minuet" (Karganof), (b) "Allegretto" from "Symphony No. 4" (Dvorak).
 8.57: Baritone solo—Mr. A. G. Thompson, "Serenade" (Gounod).
 9.1: Weather report.
 9.3: Solo and chorus—Zonophone Light Opera Company, Vocal gems from "The Mikado" (Sullivan) (Zonophone Record A323).
 9.11: Soprano solo—Miss Hilda Hutt, "Blackbird's Song" (Cyril Scott).
 9.15: Orchestral—Studio Orchestra, (a) "Turkish March" (Beethoven), (b) "Ave Verum" (Mozart), (c) "La Danza" (Rossini).
 9.25: Tenor solo—Mr. T. G. Rogers, "Lorraine" (Sanderson).
 9.29: Vocal quartet—Dulcet Quartet, "The Curfew" (Thompson).
 9.33: Humorous recital—Miss Mavis Ritchie, "Mrs. Jollop on 'Hamlet'" (MS.).
 9.43: Orchestral—San Francisco Symphony Orchestra, "Caprice Viennois" (Kreisler) (H.M.V. Record D1272).
 9.47: Contralto solo—Miss Nellie Lowe, "A Last Year's Rose" (Quilter).
 Baritone solo—Mr. A. G. Thompson, "The Fortune Hunter" (Willeby).
 9.54: Chorus with orchestra—Light Opera Company, gems from "The Blue Mazurka" (Lehar) (H.M.V. Record EB11).
 10.0: Close down.

4YA, DUNEDIN (463 METRES)—WEDNESDAY, APRIL 10.

- 7 p.m.: Town Hall chimes.
 7.1: Request gramophone items.
 7.40: News session.
 8.0: Town Hall chimes.
 8.1: Overture—Columbia Symphony Orchestra, "Poet and Peasant" (Suppe) (Columbia Record 02618).
 8.9: Light songs—Miss Betty Roberts, (a) "Touch of a Woman's Hand" (Hirsch), (b) "If You Look in Her Eyes" (Hirsch).
 8.16: Scottish humour—Mr. J. A. Paterson, "The Egg" (Newmann).
 8.20: Tenor solo—Charles Hackett, "A Brown Bird Singing" (Haydn Wood) (Columbia Record 03545).
 Saxophone solo—Rudy Wiedoeft, "La Cinquantaine" (arr. Wiedoeft) (Columbia Record 4037).
 8.26: Presentation of the pantomime "Bluebeard" (Bobbed) by "The Mummies."
 8.56: Soprano solo—Gladys Moncrieff, "Huguette" (Friml) (Columbia Record 01302).
 Musical idyll—H.M. Grenadier Guards, "The Smithy in the Woods" (Michaelis) (Columbia Record 4111).
 9.2: Weather report.
 9.4: March medley—H.M. Grenadier Guards, "Martial Moments" (arr. Winter) (Columbia Record 9065).
 Male quartet—Goodrich Silvertown Quartet, "Under the Clover Moon" (Healy) (Columbia Record 01192).

- 9.11: Light song—Miss Betty Roberts, "That Old Irish Mother of Mine" (Von Tilzer).
 9.15: Scottish humour—Mr. J. A. Paterson, (a) "I'm Eighty in the Morning" (MacFarlane), (b) "When the Bloom is on the Heather" (Carlton).
 9.22: Soprano solo—Gladys Moncrieff, "Some Day" (Friml) (Columbia Record 01302).
 9.25: Orchestral—Columbia Symphony Orchestra, "March of the Toys" (Herbert) (Columbia Record 02651).
 9.29: Waltz—Eddie Thomas's Collegians, "Beautiful Ohio" (Earl) (Columbia Record 02651).
 9.33: "His Master's Voice" Dance Programme:
 Waltz—International Concert Orchestra, "Blue Danube" (Strauss) (Zonophone Record EF21).
 Foxtrot with vocal chorus—Shilkret's Orchestra, "Flower of Love" (Dreyer) (H.M.V. Record EA431).
 Foxtrot with vocal refrain—Shilkret's Orchestra, "Dancing Shadows" (Golden) (H.M.V. Record EA367).
 Waltz—Paul Whiteman's Orchestra, "Cheerful Beerie Be" (Wayne) (H.M.V. Record EA396).
 9.46: Tenor solo—Franklyn Baur, "Just Across the Street from Heaven" (Newman) (Zonophone Record EE107).
 Saxophone solo—Rudy Wiedoeft, "Rubenola" (Wiedoeft) (Zonophone Record EE119).
 Tango Argentino—International Novelty Orchestra, "Y Como Le Va?" (Valverde) (H.M.V. Record EA364).
 Wurlitzer organ solo—Jesse Crawford, "The Dance of the Blue Danube" (Fisher) (H.M.V. Record EA404).
 9.58: Vocal duet—Maurice and Sidney, "Toy-Town Artillery" (Lynton) (Zonophone Record 5161).
 Dance orchestra—Shilkret's Rhythm Melodists, "Dolly Dimples" (Alter) (H.M.V. Record EA336).
 10.4: Baritone solo—John Brownlee, "Sirs! Your Toast" (Bizet) (H.M.V. Record D1396).
 Wurlitzer organ solo—Jesse Crawford, "I Can't Do Without You" (Berlin) (H.M.V. Record EA404).
 Waltz—Wurlitzer organ, Charles W. Saxby, "Janette" (Nicholls) (Zonophone Record 5094).
 Yale Blues—Rio Grand Tango Band, "A Blue Serenade" (Lytell) (H.M.V. Record B5355).
 10.18: Tenor with kinema organ—Gerald Griffin, "My Irish Song of Songs" (Sullivan) (Zonophone Record 2989).
 Wurlitzer organ solo—Jesse Crawford, "King for a Day" (Lewis) (H.M.V. Record EA425).
 Foxtrot with vocal refrain—Nat Shilkret and Victor Orchestra, "Hallelujah" (Robin) (H.M.V. Record EA253).
 Foxtrot with vocal refrain—Waring's Pennsylvanians, "What Do You Say?" (Yellen) (H.M.V. Record EA340).
 10.31: Male quartet—De Reszke Singers, "My Lady Chlo" (Leighton) (H.M.V. Record E482).
 Foxtrot—Nat Shilkret's Orchestra, "Rio Rita" (McCarthy) (H.M.V. Record EA315).
 10.44: Male quartet—De Reszke Singers, "Absent" (Metcalf) (H.M.V. Record E432).
 Duet with violin and guitar—Dalhart and Robison, "Oh, Suzannah" (Foster) (H.M.V. Record EA309).
 Hawaiian—Ferera and Paaluh, "Hawaiian Waltz Medley" (traditional) (H.M.V. Record B2369).

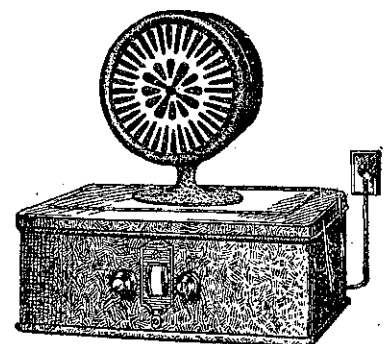


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Barn dance—Bert Firman's Dance Orchestra, "My Lady Dainty" (Hesse) (Zonophone 5118).

Waltz—The Troubadours, "La Golondrina" (The Swallow) (H.M.V. Record MAB49).

Schottische—International Novelty Quartet, "Lena" (Mewes) (Zonophone Record EE07).

11.0: Close down.

Thursday, April 11

1YA, AUCKLAND (333 METRES)—THURSDAY, APRIL 11.

3.0 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 Peter Pan.

7.15: Market reports.

8.0: Chimes.

8.1: Overture—Orchestra, "Poet and Peasant" (Suppe).

8.11: Vocal trios—Celeste Trio, (a) "Three Little Maids From School" ("The Mikado") (Sullivan), (b) "The Sun Whose Rays" (Rolf), (c) "The Sundown Sea" (Steckel).

8.21: Novelty—Potted Panto Players, "Sinbad" (Rome).

8.51: Instrumental—Orchestra, (a) "Serenade" (from "Les Millions d'Arlequin") (Drigo), (b) "The Little Lead Soldiers" (Pierne).

8.59: Vocal—Celeste Trio, (a) "Love Is a Plaintive Song" (Sullivan), (b) "Love Was Once a Little Boy" (Old English).

9.5: Weather report.

9.7: Selection—Orchestra, "Pirates of Penzance" (Sullivan).

9.15: Vocal—Celeste Trio, (a) "I Know Not Why" (Bingham), (b) "Rain" (Curran).

9.22: Novelty—Orchestra "Musical Switch" (Alford).

9.32: "Columbia" dance programme.

March—H.M. Grenadier Guards Band, "Twist And Twirl" (Kottum) (Columbia 0987).

Foxtrot with vocal chorus—Denza Dance Band, "Dance of the Blue Danube" (Fisher) (Columbia 01151).

Foxtrot—Biltmore Hotel Orchestra, "Sweet Sue—Just You" (Young) (Columbia 01249).

Foxtrot with vocal refrain—Paul Whiteman's Orchestra, "Just a Sweetheart" (Dreyer) (Columbia 07015).

9.40: Tenor solo—Alfred O'Shea, "Love's Garden of Roses" (Haydn Wood) (Columbia 04117).

Vocal duet—Layton and Johnstone, "Because My Baby Don't Mean Maybe Now" (Donaldson) (Columbia 01339).

Pianoforte duet—Constance Nering and Muriel Pollack, "High Hat" (Foxtrot) (Alter) (Columbia 01224).

Foxtrot—Picadilly Revels Band, "Dolores" (Kassal) (Columbia 01157).

Waltz with vocal refrain—Paul Whiteman's Orchestra, "Where Is The Song of Songs For Me?" (Berlin) (Columbia 07015).

9.57: Soprano and male quartet—Norah Blaney and The Ramblers, "Just Like Darby and Joan" (Leslie) (Columbia 01170).

Piano solo—Gil Dech, "Sometime's I'm Happy" (Youmans) (Columbia 01205).

Foxtrot with vocal refrain—Paul Whiteman's Orchestra, "Roses of Yesterday" (Berlin) (Columbia 07014).

Novelty foxtrot—Debroy Somers' Band, "Laughing Marionette" (Collins) (Columbia 01341).

Waltz with vocal refrain—Paul Whiteman's Orchestra, "The Sidewalks of New York" (Lawlor) (Columbia 07014).

10.14: Tenor with orchestra—Alfred O'Shea, "Love, Here Is My Heart" (Ross) (Columbia 03589).

Xylo-Rimba Orchestra, "Along Miami Shore" (Waltz) (Regal G20328).

Marimba Orchestra—Rio Marimba Orchestra, "My Isle of Golden Dreams" (Blauvuss) (Columbia 02685).

10.24: Humour—Flotsam and Jetsam, "Optimist and Pessimist" (Hillman) (Columbia 0995).

Hawaiian—South Sea Islanders, "Dreamy Hilo Bay" (Clark), (Columbia 01163).

Hawaiian Selections—King's Hawaiian Players, "Hilo March" (Berger) (Columbia 01226).

Pipe organ solo, with vocal chorus—Milton Charles, "Are You Happy?" (Ager) (Columbia 01184).

10.38: Tenor solo—Chas. Hackett, "The World Is Waiting For the Sunrise" (Lockhart) (Columbia 03596).

Vocal solo—Vaughan de Leath, "I Just Roll Along Having My Ups and Downs" (Columbia 01136).

Waltz—Xylo-Rimba Orchestra, "My Sweetheart" (Nelson) (Regal G20328).

Vocal—Vaughan de Leath, "Watching For the Boogie Man" (Johnson) (Columbia 01136).

10.51: Piano-acordion solo—Guido Deiro, "Toselli's Serenade" (Arrgd. Deiro) (Columbia 01168).

Vocal duet—Layton and Johnstone, "Good News—Varsity Drag" (de Sylva) (Columbia 01308).

Vocal duet—Jack Lumsdaine, Len Maurice, "Good-Night" (Wood), (Columbia 01191).

11.0: Close down.

2YA, WELLINGTON (420 METRES)—THURSDAY, APRIL 11.

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 Len.

7.0: News session, market reports and sports results.

7.40: Lecture—Miss M. S. Christmas, Voluntary Organiser, Wellington Federation Women's Institutes, "Women's Institutes—What Membership Means."

8.0: Chimes of the General Post Office clock.

8.1: March—Wellington Municipal Tramways Band, "Machine Gun Guards" (Marechal).

Overture—Band, "Morning, Noon and Night" (Von Suppe).

8.12: Soprano—Miss Nita Hopkins, "My Mother Bids Me Bind My Hair" (Haydn).

8.16: Bass-baritone solo—Mr. Wilbur Davies, "The Wheel Tapper's Song" (Charles).

8.20: Selection—Band, "Katja the Dancer" (Gilbert).

8.28: Sketch—Miss Rose Carte and partner, "Which Is It?" (Moore).

8.35: Xylophone solo—Rudy Starita, "Dancing Tambourine" (Polla) (Regal Record G20305).

8.38: Contralto solo—Miss Edith Buckmaster, "Country Folk" (Brahms).

8.42: Tenor—Mr. Will Hancock, "There's A Song Down Every Roadway" (Wood).

8.45: Hawaiian selections—Hawaiian Guitar, Banjo and Ukulele Trio, (a) "O So E Mio" (di Capua), (b) "My Hawaii" (Lewis), (Columbia Record 3606).

8.51: Romanza—Band, "Era Un Re" (Wallace).

Characteristic—Band, "March of the Mountain Gnomes" (Ellenberg).

9.0: Weather report.

9.2: Duet and chorus—Doris Vane and Harold Williams, "Only A Rose" (Friml).

Solo and chorus—Harold Williams, "Song of the Vagabonds" (Friml), (Columbia Record 01271).

9.8: Soprano solo—Miss Nita Hopkins, (a) "A Request" (Finden), (b) "The Wind Song" (Rogers).

9.14: Bass-baritone solo—Mr. Wilbur Davies, (a) "The Trumpeter" (Dix), (b) "Mate o' Mine" (Elliott).

9.21: Waltz—Band, "The Merry Widow" (Douglas).

Selection—Band "My Son John" (Strauss).

9.35: Sketch—Miss Rose Carte and partner, "The Reason Why" (Pain).

9.42: Contralto solo—Miss Edith Buckmaster, (a) "Morning" (Speaks), (b) "Trees" (Rasbach).

9.48: Tenor solo—Mr. Will Hancock, (a) "I Heard You Go By" (Wood), (b) "Rose of My Heart" (Logan).

9.53: Foxtrot—Band, "I'd Never Be Happy Until I'd Got You" (Leslie).

March—Band, "Knight of the Road" (Rimmer).

10.0: Close down.

3YA, CHRISTCHURCH (306 METRES)—THURSDAY, APRIL 11.

3.0 p.m.: Afternoon session—Selected gramophone items.

4.25: Sports results to hand.

4.30: Close down.

6.0: Children's session conducted by Uncle John.

7.15: News session.

7.30: Talk—Miss B. Tossman—Fourth of a series of talks on "Russian Furs."

8.0: Chimes.

Studio programme by the Christchurch Harmonic Society.

8.1: Baritone solo—Mr. W. H. Spratt, "Give a Man a Horse He Can Ride" (O'Hara).

Vocal quartet—Misses Duff and Spiller and Messrs. Quane and Spratt, "All In An April Evening" (MS).

8.8: Violin-cello solo—Mr. Harold Beck, "Andante Cantabile" (Francatelli).

8.12: Contralto solo—Miss Dorothy Spiller, "Dream Voyage" (Franz).

Tenor solo—Mr. Douglas Suckling, "A Spirit Flower" (Tipton).

8.19: Recital—Miss Winifred Smith, "Bath Time" (Graham).

8.23: Vocal quartet—Misses Duff and Spiller and Messrs. Quane and Spratt, "In This Hour of Softened Splendour" (Pinsuti).

Soprano solo—Miss Jessie Duff, "The Little Damsel" (Novello).

8.30: Instrumental Trios—Christchurch Broadcasting Trio, (a) "Rondo Alla Turca" (Mozart), (b) "Rosamunde Entr'acte" (Schubert).

8.35: Bass solo—Mr. Finlay Robb, "The Bitterness of Death" (Dunn).

Vocal duet—Misses Belson and Martin, "Still As The Night" (Bohm).

8.42: Recital—Miss Winifred Smith, "Bannerman of the Dandernong" (Bush Ballads) (Lawson).

8.47: Tenor solo—Mr. L. C. Quane, "I Did Not Know" (Trottere).

8.51: Contralto solo—Miss Vera Martin, "June Music" (Trent).

8.55: Valedictory address.

9.5: Weather report.

9.13: Soprano solos—Miss Marjorie Nelson, (a) "Men From The Fields" (Hughes), (b) "Wings of Night" (Namodel).

Baritone solo—Mr. W. J. Spratt, "Tally Ho" (Leoni).

9.23: Recital—Miss Winifred Smith, "Breakfast" (Graham).

9.28: Vocal quartet—Misses Duff and Spiller and Messrs. Spratt and Quane, "An Evening's Pastoral" (Shaw).

Contralto solo—Miss Dorothy Spiller, "The Green Hat" (Schumann).

9.35: Violin-cello solo—Mr. Harold Beck, "Orientale" (Cui).

9.39: Tenor solo—Mr. L. C. Quane, "Give Me Youth and a Day" (Drummond).

Soprano solo—Miss Jessie Duff "Butterfly" (Kavanagh).

- 9.46: Song Cycle—"Flora's Holiday" (Lane Wilson) (soloists Misses Nelson and Martin and Messrs. Robb and Suckling).
10.0: Close down.

4YA, DUNEDIN (463 METRES)—THURSDAY, APRIL 11.

SILENT DAY.

Friday, April 12

1YA, AUCKLAND (333 METRES)—FRIDAY, APRIL 12.

- 3.0 p.m.: Afternoon session—Selected 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 Nod and Aunt Jean.
7.15: News and market reports.
8.0: Chimes.
9.1:

AN EVENING WITH BRAHMS.

- Orchestral—London Symphony Orchestra, "Symphony No. 1 in C Minor" (Brahms) (1st Movement) (H.M.V. Records D1454/5).
8.13: Soprano solo—Madame Mary Towsey, "True Love" (Brahms).
8.17: Baritone solo—Mr. John Bree, "How Fair Art Thou" (Brahms).
8.21: Instrumental trio—Auckland Trio, "Intermezzo" Op. 17, No. 1 (Brahms).
8.31: Soprano solo—Miss Mollie Atkinson, "The May Night" (Brahms).
8.35: Recitals—Mr. J. F. Montague, (a) "The Exile's Return"; (b) "The Novel Writer."
8.44: Pianoforte solo—Mr. Cyril Towsey, "Andante" from "Sonata in F Minor" (Brahms):
(Synopsis: The shadows of even fall: 'tis clear mid-June, and twilight. The pale moon streams mildly lustrous from the heaven above on two blest souls drow'd with the love of love.)
8.49: Contralto solo—Miss Edna Peace, "Sapphic Ode" (Brahms).
8.53: Orchestral—London Symphony Orchestra, "Symphony No. 1 in C Minor" (Brahms) (2nd Movement) (H.M.V. Records D1455 and D1456).
9.1: Weather report.
9.3: Tenor solos—Mr. John McDougall, (a) "Sunday" (Brahms), (b) "Love Song" (Brahms).
9.9: Orchestral—London Symphony Orchestra, "Symphony No. 1 in C Minor" (Brahms), (3rd Movement) (H.M.V. Record D1456).
9.13: Soprano solos—Madame Mary Towsey, (a) "In Summer Fields" (Brahms), (b) "Love Is Forever" (Brahms).
9.19: Violin solos—Miss Ina Bosworth, (a) "Cradle Song" (Brahms), (b) "Waltz in A Major" (Brahms).
9.23: Baritone solo—Mr. John Bree, "The Message" (Brahms).
9.27: Recital—Mr. J. F. Montague, "Thomas Atkins."
9.33: Instrumental trio—Auckland Trio, "Three Hungarian Dances" (Brahms).
9.43: Soprano solos—Miss M. Atkinson, (a) "The Forge" (Brahms); (b) "The Vain Suit" (Brahms).
9.49: Vocal quartet—Madame Mary Towsey's Quartet, "Lullaby" (Brahms).
9.53: Orchestral—London Symphony Orchestra, "Symphony No. 1 in C Minor" (4th Movement) (H.M.V. Records D1457/8).
10.9: Close down.

2YA, WELLINGTON (420 METRES)—FRIDAY, APRIL 12.

- 3 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 Big Brother Jack and Uncle Stewart.
7.9: News session, market reports, and sports results.
8.0: Chimes of the G.P.O. clock.
8.1: Overture—Orchestra, "Finlandia" (Sibelius).
8.10: Soprano solo—Mrs. W. Fraser Morrish, "Come e Bello" (Lucrezia Borgia) (Donizetti).
8.14: Instrumental trio—Kriesler, Kriesler, and Raucheisen; (a) "Syncopation" (Kriesler), (H.M.V. Record DA961); (b) "March Miniature Viennoise" (Kriesler).
8.20: Baritone solo with orchestral accompaniment, recitative and aria, "I Rage, I Melt, I Burn" (Handel); "O Ruddier than the Cherry" ("Acis and Galatea") (Handel).
8.25: Recital—Mr. Cedric Gardiner, "The Grave of a Hundred Head" (Kipling).
8.31: Grand opera selection—Orchestra, "The Masked Ball" (Verdi).
8.41: Contralto solo—Mr. P. Ramsey, "My Heart is Weary" ("Nadeshda") (Goring Thomas).
8.45: Tenor solo—Mr. Edwin Dennis, "Una Furtiva Lagrima" ("Elixir of Love") (Donizetti).
8.49: Instrumental—Orchestra, repeat number.
8.57: Soprano solo—Mrs. W. Fraser Morrish, recitative and aria, "Far Great-er in His Lowly State" ("La Reine de Saba") (Gounod).
9.1: Weather report.
9.3: Baritone solo with orchestral accompaniment. "The Toreador Song" ("Carmen"). (Bizet),

- 9.8: Humour—Mr. Cedric Gardiner, "That Ain't All."
9.14: Instrumental—Orchestra, (a) "Serenade" (from "Eine Kleine Nachtmusik") (Mozart); (b) "Rigaudon" (Raff); (c) Piano and strings, "Tarantelle" (Raff).
9.25: Contralto solo—Mrs. P. Ramsey, "When All Was Young" ("Faust") (Gounod).
9.29: Tenor solo—Mr. Edwin Dennis, "A Song of Thanksgiving" (Allitsen).
9.33: Musical comedy selection—Orchestra, "Haddon Hall" (Sullivan).
9.43: Presentation of the opera "Rigoletto" (Verdi), Act 1, Scene 1, and part Scene 2. (H.M.V. Record C1483-6).

Cast:

Gilda, daughter of Rigoletto—Soprano
Maddalena, Sparafucile's sister—Contralto
The Duke, a titled profligate—Tenor.
Rigoletto, a hunchback jester to the Duke—Baritone.
Sparafucile, a hired assassin—Bass.
Count Monterone—Baritone.
Count Ceprano—Bass.

(Synopsis: "Rigoletto" was first produced in Venice in 1851, and its composer died fifty years later. The plot is based upon a play by Victor Hugo, "Le Roi s'amuse" (The King's Diversion). Though in the older discontinuous style (with set songs, etc.), it is one of the greatest operas. It possesses beauties of melody, harmony, and orchestration, and subtleties in the presentation of character. The opera established the reputation of Verdi. It is very Italian in its type of tune, and in its expression of passion. The portion of the opera to be presented will comprise Act I, Scene 1, and portion of Scene 2.

The scene and period of the plot is Mantua, Italy, in the sixteenth century. The Duke of Mantua is a Don Juan, against whose attentions no woman is safe. He is indebted for help in his schemes to his jester, Rigoletto. The courtiers naturally have much reason to hate both Duke and jester. In the opening instalment of this play, as covered by this programme, Count Monterone is introduced. He is angry on account of wrongs done to his daughter. Rigoletto jeers at Monterone, who utters a parent's curse upon both Duke and jester. The Duke is merely amused, but the jester is terrified. The courtiers plan revenge on Rigoletto.

The solos include the well-known "Questo o quella," sung by the Duke; Rigoletto's flippant "Oh! le parli" as he steps between the Duke and Count Monterone; Rigoletto's monologue, "We are Equal," after meeting the assassin Sparafucile; and Rigoletto's pathetic duet with his daughter, "Recall not the Past." The second instalment of the play, telling how the courtiers abducted Gilda, will be given next Tuesday).

10.5: Close down.

3YA, CHRISTCHURCH (306 METRES)—FRIDAY, APRIL 12.

- 3 p.m.: Afternoon session—Selected gramophone items.
4.25: Sports results to hand.
4.30: Close down.
6.0: Children's hour conducted by "Storyman."
7.15: News session.
8.0: Chimes.
8.1: Rebroadcast of 2YA, Wellington (conditions permitting).
8.10: Mixed trio—Radiolian Trio, (a) "I Like It," (b) "Oh, How Warm it is To-day" ("Kissing Time") (Caryll).
8.14: Tenor solo—Mr. Greg. Russell, "An Evening Song" (Blumenthal).
8.18: Violin solo—Miss Irene Morris, "Gondoliera" (Frank Bridge).
8.22: Soprano and tenor duet—Radiolian Duo, "Ring o' Roses" (from "Dol-lar Princess") (Fall).
8.26: Popular song—Mr. Charles Lawrence, "Little Mother" (Rapee).
8.30: Humour—John Henry and Blossom, "A Curtain Lecture" (Henry) (H.M.V. Record B2120).
8.33: Instrumental—Broadcasting Trio, (a) "Rondo" (Pleyel), (b) "Presto" (Lalo).
8.41: Soprano solo—Mrs. Claris Shaw, "Go Down to Kew in Lilac-Time" (Peel).
8.45: Balalaika Orchestra—Kirilloff's Balalaika Orchestra, "Shining Moon" (Russian folk song) (H.M.V. Record BA48).
8.48: Bass solo—Mr. W. J. Richards, "Simon" Grant.
8.52: Tenor solos—Mr. Greg. Russell, (a) "The Devout Lover" (Witte), (b) "Passing By" (Purcell).
8.58: Soprano and bass duet—Radiola Duo, "Rose of My Heart" (Lohr).
9.2: Weather report.
9.4: Soprano solo—Mrs. Claris Shaw, "A Heart that's Free" (Robyns).
9.7: Violin solo—Miss Irene Morris, "Tempo di Minuetto" (Pugnani—Kriesler).
9.11: Vocal mixed trio—Radiolian Trio, "Now the Twilight" (Pattison).
9.14: Humour—Will Gardner, "That's Another One Gone" (Darewski) (Zonophone Record 5079).
9.17: Instrumental—Broadcasting Trio, (a) "Cantabile from 'Samson et Dalila'" (Saint-Saens), (b) "Humoresque" (Widor).
9.26: Popular songs—Mr. Charles Lawrence, (a) "Mammy's Little Coal-Black Rose" (Egan), (b) "I'm Ticked to Death I'm Single" (Gideon).
9.33: Bass solos—Mr. W. J. Richards, (a) "Under the Hammer" (Arundale), (b) "Ma Little Banjo" (Dichmont).

9.38: "His Master's Voice" Dance Programme:

Military Band—H.M. Coldstream Guards, "Poet and Peasant" Overture (Suppe) (H.M.V. Record C1315).

Foxtrot with vocal chorus—Henry Busse's Orchestra, "One Step to Heaven" (Klages) (H.M.V. Record EA437).

Foxtrot—Arcadians Dance Orchestra, "There's Something about a Rose" (Fain) (Zonophone Record 5169).

Waltz—The Troubadours, "Diane" (Rapee) (H.M.V. Record EA269).

9.57: Duet with violin, banjo, guitar, and harmonica—Dalhart and Robisin, "My Blue Mountain Home" (Robison) (H.M.V. Record EA295).

Jazz piano solo—Pauline Alpert, "The Dancing Tambourine" (Ponce) (Zonophone Record EE98).

Foxtrot—Arcadians Dance Orchestra, "Chilly-Pom-Pom-Pee" (Bryan) (Zonophone Record 5169).

Foxtrot—Henry Busse's Orchestra, "How About It?" (Klages) (H.M.V. Record EA437).

10.10: Humour—Norman Long, "Under the Bazunka Tree" (H.M.V. Record B2454).

Wurlitzer organ solo—Jesse Crawford, "High Hat" (Alter) (H.M.V. Record EA426).

Foxtrot with vocal refrain—George Olsen and His Music, "Old Man Sunshine" (Dixon) (H.M.V. Record EA422).

Foxtrot with vocal chorus—George Olsen and His Music, "Doin' the Raccoon" (Klages) (H.M.V. Record EA446).

Foxtrot—Louisiana Sugar Babies, "Persian Rag" (Kahn) (H.M.V. Record EA397).

10.22: Tenor with orchestra—John McCormack, "Somewhere a Voice is Calling" (Tate) (H.M.V. Record DA914).

Waltz—Hilo Hawaiian Orchestra, "Kawaihan Waltz" (Kealakai) (H.M.V. Record EA397).

Foxtrot with vocal chorus—Shilkret's Orchestra, "Baby's Blue" (Hupfeld) (H.M.V. Record EA422).

Foxtrot with vocal refrain—Statler Pennsylvanians, "It Goes Like This" (Caesar) (H.M.V. Record EA446).

10.33: Bass-Baritone solo—Peter Dawson, "Now Your Days of Philandering are Over" (Mozart) (H.M.V. Record C1401).

Violin with cinema organ—Elsie Southgate, "Rose in the Bud" (Forster) (Zonophone Record 5109).

Foxtrot—Nat Shilkret's Orchestra, "Nagasaki" (Dixon) (H.M.V. Record EA412).

Guitar and piano—Roy Smock and Art Kahn, "Itchin' Fingers" (Robison) (Zonophone Record EE119).

Waltz—Nat Shilkret's Orchestra, "Till We Meet Again" (Egan) (H.M.V. Record EA412).

10.50: Whispering Voices—Devonshire Restaurant Dance Band, "At the End of an Irish Moonbeam" (Golden) (Zonophone Record EES4).

10.54: Community Lancers—Bert Firman's Dance Orchestra, "Figures 1, 2, 3, and 4" (Zonophone Record 5117).

Community Lancers, "Figure 5" (Zonophone Record 5118).

11.3: Close down.

4YA, DUNEDIN (463 METRES)—FRIDAY, APRIL 12.

3 p.m.: Town Hall chimes.

3.1: Gramophone items.

4.25: Sporting results.

4.30: Close down.

6.0: Children's session conducted by Aunt Sheila and Big Brother Bill.

7.15: News session.

8.0: Town Hall chimes.

8.1: Baritone solo—Mr. F. M. Tuohy, "The King's Minstrel" (Pinsuti).

8.13: Instrumental—Broadcasting Trio, (a) "Marche Miniature Viennoise" (Kreisler), (b) "Scherzo" (Schubert).

8.23: Monologue—Milton Hayes, "Meanderings of Monty—Monty Attends a Board Meeting" (Hayes) (Columbia Record 01106).

8.29: 'Cello solos—Mr. P. J. Palmer, (a) "Melodie Arabe" (Glazounov), (b) "Idylle" (Squire).

8.39: Presentation of "The Pagoda of Flowers" (Woodforde-Finden) by the 4YA Harmonists:

Soprano Miss Mae Matheson

Mezzo-Soprano Miss Mollie Andrews

Tenor Mr. H. A. Johnston

Baritone Mr. F. M. Tuohy

9.9: Weather report.

9.11: Violin solo—Miss Eva Judd, "Ballet Music—Rosamunde" (Schubert—Kreisler).

9.15: Mezzo-Soprano solos—Miss Mollie Andrews, (a) "Dreaming of Home" (Besly), (b) "The Road to the Isles."

9.21: Pianoforte solos—Mrs. Ernest Drake, (a) "Lento," (b) "Danse Negre" (from Two Pierrot Pieces) (Cyril Scott).

9.27: Duet with orchestra—Lombardi and Galeffi, "Il Trovatore—Duet, Act 4" (Verdi) (Columbia Record 04224).

9.35: Orchestral—New Queen's Hall Light Orchestra, "Peer Gynt Suite" Grieg: (1) Morning; (2) Death of Ase; (3) Anitra's Dance; (4) Dance of the Imps; (5) Solveig's Song (Columbia Records L1516-7).

9.51: Tenor solos—Mr. H. A. Johnston, (a) "O Ship of My Delight" (Phillips), (b) "I Wept, Beloved" (Hue).

9.58: Violin solo—Miss Eva Judd, "Romance" (Ernsfeld).

10.3: Soprano solo—Miss Mae Matheson, "By the Waters of Minnetonka" (Lieurance).

10.7: Instrumental—Broadcasting Trio, "Ballet Music No. 3" ("Faust"—Gounod).

10.12: Close down.

Saturday, April 13

1YA, AUCKLAND (333 METRES)—SATURDAY, APRIL 13.

3.0 p.m.: Afternoon session—Selected gramophone 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 Cinderella.

7.15: News and information session.

7.30: Market reports and sports results.

8.0: Chimes.

8.1: Overture—Orchestra, "Pique Dame" (Suppe).

8.11: Vocal Trio—The Snappy Three, (a) "Good Little, Bad Little You" (Green), (b) "Mary Ann" (Silver).

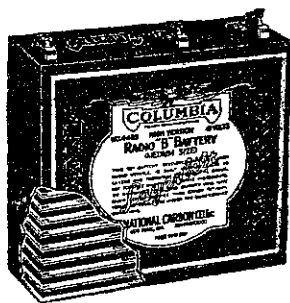
8.18: Saxophone solo—Rudy Wiefcoft, "Saxophon" (Wiedcoft) (Columbia Record 4037).

8.22: Baritone solo—Mr. Stan. Pritchard, "Homing" (Del Reigo).

8.26: Humour—Miss Maisie Carte-Lloyd, "Burton's Curtains."

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- 8.32: Cello solo with orchestral accompaniment—Orchestra, "Prelude and Claire De Lune" (Massenet).
 Y Orchestral—Orchestra, "Caprice" (Moszkowski).
 8.40: Contralto solo—Mrs. B. Jellard, "Break o' Day" (Sanderson).
 8.44: Instrumental Trios—Kreisler, Kreisler and Rauchslein, (a) "Syncopation" (Kreisler), (b) "Marche Minature Viennoise" (Kreisler) (H.M.V. Record DA961).
 8.51: Vocal Trio—The Snappy Three, (a) "A Kiss Before the Dawn" (Perkins), (b) "Jazz Piano Solo," (c) "Side By Side" (Brown).
 9.0: Weather report.
 9.2: Ballet music—Orchestra, "Faust Ballet Music" (Gounod).
 9.12: Humour—Miss Maisie Carte-Lloyd, (a) "Man," (b) "It Was His Dog."
 9.20: Saxophone Solo—Rudy Wiedoeft, "Rubenola" (Wiedoeft) (Zonophone Record EE119).
 9.24: Baritone solo—Mr. S. Pritchard, (a) "The Stars Have Eyes" (Manna-Lucca), (b) "Big Brown Bear" (Del Reigo).
 9.32: Hawaiian selections—Hilo Hawaiian Orchestra, (a) "Hawaiian Sunset" (Vandersloot), (b) "Sweet Hawaiian Dream" (Coleman) (H.M.V. Record B2328).
 9.38: Contralto solos—Mrs. B. Jellard, (a) "Sincerity" (Clarke), (b) "Slave Song" (Del Reigo).
 9.46: Novelty—Orchestra and Vocalists, "Americana" (Thurman).
 1. The Tiger's Tail.
 2. When Malindy Sings.
 3. Water-Melon Fete.
 9.55: Chorus with Orchestra, Light Opera Company, "Hit the Deck" (Vocem gems) (Youmans) (H.M.V. Record C1433).
 10.3: Band—American Legion Band, "March Salutation" (Seitz) (Zonophone Record EE74).
 Foxtrot—Nat Shilkret's Orchestra, "Fascinating Vamp" (Nussbaum) (H.M.V. Record EA367).
 Foxtrot—Nat Shilkret's Orchestra, "What's The Reason?" (Atteridge) (H.M.V. Record EA378).
 10.13: Tenor solo—Maurice Gunsky, "Lay My Head Beneath a Rose" (Talkenstein) (Zonophone Record EE17).
 10.16: Foxtrot—Coon Bander's Orchestra, "Ready For The River" (Kahn) (H.M.V. Record EA378).
 Foxtrot—Paul Whiteman's Orchestra, "It Was The Dawn of Love" (Davis) (H.M.V. Record EA381).
 Waltz—Rhythmic Eight, "Neapolitan Nights" (Zamecnik) (Zonophone Record EE108).
 Waltz—with vocal refrain—Goodrich Silvertown Cord Orchestra, "The Church Bells Are Ringing For Mary" (Colby) (H.M.V. Record EA381).
 10.27: Comedian with Orchestra—Frank Crumit, "The Song of the Prune" (Crumit) (H.M.V. Record EA366).
 10.30: Cinema Organ Solo—Chas. W. Saxby, "For My Baby" (Kahal) (Zonophone Record 5143).
 Foxtrot—Arcadians Dance Orchestra, "Singapore Sorrows" (Le Solf) (Zonophone Record EE106).
 Waltz—Victor Arden and Phil Ohman's Orchestra, "Chiquita" (Wayne) (H.M.V. Record EA396).
 10.40: Tenor with orchestra—Franklyn Baur, "Beloved" (Kahn) (H.M.V. Record EA392).
 10.43: Foxtrot—Paul Whiteman's Orchestra, "Louisiana" (Razaf) (H.M.V. Record EA386).
 Male Trio with piano—California Humming Birds, "I Just Roll Along" (Trent) (H.M.V. Record EA356).
 Foxtrot—Paul Whiteman's Orchestra, "Dixie Dawn" (Trent) (H.M.V. Record EA386).
 10.53: Male Trio—California Humming Birds, "She's a Great, Great Girl" (Woode) (H.M.V. Record EA356).
 8.0...Chimes of the G.P.O. clock.
 8.1: Overture—Orchestra, "Plymouth Ho" (Ansell). (A nautical overture based on familiar airs).
 8.11: Quartet—Melodie Four, "Johnny Schmoker" (Dix).
 8.15: Instrumental—Mrs. Mildred Kenny's Mandolin Band, (a) "I Can't Do Without You" (Berlin); (b) "Comical Coons" (Grimshaw).
 8.22: Tenor solo—Mr. Frank Bryant, "My Prayer" (Squire).
 8.26: Musical sketch—Orchestra, "Reminiscences of the Plantation" (Chambers).
 8.43: Humour—Mr. Jack Wilkinson, "And Here's Another Thing" (Weston).
 8.50: Duet—Messrs. S. Duncan and W. W. Marshall, "All's Well" (Brahm).
 8.54: Instrumental—Orchestra, Repeat Number.
 9.2: Weather report.
 9.4: Baritone solo—Mr. R. S. Allwright, "Geraldine" (Clarke).
 9.8: Instrumental—Mrs. Mildred Kenny's Mandolin Band, (a) "Laugh, Clown, Laugh" (Florite); (b) "Dorinda" (polka march) (Grimshaw).

2YA, WELLINGTON (420 METRES)—SATURDAY, APRIL 13.

- 8 p.m.: Chimes of the G.P.O. clock.
 8.1: 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.
 7.40: Lecturette—Miss Inez Connop, "A Talk on Ballroom Dancing."
 8.0...Chimes of the G.P.O. clock.
 8.1: Overture—Orchestra, "Plymouth Ho" (Ansell). (A nautical overture based on familiar airs).
 8.11: Quartet—Melodie Four, "Johnny Schmoker" (Dix).
 8.15: Instrumental—Mrs. Mildred Kenny's Mandolin Band, (a) "I Can't Do Without You" (Berlin); (b) "Comical Coons" (Grimshaw).
 8.22: Tenor solo—Mr. Frank Bryant, "My Prayer" (Squire).
 8.26: Musical sketch—Orchestra, "Reminiscences of the Plantation" (Chambers).
 8.43: Humour—Mr. Jack Wilkinson, "And Here's Another Thing" (Weston).
 8.50: Duet—Messrs. S. Duncan and W. W. Marshall, "All's Well" (Brahm).
 8.54: Instrumental—Orchestra, Repeat Number.
 9.2: Weather report.
 9.4: Baritone solo—Mr. R. S. Allwright, "Geraldine" (Clarke).
 9.8: Instrumental—Mrs. Mildred Kenny's Mandolin Band, (a) "Laugh, Clown, Laugh" (Florite); (b) "Dorinda" (polka march) (Grimshaw).

- 9.15: Humour—Mr. Jack Wilkinson, "It's the Girls that Make the Seaside" (Weston).
 9.22: Tenor solo—Mr. Sam Duncan, "I'll Sing Thee Songs of Araby" (Clay).
 9.26: Solo and chorus—Virginia Perry and Chorus, "The Merry Widow" (Lehar) (Columbia Record 01173).
 9.29: Song suite—Orchestra, "Old Favourites" (arrgd. Seredy), (1) "Sailing"; (2) "Old Oaken Bucket"; (3) "Alice, Where Art Thou"; (4) "Listen to the Mocking Bird"; (5) "Ben Bolt"; (6) "Nancy Lee"; (7) "Love's Old Sweet Song"; (8) "Cheer, Boys, Cheer."
 9.39: Duet with orchestra, Gladys Moncrieff and Johnny Valentine, "If You're in Love You'll Waltz" (Tierney) (Columbia Record 01303).
 9.42: Bass solo—Mr. W. W. Marshall, "The Yarn of the Fiddler's Ghost" (Trottere).
 9.46: Quartet—Melodie Four, "Get Out and Get Under the Moon" (Shay).
 9.50: Instrumental—Orchestra, Dance Novelities.
 10.0: His Master's Voice Dance Programme:
 Orchestral—Symphony Orchestra, (a) "La Vida Breve" (Spanish Dance) (De Falla); (b) "L'Amour Sorcier" (Love, the Magician) (De Falla) (H.M.V. Record D1453).
 Male quartet with piano—The Revellers, "Oh, Lucindy" (Hollingsworth) (H.M.V. Record EA430).
 Foxtrot with vocal refrain—International Orchestra, "Shine On, Harvest Moon" (Norworth) (H.M.V. Record EA407).
 Waltz with vocal refrain—The Troubadours, "Some Day—Somewhere" (Pollack) (H.M.V. Record EA421).
 10.17: Male quartet with Piano—National Cavaliers, "Beautiful" (Gillespie), (H.M.V. Record EA430).
 Foxtrot with vocal refrain—Hamp's Kentucky Serenaders, "Blue Grass" (De Sylva) (H.M.V. Record EA407).
 Foxtrot—Geo. Cleen and his Music, "Who?" (Harbach) (H.M.V. Record EA79).
 Waltz with vocal refrain—The Troubadours, "Neapolitan Nights" (Kerr) (H.M.V. Record EA421).
 10.30: Tenor with orchestra—Jno. McCormack, "The Far Away Bells" (Gordon) (H.M.V. Record DA914).
 Waltz—Hilo Orchestra, "Louisiana Lullaby" (Zoolier) (H.M.V. Record EA374).
 Hawaiian Orchestra—Hilo Hawaiian Orchestra, "Hawaiian Nights" (Roberts) (H.M.V. Record EA310).
 Foxtrot—Hilo Orchestra, "My Bird of Paradise" (Berlin) (H.M.V. Record EA374).
 Violin with Cinema Organ—Elsie Southgate, "I Hear You Calling Me" (Marshall) (Zonophone 5109).
 10.45: Summary of sporting results.
 Foxtrot—Statler's Pennsylvanians, "Happy-Go-Lucky Lane" (Lewis) (H.M.V. Record EA353).
 Foxtrot—Geo. Olsen and his Music, "Sunny" (Harbach) (H.M.V. Record EA79).
 10.53: Vocal with guitar—Harry McClintock, "The Big Rock Candy Mountains" (McClintock) (Zonophone EE125).
 Foxtrot—Harry Reser's Banjo Boys, "Down South" (Myddleton), (H.M.V. Record EA353).
 11.0: Close down.

3YA, CHRISTCHURCH (306 METRES)—SATURDAY, APRIL 13.

- 3 p.m.: Afternoon session—Selected gramophone items.
 4.25: Sports results to hand.
 4.30: Close down.
 6.0: Children's session, conducted by "Storyman."
 7.15: News session.
 8.0: Chimes.
 8.1: Rebroadcast of 2YA (conditions permitting).
 10.0: Dance programme until 11 p.m.
 11.0: Close down.

4YA, DUNEDIN (463 METRES)—SATURDAY, APRIL 13.

- 7.15 p.m.: News session.
 8.0: Town Hall chimes.
 8.1: Relay of orchestral music from Octagon Theatre Orchestra, under the direction of Monsieur Henri de Rose (Mus. Itac.).
 8.11: Light songs—Miss Minna Ahlers, (a) "Beneath the Maori Moon" (Smith); (b) "Dixie Band."
 8.18: Sketch—Miss Sheila Neilson and Mr. J. B. McConnell.
 8.28: Tenor solo—Charles Hackett, "I Look into your Garden" (Wood) (Columbia Record 03597).
 Hawaiian selections—South Sea Islanders, (a) "The Call of Aloha" (Hyatt); (b) "That's What the Lei Said to Me" (Perez) (Columbia Record 01014).
 8.34: Contralto solo—Miss Constance Poole, "Dawn" (Curran).
 8.38: Relay of orchestral music from the Octagon Theatre.
 8.48: Light song—Miss Minna Ahlers, "When I was One Year Old" (Courtney).
 8.52: Tenor solo—Alfred O'Shea, "Ben Bolt" (Kneass) (Columbia Record 03613).
 Xylo-rimba orchestra, "My Sweetheart Waltz" (Regal Record G20328).
 8.58: Contralto solos—Miss Constance Poole, (a) "Break o' Day" (Sanderson); (b) "I Did not Know" (Trottere).
 9.5: Weather report.

- 9.7: Tenor solo—Alfred O'Shea, "Then You'll Remember Me" (Balfe) (Columbia Record 03613).
Xylo-rimba orchestra, "Along Miami Shore" (Warren) (Regal Record G20328).
- 9.13: Baritone solo—Riccardo Stracciari, "Barbiere di Siviglia—Largo al Factotum" (Rossini) (Columbia Record 04173).
Trio with chorus and orchestra—Stracciari, Appoloni, and Ticozzi—"Carmen—Toreador's Song" (Bizet) (Columbia Record 04173).
- 9.21: Sketch—Miss Sheila Neilson and Mr. J. B. McConnell.
- 9.31: "Columbia" dance programme.
March medley—H.M. Grenadier Guards' Band, "Martial Moments" (arrgd. Winter) (Columbia 9065).
Foxtrot with vocal chorus—Park Central Hotel Orchestra, "Golden Gate" (Jolson) (Columbia 01350).
Foxtrot—Ambassadors' Band, "Forty-seven Ginger-headed Sailors" (Sarony) (Columbia 01338).
Vocal duet—Layton and Johnstone, "Just Like a Melody Out of the Sky" (Donaldson) (Columbia 01339).
- 9.43: Tenor solo—Seamus O'Doherty, "The Pride of Tipperary" (Lockhead) (Regal G20343).
Band selection—H.M. Grenadier Guards, "In a Clock Store" (Orth) (Columbia 9029).
- 9.50: Foxtrot—Ambassadors' Band, "I Just Roll Along Having My Ups and Downs" (Trent) (Columbia 01338).
Foxtrot with vocal chorus—Ipana Troubadours, "S Wonderful" (Gershwin) (Columbia Record 01306).
Hawaiian guitar, banjo, and ukelele trio, "My Hawaii" (Lewis) (Columbia 3606).
- 10.0: Monologue—Milton Hayes, "Meanderings of Monty—Monty Attends a Board Meeting" (Hayes) (Columbia 01106).
Male quintet—Singing Symphonies, "My Ohio Home" (Kahn) (Columbia 01088).
Organ solos—G. T. Pattman, (a) "Polly" (Zamecnik); (b) "Janette" (Williams) (Columbia 01144).
Foxtrot—Debroy Somers' Band, "Without You, Sweetheart" (de Sylva) (Columbia 01249).
- 10.20: Tenor solo—Hubert Eisdell, "Parted" (Tosti) (Columbia 02598).
Humoresque—Australian Commonwealth Band, "Slidin' Thro' the Rye" (Hawkins) (Columbia 01235).
Male quartet—Shannon Male Quartet, "The Sidewalks of New York" (Lawlor) (Regal G20298).
Pianoforte solo—Gil Dech, "Hallelujah" (Youmans) (Columbia 01205).
Vocal with novelty accompaniment—Ukelele Ike, "Chiquita" (Wayne) (Columbia 01265).
Vocal duet—Jack Lumsdaine and Len Maurice, "That's My Mammy" (Perse) (Columbia 01191).
- 10.45: Orchestral—Columbia Symphony Orchestra, "March of the Toys" (Herbert) (Columbia 02651).
Foxtrot—La Nuovo Orchestra, "Di Napoli" (Italian foxtrot) (Romani) (Columbia 3066).
Waltz—Eddie Thomas's Collegians, "Beautiful Ohio" (Earl) (Columbia 02651).
Waltz—Royal Serbian Tambouritzza Orchestra, "Kosovo Waltz" (Columbia 3066).
Male chorus—Sheffield Orpheus Choir, "There is a Tavern in the Town" (Tradl) (Columbia 01175).

Sunday, April 14

IYA, AUCKLAND (333 METRES)—SUNDAY, APRIL 14.

- 3.0: Selected Studio Items.
4.0: Literary selection by the Announcer.
4.8: Further studio items.
4.20: Close down.
- 6.0: Children's session, conducted by Uncle Leo.
6.55: Relay of Divine service from St. James Church.
Preacher: Rev. E. R. Harries.
Organist: Mr. Walter Impett.
- 8.30: Orchestra—The British Broadcasting Company's Symphony Orchestra, "Ruy Blas Overture" (Mendelssohn) (Columbia Record 02576).
8.38: Soprano solo—Miss Lola Solomon, "Thanks Be To God" (Dickson).
8.42: Violin solo—Eugene Ysaye, "Caprice Viennois" (Kreisler) (Columbia Record 7115).
8.46: Baritone solos—Mr. Fred Baker, (a) "Pro Peccatis" (Rossini), (b) "Requiem" (Allan).
8.54: Contralto solo—Miss Madge Clague, "Abide With Me" (Liddle).
8.58: Orchestra—Royal Philharmonic Orchestra, "Le Prince Igor" (Borodine) (Columbia Record 04157).
- 9.2: Weather report.
9.4: Soprano solos—Miss Lola Solomon, (a) "Speak, Music" (Elgar), (b) "Ave Maria" (Luzzi).
9.12: Baritone solo—Mr. F. Baker, "Lord God of Abraham" (Elijah) (Mendelssohn).
9.16: Pianoforte solo—William Murdoch, "Sleepers Awake" (Busoni) (Columbia Record 02610).
9.20: Contralto solos—Miss Madge Clague, (a) "The First Primrose" (Grieg), (b) "A Swan" (Grieg), (c) "Two Brown Eyes" (Grieg).

- 9.26: Orchestra—Royal Philharmonic Orchestra, "Introduction Act 3—Lohengrin" (Columbia Record L1962) (Wagner).
9.30: Close down.

2YA, WELLINGTON (420 METRES)—SUNDAY, APRIL 14.

- 3.0 p.m.: Afternoon session—Selected studio items.
4.30: Close down.
6.0: Children's session, conducted by Uncle George.
7.0: Relay of service from Trinity Methodist Church, Newtown:
Preacher: Rev. T. W. Vealie.
Organist: Miss Lilian Thawley, I.A.B.
Choirmaster: Mr. E. Bales.
8.15 (approx.): Relay from Grand Opera House of recital by the Port Nicholson Silver Band under the conductorship of Mr. J. J. Drew.
Close down.

3YA, CHRISTCHURCH (306 METRES)—SUNDAY, APRIL 14.

- 3 p.m.: Afternoon session—Selected studio items.
4.30: Close down.
5.30: Children song service.
6.15: Hymn chimes.
6.30: Relay of service from Oxford Terrace Baptist Church. Preacher, Rev. J. Robertson, M.A. Choirmaster, Mr. Vic. Peters. Organist, Mr. Melville Lawry.
7.45: (approx.): Studio concert.
Orchestral—Philadelphia Symphony Orchestra, "Symphony in D Minor" (Cesar Franck) (1st. Movement—Lento Allegro) (H.M.V. Records D1404/5).
8.0: Contralto solo—Miss M. Lewis, "Out of the Deep I Call" (Easthope-Martin).
8.4: Baritone solo—Mr. Robt. Allison, "Arise, O Sun" (Day).
8.8: Orchestral—Philadelphia Symphony Orchestra, "Symphony in D Minor" (2nd Movement—Allegretto) (Cesar Franck) (H.M.V. Records D1406/7).
8.19: Soprano solo—Miss Thelma Ayres, "How Lovely are Thy Dwellings" (Liddle).
8.23: Contralto solos—Miss M. Lewis, (a) "Teach Me to Pray" (Gwynn); (b) "Immortality" (Lohr).
8.27: Orchestral—Philadelphia Symphony Orchestra, "Symphony in D Minor" (3rd Movement—Allegro) (Cesar Franck) (H.M.V. Records D1047/8).
8.39: Baritone solos—Mr. Robt. Allison, (a) "The Star" (Rodgers); (b) "The Lost Chord" (Sullivan).
8.46: Grand organ solo—Edwin Lemare, "Traumerel" (Schuman) (H.M.V. Record C1455).
Violin solo—Erica Morini, "Rondo on a Theme by Beethoven" (H.M.V. Record EC5).
8.53: Soprano solos—Miss Thelma Ayres, (a) "The Prayer Perfect" (Stenson); (b) "The Lord is My Light" (Allitsen).
9.0: Vocal duet—Hislop and Granforte, "O, Mimi, Tu Pici Non Torni" (Ah, Mimi, you will never come back to me) ("La Boheme") (Puccini) (H.M.V. Record DB939).
9.4: Violin solo—Erica Morini, "Russian Folk Song" (Kreisler) (H.M.V. Record ED8).
9.8: Vocal duet—Fanny Heldy and Marcel Journet, "Baigne d'Eau Mes Mains Et Mes Levres" (Bathe my hands and lips with this water) ("Thais") (Massenet) (H.M.V. Record DA940).
Soprano solo—Fanny Heldy, "O, Messenger de Dieu" (O, Messenger of God) ("Thais") (Massenet) (H.M.V. Record DA940).
9.16: Orchestral—Philadelphia Symphony Orchestra, "Prelude in E Flat Minor" (Bach) (H.M.V. Record D1464).
9.20: Vocal sextet—Galli-Curci, Homer, Gigli, De Luca, Pinza and Bada, "Chi Mi Frena? (What restrains me?) ("Lucia di Lammermoor") (Donizetti) (H.M.V. Record DQ102).
9.24: Orchestral—(a) Chicago Symphony Orchestra, "Valse Triste" (Sibelius); (b) San Francisco Symphony Orchestra, "Funeral March of a Marionette" (Gounod) (H.M.V. Record ED5).
9.32: Close down.

4YA, DUNEDIN (463 METRES)—SUNDAY, APRIL 14.

- 5.30 p.m.: Children's Song Service conducted by Big Brother Bill.
6.30: Relay of the Evening Service from the Hanover Street, Baptist Church:
Preacher: Rev. E. S. Tuckwell.
Organist: Mr. Upton Harvey.
Choirmaster: Mr. H. P. Desmoulin.
8.5: Relay from St. Kilda Rotunda, of concert by the St. Kilda Municipal Band, under the conductorship of Mr. James Dixon.
9.15: Close down.

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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.

The Service Appreciated.

I AM sure listeners appreciated 2YA's effort in coming on the air last Wednesday night after the station's hard luck on Monday and Tuesday nights. The Radio Broadcasting Co. certainly do their best for the public. The children's sessions at 2YA are very entertaining, and the various "uncles" and "aunts" have endeared themselves not only to the children but to adults also. That cheery and "smiling" voice of Mr. Announcer cheers many listeners, and he is always listened to as a friend. Would it be at all possible to publish photos. of the Studio Orchestra, artists, etc., when space permits? On glancing through an old "Radio Record" I see this was once done. To new listeners they would prove interesting, I am sure. With best wishes for your paper and the R.B.C.—"Robpuni" (Puniho).

[Effort is made to publish the photographs of as many artists as possible.—Ed.]

Lively Programme requested.

NOT so long ago it was announced that 4YA would hold an extra hour dance programme on Saturday nights, yet I find, when looking at this week's programme, not only is the dance hour left out, but humorous night is changed to put in some high-class, so-called music. Knowing that the R.B. Co. can't please everybody I suggest they should at least adopt one night a week for a real good humorous and dance programme. Perhaps it will be said they have one set aside, but if so why should it be left out just when the holidays are here and people like a good lively programme, especially those who find it inconvenient to go for holidays? I hope my suggestion will be adopted in time to say to a friend, "Coming down, to-night; there is a humorous programme, followed by a good dance?"—"Worth More" (Dunedin).

A Squealing Cured.

A CORRESPONDENT, H. W. Brocas, writes:

The following may be of assistance to those situated as I was, away back from anywhere, with a whistling four-valve set. I have a four-valve "Browning Drake," which has earned the name here of "Drowning Drake." It has given me enough trouble almost to cure me of wireless for ever. The most persistent annoyance was a shrill whistle when the speaker was plugged in, but which stopped at the 'phone connection. If I wetted my finger and placed it on the casing of the second A.F. transformer, it stopped. I tried earthing the casing, but with no effect. I worked out the reason why my finger should stop it but not the earthing. So I took a length of 'phone cord and wound it jumble fashion, taking care that there was no bone end to make a connection anywhere. I placed the coil of wire in the end of the R.F. transformer, and connected the loose end to the casing of the second A.F.

transformer. Oh! blissful peace. The whistle has stopped!

Brighter Programmes.

THE vast improvement in this evening's programme as compared with the painfully dismal items which have been inflicted upon listeners on recent Sunday evenings prompts me to place on record my guests' and my own appreciation of the welcome change. We realise the difficulty of the company in catering for all tastes, but venture the opinion that 90 per cent. of listeners prefer a bright programme such as this evening's to follow the broadcast of the church service. While on the subject, may I ask if you are in a position to advise your readers whether the company is arranging to broadcast band concerts this winter? Every radio enthusiast with whom I have discussed the question agrees that such concerts make Sunday evening broadcasts the best of the week.—"Licensed."

[Band music relays from 2YA will commence on April 14.—]

And Another View.

LET me express a few words of appreciation of the programmes broadcast by the R.B.C. Up in the bush here it is a great help to pass the evenings, but why is it I receive 2YA and 4YA at two different wavelengths, as though someone is rebroadcasting? The mock trial of outward bound broadcast by 1YA are indeed a novelty and would be really good if it was not for fading, and some other station interfering. Something like this would be great from 2YA. Wishing you every success.—T.R. (Te Kiri).

[These would be the "harmonics" of 2YA and 4YA. The station interfering with 1YA would be probably an American, KHT or KOMO.—Ed.]

Conditions in Southland.

I HAVE read and thoroughly endorse the remarks of your correspondent "A.R." anent "Radio in Southland." Conditions during the last two or three weeks in particular have been wretched. 2YA, usually fairly consistent, has been weak; 3YA has been consistently erratic, 4YA is just so-so, and 1YA strange to relate has been the loudest and most consistent of all, with very little fading. On many occasions the Australian stations came through far louder than our "locals." Apart from poor reception we have to put up with a lot of mush and power leaks. The writer located one particular leak about a year ago (it was a faulty earthing switch), and lodged a personal complaint with the newly-appointed radio inspector. He told me that he could not do anything in the matter, that the Post Office had no authority over the Power Board. On approaching the Power Board, the heads were found to be away in Wellington, and I could not obtain satisfaction from those here, and was told that such a position could not exist as they knew that the line was in good order! The impression gained was

that the Post Office officials, with one or two exceptions, consider radio a nuisance and a tax on their valuable time.

Our nearest station, 4YA, is about 100 miles air-line away. Naturally you would expect it to be our loudest and best station, but it is far from being that. In fact, most listeners do not bother with it at all. Apart from lack of volume, it is marred by a wobbly wave and fading. It has a harmonic on 230 metres that is almost as loud as the transmission proper. 4YA's output into the aerial will only be about 250 watts as it is. The regulations governing broadcast stations provide that the wave emitted be steady and free from harmonics. Why hasn't the Post Office forced the Radio Broadcasting Company to conform to the regulations. In the matter of programmes the "Radio Record" of March 15 reveals the fact that for the week ending March 24, 4YA would be on the air 16½ hours, against 32½ hours for 3YA!

I would like the Radio Broadcasting Company to answer these questions:

(a) Why does the Radio Broadcasting Company persist with a station that is a compromise and unsatisfactory?

(b) Why does the Radio Broadcasting Company cut the hours of service down to approximately half that of the other stations?

(c) Does the Radio Broadcasting Company consider it is providing a satisfactory service for the listeners of the fourth radio district?

(d) Does the Radio Broadcasting Company intend to place that service on a par with that provided for the other radio districts by extending hours of transmission and installing a modern transmitter?

(e) Does the Radio Broadcasting Company consider the fourth radio district incapable of further expansion and therefore unworthy of a better service?

(f) Does the Radio Broadcasting Company consider that the provision

of a modern station would not be coincident with an increase of listeners in the South Island?

(g) Why doesn't the Radio Broadcasting Company provide a service equal to that obtaining in the other centres.

I honestly think that Otago and Southland should receive consideration before any of the northern provinces, because of the great area to be covered and the present inadequacy of the service. I hope that my criticism has not been too "destructive," and that I have not taken up too much of your valuable space.—I am, etc., "Shielded Grid" (Invercargill).

[Announcement has already been made by the Broadcasting Company that the Dunedin station is being remodelled as far as is possible under present conditions. Advantage is being taken of the erection of the new building of the "Evening Star" to place the transmitting masts there, and the plant has recently been overhauled and strengthened. Under the agreement Dunedin is entitled to twelve hours service per week, and has received far more than this on the average. Dunedin service has not been cut down—it is being given more than the legal requirement quite cheerfully, and nobody would be better pleased than the Company if the response from southern listeners would be such as to permit further expansion, which obviously must bear relation to revenue. (See figures of licenses published elsewhere.)]

THE London "Popular Wireless" says:

"An opportunity is available to short-wave listeners to hear 30-metre telephony transmissions from wildest Africa. We understand that, until further notice, Major Court Treatt is transmitting on this wavelength from Bahr-el-Arab, Southern Sudan, between 6 and 8.30 p.m. G. M. T., using the call-sign FXCT."

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MELBOURNE	Dominion Chambers, 59 William Street
ADELAIDE	Director South Australia Intelligence Bureau
BRISBANE	King House, Queen Street
PERTH	285 Queen's Buildings, Murray Street

Notes and Comments

By
"SWITCH"

QUITE probably Mr. J. H. Owen, ex-president of the Amateur Radio Society of Wellington, who has just returned from a prolonged visit to England, will be requested to give an address before the society on his experiences with radio broadcasting while he was abroad. On his previous visit to England Mr. Owen collected a wealth of interesting material and provided a meeting of the society with a most entertaining account of radio at home. On this occasion Mr. Owen could relate his experiences also of broadcasting in Canada.

2YA, Wellington, made a veritable "hit" with the rebroadcast of 2BL, Sydney, on the occasion of the fight between McAlister and Tommy Griffiths at the Sydney Stadium. 2BL fluctuated considerably, but 2YA gave us abundant volume. Static was by no means quiescent, yet 2YA maintained a clear hold of the ringside description. The announcer at the ringside was by no means as successful as the men at Auckland and Christchurch have been. Even the last ringside description from the Wellington Town Hall was better than that from the Sydney Stadium.

RADIO in Wellington has experienced a severe loss in the departure of Mr. D. G. Wyles, radio engineer, for Melbourne, where he is about to take up an appointment as sales direction manager and radio engineer for the Phillips Co. Mr. Wyles was formerly

with Amalgamated Wireless prior to settling in Wellington, and was sent to Europe and America by the big Australian company to study broadcasting technique. He inspected all the great broadcasting stations in several countries.

THE executive of the Amateur Radio Society of Wellington has forwarded Mr. D. G. Wyles a letter expressing appreciation of his kind assistance to the society in having given highly instructive and interesting lectures to the members. The letter also embodied good wishes for his success in his new sphere.

THE officials of the Amateur Radio Society of Wellington are greatly exercised over the dwindling membership and apathy of listeners. It appears that the society is facing a crisis, and the executive view the outlook with anxiety. Various plans will be brought forward to revive the society, which has been languishing for some time past. The matter will be gone into at an early date.

A SUGGESTION came before the executive of the Amateur Radio Society of Wellington recently that the children's sessions be a little curtailed. This was most unfavourably received; in fact the executive thought there should be no curtailment in the youngsters' sessions under any circumstances. The "birthday greetings," however,

they considered should not take up such a large proportion of the children's sessions. They held that the greetings should be more pithy and abbreviated.

TELEPHONE conversations have at rare intervals been picked up by wireless sets in New Zealand, owing to some freak causes. A New South Wales listener writes to the Sydney press: "One day I was changing coils, and left the set switched on, and as soon as the coil (tuning and re-act) was removed a voice spoke very loudly in the speaker. The telephone wires are within 20 feet of the set, and my aerial runs at right angles to them. A loud squeal accompanied the reception, but can be stopped by turning down the detector rheostat. Imagine the volume if the aerial had happened to be parallel."

LATELY Wellington listeners have observed a blurring which creeps into the transmission by 2FC, Sydney. It is not constant, but it is frequent. This peculiarity has been noticed by up-country listeners, also. Mr. Claude P. Grey, of Shannon, states that 2FC is quite "mushy" as heard in Shannon. "Switch" remembers 2FC suffering from the same disability some time back. A letter was sent from Wellington to 2FC reporting the matter, and later it was eliminated, after a courteous reply had been sent to Wellington.

A REMARKABLE ignorance of the radio regulations on the part of some post-office officials when receiving applications for renewals of listeners' licenses has been reported to "Switch." The writer himself, when applying for the renewal of his license surprised the clerk in a suburban post office by informing him that one license covered his six receiving sets. The clerk hesitated for some time before accepting "Switch's" assurance. If listeners meet with any difficulty in this respect they should write to the District Radio Inspector, c/o. Post and Telegraph Department.

DURING April both 2BL and 2FC will carry out a series of evening relays of 3AR and 3LO, Melbourne. These relays in Australia are conducted by trunk telephone lines. On Thursday, April 4, 2BL will relay 3AR between 10.30 p.m. and 11.30 p.m., New Zealand time. On the following Thursday, April 11, 3LO will be relayed by 2FC between 11 p.m. and 1 a.m., New Zealand time. This is 3LO's dance night. An hour's dance music will be taken by 2BL from 3LO on the following Thursday, April 18, and the final relay for the month will be from 3AR through 2FC between 10.30 p.m. and 11.30 p.m., New Zealand time on the evening of Friday, April 26.

THE New South Wales Broadcasting Company has made arrangements for the appearance in Sydney this week of Donald McBeath, the famous Australian violinist, who was chosen by John MacCormack to tour the world with him. Prior to joining up

with Evelyn Scotney, who is touring Australia this year, Mr. McBeath found time to go to Sydney from Melbourne to give these two broadcast engagements. Miss Evelyn Scotney's wonderful voice is familiar to Wellington listeners, her records having been put on the air by 2YA, Wellington.

BBROADCAST listening has established a firm hold in Australia, and every month brings a substantial increase in the number of licences. At the end of February there were no fewer than 291,000 licences.

A YANKEE lighthouse keeper, who is a devoted listener, complained that he was unable to follow the announcer's advice when KGO, Oakland, California, was about to broadcast a nautical playlet. The announcer advised listeners that to derive the utmost pleasure from the play, they should extinguish all lights. One can sympathise with the light-keeper. By the way, a number of New Zealand lighthouse keepers have wireless receiving sets. "Switch" is acquainted with an ex-lighthouse keeper who went almost deaf through listening-in with headphones during a season of intense static. His hearing is permanently impaired.

HERE is a "tip" for some clergymen in this part of the world. A light signal, installed in the pulpit when KGO, Oakland, California, broadcasts church services, warns preachers when it gets dangerously near time for the General Electric station to make a switch to some other feature. Increased attendances when church services are broadcast is responsible in a great degree to the punctuality with which services end when this little light signal starts blinking.

IT is an advantage to every individual listener to increase the number of listeners. A statement published along these lines points out that every increase of revenue leads to an improvement in the services rendered by the "A" class stations, and this in turn makes the possession of a wireless receiving set still more attractive. The exacting claims that are being made upon those controlling broadcasting are an ever-increasing quantity, and the payments made in copyrights, royalties, and fees, of which the public have little or no knowledge, are eating into the revenue previously available for programmes to such a degree that to maintain the standard which has apparently proved so satisfactory during the past three years calls for a still greater percentage of new licences.

THE New Zealand Government deserves the thanks of listeners for having refused permission for the "B" class stations to inflict advertising announcements upon us. These announcements debase and spoil radio as a source of entertainment and interest. A correspondent writing to the Sydney "Wireless Weekly" says—"Now what about that 'Advertising Talk and Nonsense' given at 2BL each night. It's a disgrace to any station." "Switch"

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advises Wellington listeners to tune in 2BL in the early evening to hear what is put out as advertising matter.

THE mouth-organ band idea has not invaded New Zealand yet, but it has made big strides in and around Melbourne. Recently 3AR and 3LO, Melbourne, broadcast a mouth-organ band competition for the 3LO and 3AR "Mouth-organ Medal." The competitors, who acquitted themselves splendidly, were required to play the test piece, "Jeannine," and other selection of their own choice. Owing to the all-round excellence of the bands—the adjudicator, Mr. W. G. James, the well-known Australian pianist and composer—had some difficulty in selecting the winning team but his awards "Geelong Mouth-organ Band" 1, Melbourne Crackerjack Mouth-organ Band 2, and Sunshine Boomerang Mouth-organ Band 3, proved most popular, and were received with acclamation from the enthusiastic audience at the competition hall.

NEW ZEALAND listeners will be greatly interested in the news that in July much more powerful stations will be operating in Australia. The Commonwealth Postmaster-General has already called tenders for one, two or four broadcast stations, having a power of 3000 watts in the aerial, or with a power of 5000 watts in the aerial. The Commonwealth Government is taking over the broadcast throughout Aus-

tralia in July, and the new stations are to be ready by then. The sites of the new stations have not been disclosed, and there is great curiosity on that point. As the station will have to be ready for operating in July, only five months are available for the work of erecting them. The feature which will appeal to New Zealand listeners is that the new stations will have at least double the power of the existing stations, and possibly more than three times the power.

IT was a compliment to the Broadcasting Company's relay of the concert from Wanganui a few months ago when at last week's meeting of the Wellington Radio Society the meeting asked, like Oliver Twist, for "some more." Certainly the relay was a brilliant achievement, and no one who listened to it could deny the general merit of the whole affair. Actually there are not many up-country concerts that can hold a candle to that Wanganui concert, and when the Broadcasting Company is asked to give plenty more of these country relays one wonders where the concerts are to come from.

SEVERAL nights ago those who were listening to 3LO, Melbourne, had an opportunity of first-rate reception of a speech by La Barba, the famous little American boxer. His words came through with exceptional volume and clarity. He was manifestly reading his speech, which expressed appreciation of the cordial reception he had been given in Melbourne, and he read off a list of names of the great fighters whom Australia had turned out. His list included the world-famed Billy Murphy (still alive in Auckland), and the former world's champion, Bob Fitzsimmons, who died a few years ago. Billy Murphy is a New Zealander, and "Ruby Bob," although born in Cornwall (England), was brought up in New Zealand, where he first struck out as a pugilist. La Barba's list requires revising.

DISTANCE lends enchantment to the air! The average listener the world over always considers that the more distant station is more interesting than that of his nearest or home city. And so it is that there is so much demand by New Zealanders to reach out for the Australian stations. This fact is brought home to New Zealand dealers when they are selling a multi-valve set. Unless reception of the Australian stations is guaranteed, in nine cases out of ten, the sale is lost. Reception of the Australian stations, however, cannot be guaranteed the whole year round, what with periods of intense static and spells of weakness through some mysterious atmospheric cause.

BATTERYLESS, multi-valve receiving sets are making a steady invasion on Wellington. In America during last year there was a marked decrease in the sale of all types of batteries, reflecting the trend towards the general adoption of the batteryless receiving set. It is estimated that there are now 35,000,000 private owners of receiving sets in the United States.

A CURIOUS circumstance in connection with the "B" class stations in Australia is that complaints of the character of their programmes find their way into the radio press. This

goes to show that although the public are not paying to listen to these "B" class stations, they feel that they have a right to criticise what these stations put on the air. A writer in the Sydney "Wireless Weekly" says of one "B" class station: "2UE used to put on decent programmes on Sundays, but I am sorry to say that their programme is now also badly adulterated by 'snivelling stuff.'"

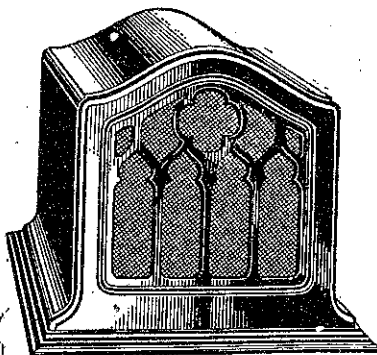
"PA" COCHRANE, the popular announcer at 2FC, Sydney, had something to say the other night regarding the subject of an anonymous letter received by 2FC. The unknown writer gave 2FC a "dig" for omitting the words "Mr.," "Mrs.," and "Miss" when announcing the names of performers. Mr. Cochrane sought to justify these omissions by stating that it was the custom in musical circles. He said no one would think of announcing "Mr. Caruso" or "Mr. Paderewski." Just so, Mr. Cochrane, but until a performer attains the world fame of the artists mentioned, he or she is entitled to the prefix "Mr.," "Mrs.," or "Miss," and the omission sounds like an unwarranted familiarity.

PEOPLE in quest of notoriety who are agreeable to do anything the law will permit are numerous in every large city. The New South Wales Broadcasting Co. have called for volunteers 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. All applications will be considered in the order they are received. Should more than 1000 people apply, the name of the winner will be drawn from a hat!

IN view of the use by the Melbourne metropolitan fire brigades of portable wireless transmitters for establishing communication between the chief station at Eastern Hill and suburban stations, when ordinary means of communication fail, a development of the use of wireless services in fire-fighting work in Great Britain is of interest. A small portable transmitter, which can be fitted to fire-fighting vehicles, and driven from the petrol motor which supplies the motive power, has been designed and tested successfully. By means of this transmitter, it is possible to establish communication with any suitably equipped fire station as soon as an engine reaches a fire. Calls for further equipment are thus facilitated. It is claimed that the installation is likely to be of value in cases where fires break out almost simultaneously. Many cases have occurred in which all available equipment has been dispatched to one fire shortly before a more serious one has been reported. If fire engines are able to keep in constant touch with their stations by wireless transmitters, it is claimed that equipment can be diverted from one fire to another as desired.

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Useful Constructional Hints

A Helpful Article Dealing with a Few Practical Difficulties

By "PENTODE"

JUDGING by the ever-increasing number of questions dealing with technical and practical difficulties sent in by correspondents to this journal, it surely indicates that there is an insufficiency of literature available on the difficulties that the amateur builder and set owner is likely to encounter. Unlike most other hobbies there are countless pitfalls for the inexperienced to fall into, and, sad to relate, even the most experienced trip over trivialities now and then.

Quite a large amount of space is devoted to these questions and their answers, and this is done because often a correspondent gives voice to trouble experienced by others, and the answer, although short, sometimes gives a wealth of information.

This week several letters have come to hand from readers, and the queries are typical of a few of the most likely sources of trouble met by most amateur set builders.

The first letter opened comes from Wellington. This listener, who uses a crystal set coupled to a two-valve amplifier, is troubled with motor-boating when used in conjunction with a home-built battery eliminator. The only way in which to stop this is by dimming the valve filaments, so our correspondent writes.

To begin with, two PM2 valves should not be used for first and second stage unless a high ratio transformer is used with the primary in the anode of the first PM2 valve. The use of a semi-power valve in the first stage has no advantage in its favour. Here are a few hints on how to begin to cure the trouble. Use a general purpose valve in the first stage, biased about 2 or 3 volts on the grid and no more than 90 volts on the plate. The last

valve should be run according to the specifications given by the maker. Negative grid bias must be given when using battery eliminators, and although the correspondent has not stated this it is assumed that he is using a C battery. Unless used with care, grid bias worked from the bottom end of the B supply is not recommended.

If these simple remedies do not prove effective, then a choke and condenser must be used for the supply of the first valve. This is done by connecting a low frequency choke in series with the B battery lead to the first valve, and incorporating a 1 or 2 m.f.d. condenser between the terminal B plus on the first audio transformer and the A minus terminal. This prevents all back coupling, which is the cause of motor-boating.

A.M.K., of Wellington, has sent in a letter for advice on the power transformer of a battery eliminator he is building. The specifications are taken from a previous edition of the "Radio Record" on the construction of a battery eliminator. Having built the transformer he has applied a few tests and desires to know if everything is OK before building into the instrument.

The primary, wound for the 230-volt supply, is centre tapped for the 110 mains. The secondary is centre tapped for use as a double wave rectifier. The primary was connected to the 110 mains and a 230 v. 60 watt lamp put across one side of the secondary winding to the centre tapping of the secondary. To our reader's way of thinking, this lamp did not burn brightly enough, and when left for some time the transformer became warm.

Here is the information our reader desires. When designing transformers,

the most important feature to bear in mind is the current that is expected to be delivered. The more current or amperage, the thicker will be the wire in order to carry this current. When a transformer is designed for a small drain, such as that needed by a battery eliminator, the gauge of the wire on both primary and secondary can be kept down fairly small. If, however, a greater load is imposed on it, the transformer will heat up. An eliminator usually needs a current of 20 to 40 milliamperes, or about 1.33 of an ampere, and when the rectifier is of the full-wave variety, only half of this current will be drawn from each half of the centre tap.

Now, a 230-volt 60-watt lamp takes 60/230 eq. $\frac{1}{4}$ amp. approximately. The windings cannot be expected to stand this for long, and this accounts for the heating experienced. Also the resistance of the fine wire will be in series with the lamp, and with this current flowing will cut down the voltage considerably. So this shows that a lamp is not a reliable way to test a transformer. The only way is to use a high resistance A.C. voltmeter. Failing this, a rough indication can be obtained by determining the ratio of the primary and secondary windings, and calculating mathematically.

If a transformer with no load on the secondary heats up when connecting to the mains, the trouble is usually rather serious, and it will probably need re-winding. It usually indicates that the insulation has broken down, and that part of the primary or secondary is short circuiting. Even one short circuited turn is fatal, and results in a burnt-out transformer.

Learning by Experience.

WHILE on the subject of transformers, the writer had a peculiar experience, and the information learned may be helpful to others who are building large transformers. The one under discussion was wound to deliver 650 volts on each side of a centre tapping, and the secondary was wound with No. 30 DCC wire. Each layer was separated with paper, and liberal applications of shellac varnish applied. A particularly neat job was made, which seemed to be its only good feature, for when connected to the mains

the coils were soon smoking. This was with no load at all.

To the tune of much unparliamentary language the transformer was dismantled and the coils unwound. Each moment it was expected to come across an insulation breakdown, but right to the last turn the windings were intact, with no sign of charring. More wire was bought, and the job started again. Thicker paper between the layers and larger applications of shellac were used, with the result that the transformers didn't possess the good looks it had before. Again it was connected to the power, and once again smoke began to show signs of appearing. Not being possessed with unlimited patience, the only revenge that could be thought of was to let the thing do its worst. So, with a fire extinguisher handy, the onlookers stood well back to watch events. It seemed that we were unlucky, because after about 20 minutes of patient waiting, the smoke ceased, and it apparently was cooling off.

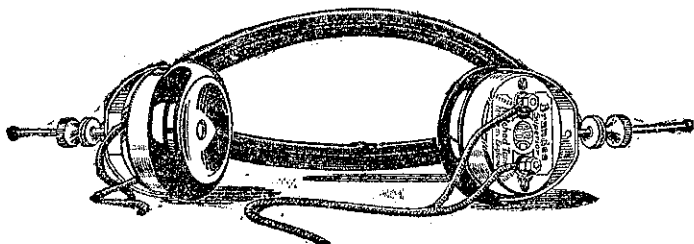
Then it dawned on the whole party that the whole trouble was due to moisture in the windings, and that a large leakage was taking place from layer to layer, until all the moisture had been driven off. Apparently the leakage was sufficient to cause the windings to heat up, and the first winding need never have been undone. When building a transformer always let each layer of shellac dry off before starting the next, and when completed bake the whole in the oven until all moisture has been driven off.

The Neutralising Problem.

A READER has built a neutrodyne receiver, and has taken special precautions to thoroughly screen each stage separately, and yet the high frequency valves refuse to neutralise. How many constructors have been unable to neutralise their sets and spend hours unwinding and rewinding their coils? It is comparatively easy to neutralise a valve, providing the feed back is only taking place through the valve electrodes. This is the reason that screening is used, to avoid the coupling between the different coils. There are other points that have to be watched to prevent the feed back and the average amateur is apt to overlook these. First consider the different B battery leads to each compartment in a screened set. Here is one of the

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Radio Specialists

most common causes of an unstable receiver, and is sure to be the case if the whole becomes unstable as the B battery runs down. The reason is obvious as the resistance of the battery increases with age and use, and the more or less powerful electrical impulses from the second stage are thrown back to the first R.F. valve.

Now for the remedy. Insert a 1 mfd. condenser in each screened compartment, one end being to the B + lead and the other end to A—filament terminal. Yet another source of trouble can be traced to a feedback occurring through the filament rheostat, especially if one rheostat is used to control both RF valves. As this resistance is usually wired into the negative lead so as to obtain a small amount of bias, it also provides a resistance for the HF currents travelling to the filament, and actually throws back energy to the first stage through the screening. As a remedy, connect the moving vanes of the variable condensers, and the filament end of the grid coil, direct to the T—terminal.

If this is not convenient through the metal end plates coming in contact with the screening, the rheostat would be better if inserted in the positive filament lead of the valve. Also, it is inadvisable to rely upon the metal end plate of the condenser for a connection to the valve, but to carry a length of wire from the moving vanes to the coil, and to the valve filament. Where no screening is used a cure to persistent oscillation can sometimes be effected by reversing the primary connections on one of the RF transformers.

Points About Valves.

C. T.M., of the King Country, has sent in a letter saying that he has a 3-valve receiver, and uses 201A type valves, which are two years old. The trouble is a persistent rattle in all the speakers he has tried. If a few more details had been given regarding the conditions under which the valves were being used, it would have been easier to give more specific reasons for this jarring.

Assuming that correct B voltages are applied to each stage, that the C battery is of the correct value, and that the various transformers are all in order, the only things to check over are the valves. As our correspondent has had these over two years, they will no doubt have passed their most useful days. It was asked whether a set of Mullard valves would be in order. A suggested set would be PM5 or PM5x for detector, PM5 for first audio and PM256 for second stage. The detector valve would need 22 to 45 volts B. The first audio, about 90 volts B, with 3 volts negative bias, and the final stage 90 to 150 volts B, with grid bias strictly in accordance with the

maker's data. It is not very often that a severe rattle develops in a transformer, and listeners experiencing a rattle in their speaker should look to the last valve and remember that a power valve will handle very little more volume than a general purpose valve, unless supplied with sufficient B and C voltages.

The Screened Grid.

A FEW weeks ago Pentode wrote an article on the application of a screened grid valve to the ordinary broadcast receiver. A very interesting criticism has come to hand from an Auckland enthusiast, who has made a number of experiments with one of these valves in his Browning-Drake. An extract from this letter is given:

"Dealing with 'Pentode's' suggestion of a 1 to 1 ratio transformer, with the primary interwound with the secondary, this idea seems to be wrong. As suggested, I made up the coil, but in my case this gave reduced volume and selectivity, and I suggest the following reasons: (1) With any coil or RF transformer, there is an optimum coupling, tapping or turn ratio, which cannot be exceeded if good volume and selectivity are desired. This is due to the damping effect of the preceding valve upon the tuning of the coil. In fact, a plain tuned anode circuit gives the effect of a coil having twice the losses that it actually does have. The 1 to 1 transformer is virtually the same circuit as the tuned anode as regards losses, tuning, etc.; (2) Although the SG valve is very nearly perfect, there is still a smaller amount of self-capacity, due to the fact that it is impossible to have a perfect screening action. There are also stray capacities in the leads, etc. As the primary is so closely coupled to the secondary, and having the same number of turns as the secondary, the feed back is increased through these stray and residual capacities, and selectivity is again decreased; (3) The step-up effect of the transformer is also lost."

"Pentode" is pleased with this criticism, as it shows that more than a passing interest is being taken in the more technical side of radio. Without desiring in any way to pull our friend's letter to pieces, the writer will indulge in a little criticism of his letter in return.

Dealing with the statements in the order in which they are set down the first refers to the best number of turns for use in the anode of a screened grid valve. Concerning any amplifying valve except the last stage, maximum amplification can only be obtained when the anode impedance is at least twice that of the valve preceding it. This holds good whenever a valve is used for voltage amplification alone, which is the case in all but the final stage.

In each case the impedance of the valve is given, but of the coil data very little information is available for the set builder, and so he has to either copy reliable specifications or experiment with a number of coils until best results are obtained.

Actual measurements of tuned coils show that the average coil on a 3in. diameter former and wound with space wound single wire has an impedance of 100,000 to 120,000 ohms. A coil wound with Litz wire and tuned can have an impedance of 200,000 ohms at any particular frequency. This resistance is only at the special frequency at which the coil may be tuned to and falls to about nothing on either side of this point. A screened grid valve has an impedance of 100,000 ohms and, according to our statement regarding suitable anode impedances, it will need an impedance of at least 200,000 ohms in its anode to obtain maximum efficiency. But this is only obtained with a tuned coil wound with Litz wire. So it is evident that a tuned coil will have to be inserted in the anode of a screened grid valve. The tuned anode method is here indicated. If two coils are very tightly coupled and one is tuned the other behaves as though it, too, was tuned. A one to one ratio transformer with the primary in the anode of the screen grid valve and the tuned secondary as the grid coil of the next valve would then give, as far as the R.F. valve was concerned, greater efficiency. This is dealing with actual amplification and the correspondent is evidently trying to combine this with selectivity. A screened grid valve has no claims for selectivity except when used under the very best conditions. These best conditions need coils to be wound with Litz wire and all condensers, etc., to be of the best quality. The correspondent mentions the effect of the damping of the valve upon the anode coil, which has the effect of decreasing the selectivity. This is true to a certain extent, but small bias batteries incorporated tend to overcome this, and this negative grid bias is recommended in any set using screened grid valves.

Regarding No. 2, "Pentode" believes our criticiser is slightly mistaken in his knowledge of how a feed-back occurs. Certainly there is a very slight amount of capacity inside the valve which cannot be entirely got rid of, but this small amount is insufficient to produce a feed-back through the valve electrodes. The coupling between the anode and grid coils of the first and second valve has no effect upon the feed-back. The place to prevent any intercoil coupling is between the anode and grid coils of the same valve.

The fact that a step up is lost through using a 1—1 transformer is unavoidable, but all the amplification is obtained from the valve, which more than compensates for the loss of the 3 or 4 to 1 step up of the R.F. transformer.

If your accumulator is a new one, keep the terminals in good condition by making a practice of coating them with petroleum jelly, which prevents the acid from attacking them.

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3 Cardwell .0005 Condensers, each	12 6	Or 2 Thordarson Transformers, each	25 0
Or Ormond .0005 Condensers, each	12 0	12 Terminals N.P., 3d. each, engraved, each	0 6
1 Fixed Condenser .0025, each	2 0	1 Panel 21 x 7, Ebonite, 10/9; Formica	18 8
1 Fixed Condenser .001, each 1/-, 2/-		1 Jack S.C. F.C.	3 6
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Holes in Panels

Remedies for Mistakes

OCCASIONALLY, owing to an error of judgment, or to some other cause, a hole is bored in a panel which provides too loose a fit for the terminal; and the result is that, no matter how tightly the under-nut of the terminal may be fastened, the terminal itself sooner or later comes loose, and develops a most annoying degree of play.

Fortunately, however, such cases can be remedied by the exercise of a little trouble. If the hole in the panel is only very slightly larger than the outer diameter of the terminal shaft, make up a paste of fine ebonite powder and thick gum. Roll the terminal shaft in this, and then insert it immediately into its hole, allowing it to stand for several hours before it is again touched. By this method, the ebonite powder will effectively bind the terminal.

If the panel hole is considerably larger than the diameter of the terminal shaft, another means will have to be employed in order to provide an effective fit for the terminal.

This is the method of terminal "packing"—the terminal being packed in its hole by means of some substance which can be poured in the hole in a molten stage, and then allowed to solidify.

Substances to Use.

THE two best substances available for this purpose are sulphur and Wood's metal. Either of these may be melted, and then carefully poured from a small spoon around the terminal in its hole. They will quickly solidify, and will provide a very fast binding for the terminal.

On the whole, Wood's metal is the better material to use for this purpose, it being rather more indifferent to mechanical shocks than sulphur.

If the hole in the panel is not excessively greater than the diameter of the terminal shaft the presence of the packing will not show on the upper side of

the panel, for it will be hidden away from sight by the base of the terminal pillar.

As for the underside of the panel, if the packing material overflows the hole when it is poured in, and flows over the ebonite surface, it can readily be removed after it has solidified, by the aid of a knife and a little sand-paper.

Solder Hints

A Simple Matter

SOLDERING is really quite simple, the main idea being merely to heat the surfaces which have to be joined together sufficiently for solder to adhere to them. When they are thus warmed, solder can be "run" across from one surface to another, and on this cooling it will set as one mass, thereby joining the two surfaces together. The great art is to keep clean both the iron itself and the working surfaces.

First of all the iron must be "tinned," which is done by heating it in a clear flame (a gas jet is ideal), till it commences to burn with a green flame. When this occurs it can be removed and filed till it is bright, and whilst still very hot it should be dipped into a little flux and a blob of solder. In a tin lid. The melted solder will then run over the clean surface of the iron and coat it with a bright covering of solder, and then the iron is warmed up again ready for business.

Whilst it is reheating the two surfaces can be thoroughly cleaned with a file or emery cloth, till the bright metal shows, touched with a little flux and then brought into contact of the hot iron until a thin coating of solder appears on them, also. (In other words, until they are "tinned" also.) When both the surfaces have been tinned, they are held together, the iron is heated again, and then it is placed over the two surfaces so that it can simultaneously and equally heat them.

When hot enough the blob of solder adhering to the iron will readily run over the two surfaces and these should be held perfectly steady until it solidifies, which it does a moment after the iron has been removed. At this stage and before the joint has had time to get cool, wipe it over with a clean cloth so as to remove any traces of superfluous flux.

The heat will have liquified this, and it can be removed easily and quickly, but if it is left for a little while it will get cool and become greasy, and then be exceedingly difficult to remove. In mind soldering will become a very if, however, the above hints are borne easy and pleasurable occupation.

AMPLIFICATION at high frequency means that the currents magnified are those which are flowing in the aerial or the tuned circuits, before the detector.

Microphonic Valves

Shock Absorption

ALMOST the only disadvantage which the modern low filament consumption valve possesses is a tendency to be microphonic—that is to be susceptible to vibration so that a ringing noise is produced in the loud-speaker when the receiver is subjected to a slight jar.

This effect is due to the vibration of the valve elements, and particularly the slender filament, under the influence of the shock. In extreme cases a fracture of the filament can result.

Many sockets are now fitted with special rubber or spring suspended bases to protect the valves from vibration, and the consequent annoying noise in the receiver. In many cases, however, valve sockets in use are not protected in this way. An excellent form of shock absorber can be provided by mounting the valves on a sheet of rubber cut from an old motor-car inner tube. The rubber should be cut in the form of a panel long enough to carry all the valve sockets in the receiver.

The sockets are attached to it by small bolts, a large washer being placed under the head of each bolt to prevent the bolt head from cutting through the rubber. When the sockets are mounted on the rubber strip, the strip, should be mounted, slightly stretched, in a shallow wooden frame. It can be clamped to the top of this frame by strips of thin wood. In making the frame to carry the rubber strip, it is important to see that it is not too deep to prevent the bottom of the socket from being pressed against the baseboard of the receiver when the valve is inserted, but deep enough to keep the bases clear of the baseboards even after the rubber has sagged slightly, as it will, under the weight of the valves.

It will be found advisable to use flexible rubber covered wires to make connections with the valve base. If bus bar is used, there is a danger that it will transmit shocks to the valves, and thus nullify the effect of the rubber suspension.

High Amplification Factor

BECAUSE a valve of high amplification factor is inserted in the R.F. sockets of a multivalve receiver, is no indication that the signals will come in stronger. Rather, in the majority of cases, the reverse is the case. A high amplification factor valve usually has a high impedance, and this high impedance does not match the coil in the anode circuit of that valve and the losses are greater than the gains. Also, by changing the valves, neutralisation is affected and the set becomes unstable as a consequence. Use only those valves for which the receiver is designed.

RADIO DIRECTORY

What to Buy and Where

CITIES

ALTONA & HAMMARLUND-ROBERTS SETS.	Johns, Ltd. Chancery Street, Auckland.
ATWATER-KENT RADIO	Frank Wiseman, Ltd. 170-172 Queen Street, Auckland.
BREMER-TULLY RADIO	Superadio, Ltd., 147 Queen Street, Auckland.
BURGESS RADIO BATTERIES,	All Radio Dealers.
CROSLEY RADIO	Abel, Smeeton, Ltd., 27-29 Customs St. E., Auckland.
CROSLEY SETS	Lewis Eady, Ltd., Queen Street, Auckland.
FERRANTI RADIO COMPONENTS	A. D. Riley and Co., Ltd. ANZAC Ave., Auckland, and all leading dealers.
GREBE RADIO	Howie's, Dilworth Building, Custom st., Auckland
MULLARD VALVES	All Radio Dealers.
PREST-O-LITE. Car and Radio Battery Service	L. J. Purdie & Co., Ltd. 97 Dixon Street, Wellington.
RADIOLA RECEIVERS and Expert Radiola Service.	Farmers' Trading Co., Ltd., Hobson Street, Auckland.
T.C.C. CONDENSERS	A. D. Riley and Co., Ltd. ANZAC Ave., Auckland, and all leading dealers.

COUNTRY TOWNS

CROSLEY RADIO	J. C. Davidson, Main Street, Pahiataua.
CROSLEY SETS	F. H. Jellyman, Ltd., Devon Street, New Plymouth.
CROSLEY RADIO	D. A. Morrison & Co., Victoria Avenue, Wanganui.
PHILIPS VALVES AND APPARATUS	All Good Radio Dealers.

For the Latest
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Mullard
THE MASTER VALVE

Our Crystal Corner

By "Galena"

If your reception is interrupted intermittently according to the position of your head or the position of the telephones, it is a sign that one of the leads is faulty and needs replacing.

An excellent test for sensitivity is to place the telephones over the ears in the ordinary way, put one of the tags between the lips and rub the other tag with a key, nail, or other piece of metal; if a rubbing noise is heard corresponding with the movement of the key you can be sure that the 'phones in question are sensitive.

As telephones are among the most sensitive instruments known to science that are in common use, we should always treat them carefully.

When telephones are not left connected permanently to the set, but are stowed away in a cupboard, make sure that they are kept in a dry place, as dampness will in time affect them.

If the telephones are incorrectly connected to the 'phone terminals in a valve set, it is only a question of time before they become demagnetised, owing to the plate current flowing through them in the wrong direction.

It is easy to damage telephones by dropping them for—apart from the effect upon the magnetism—their sensitivity depends upon the exact shape and position of the diaphragm. If a telephone diaphragm is discovered to be rusty, it can after careful removal be cleaned and slightly smeared with petroleum jelly before being replaced, in order to keep it in good condition. If, for any reason, the telephone diaphragm is taken from off the earpiece be very careful not to bend or damage it in any way. When replacing a diaphragm over a telephone earpiece, do not place the diaphragm straight down over the earpiece, so that the magnet exerts a pull upon it, but slide the diaphragm sideways over the rim of the earpiece so that it will not be bent or pulled.

Make allowance for use with the telephones, as very much enjoyment may be had by other members of the family when they can pick up the phones and listen when and where they like.

How the 'Phones Work.

THOSE who have unscrewed the ear cap of the telephones have seen a coil of fine wire wound around an iron stud. The latter is the pole of a permanent magnet. A permanent magnet will always exert a pull upon certain objects such as the metal of which the diaphragm of the telephones is constructed.

A coil of wire wound round such a magnet and carrying a current of electricity will influence the intensity of the pull of this magnet. The wireless waves are really variations in voltage impulses, and these variations make themselves felt in the wire surrounding the magnet, which in turn passes the voltage impulses on to the diaphragm, as it is either attracted or repelled according to the intensity of

the signal passed. This fluctuation of current then causes a similar fluctuation of the telephone diaphragm which causes a variation in the air, and this variation is caught up by the ear and so the sounds are heard.

Galena Crystals.

GALENA, of which many of the detectors in crystal sets are made, is a natural sulphide of lead, crystallising in both cubic and octahedral crystals. In the massive form it occurs widely distributed throughout the world as primary metallic veins in limestone, or as irregular deposits. Almost all natural galena is radio-sensitive to a certain degree.

Hard specimens of this mineral are generally more sensitive than softer ones, and those with a slightly striated surface will be found remarkably so. The most sensitive spots are to be found at the very angles of cubic crystals or clearages or on minute octahedral clearance planes. The best results are obtained by connecting the crystal itself to the "ground" side of the circuit and the cat's whisker to the aerial side.

The Full-Wave Variometer Set.

"X.Y.Z." (Mahanga Bay) who has constructed the full-wave crystal set, writes:—"My results are decidedly poor, and by no means as good as what I am getting on my present set with one permanent detector. I have tested both carborundums and cannot detect the least difference in either. The aerial directional to 2YA is 200ft., and the earth two copper plates. In tuning, the rotor can be placed anywhere with little alteration in volume. What amount of wire should be on the stators with my long aerial?"

A.: It appears that more wire could be added to the rotor or the stator, for there is no doubt that the fields created by both the coils are not strong enough to sufficiently influence one another. Increase the coupling between the aerial and the stator.

Details of a Tapped Coil.

"S.H." (Dunedin) asks for details of a I tapped basket coil consisting of 60 turns. He has already one of 38 turns, and can tune in the local stations with very good results.

A.: As the inductance of the basket type of coil is very high, there is no advantage in exceeding 50 turns. Proceed in the same way as described in the "Radio Record" of December 14, 1928, and tap every 10 turns, that is, clear away the insulation, and solder a piece of heavy wire, say 18 gauge, at this point. Shellac the joint or wrap insulation tape round it. Each of theappings can be in turn connected to the aerial, while the condenser is connected in parallel across the whole length of coil. By this means, a great tuning range can be covered.

The correspondent has asked for a diagram, but if he constructs the basket coil according to instructions, he

Radio in England

Model for Other Countries

REPRESENTATIVES from many countries in Europe—members of the Union Internationale de Radio-phonie, the wireless parliament started 3½ years ago at the instigation of the B.B.C. to discuss broadcasting in all its aspects—have been in England studying the production methods of the B.B.C., and comparing them with those of their own country, says the "Daily Mail."

The side of the British work at which they have looked most closely is the dramatic and art side, and most of all the wonderful control board for dramatic productions. In this control board as many as seven independent studios may be linked up on one production.

Seated in control the producer warns each studio by a flickering light when it must come in, brings in perhaps a band to accompany the actors in another studio, starts the effects room and tunes all three so that the listener hears each in due proportion; then, a sudden quick movement, and all three are "faded out" to bring in another studio. This control board is considered to have no equal in the world.

Later in the year it is expected that a commission from Canada will arrive to study British methods. An official of the B.B.C., who was in Canada during the summer, said:—

"The whole broadcasting scheme of Canada is to be overhauled. It is not successful at the moment, and they will probably adopt a mixture between the English and American styles; that is, allow advertising for revenue purposes, but also have the tax on licenses as in England."

should have no difficulty. If trouble is experienced in connecting the differentappings of their respective destinations, he should refer to the description of the "R.R. Selective Crystal Set" described by "Megohm" some time ago. By substituting the basket coil for the plain solenoid coil, everything should be made clear.

The Speaker for a Crystal Set.

WHEN a one or two-valve amplifier has been added to a crystal set, care should be exercised in selecting the speaker that will give the best results. It is indeed rare that a very great output has to be handled, so that capacity to handle volume is unnecessary: in fact, it is a distinct disadvantage. A small sensitive speaker, preferably of the cone type, gives greatest satisfaction.

Success of Double Grid Valve and Full-wave Crystal Set.

I HAVE made up a crystal set using pentodes system of dual tuning and "Galenas" double-grid valve for the amplifier described in article (crystal set and amplifier to work off 22½ volts. The volume was wonderful for a crystal set. When made it developed a whistle, and was very rough, but that was cured by shielding coils and putting .001 condenser across primary of transformer; the performance was equal to a two-valve set. I received IYA, 2YA, 8YA, 2FC, 2BL, LZQ, 12B, 8AR, 8LO, on a 175ft. antenna.—C. F. Mickle, (Auckland).

HUGO GERNSBACH, editor of the New York "Radio News," says:

"So far, large radio manufacturers have turned out no radio set which can be sold to the public, capable of being tuned as readily on the short waves as it can be on the high waves. But it is safe to say that most of the large manufacturers are keeping a weather eye on the short-wave situation, and, if one or more break the ice and a good set that makes tuning on the short waves easy is developed, we will have another silent revolution in radio."

TRUE to type, Viennese listeners have decided that symphony is preferable to sport—at all events to those who from choice or necessity must spend their Sunday afternoons at home. Recently tests were made with a view to relaying commentaries from a well-known winter-sports centre in Austria. The idea of following these tests up by actual transmission was, however, dropped on representations being made that the minority who would be definitely interested would themselves probably be on skis or skates far from their receiving sets.

THE old proverb, that there is no telling where lightning will strike next, lost something of its application with the discovery of the lightning rod. It has been further limited by the discovery, according to a correspondent of "Wireless Age" (London), that French tests have shown that limestone soils are less visited than rocky or mineralised areas. This is attributed to the fact that the air over the latter is more highly ionised; and this may also have its effect on vagaries of radio reception at different locations.

THE CHOICE OF A TRUSTEE

What principles should guide the prudent testator in selecting a Trustee?

What are the advantages of a Corporate Trustee over private individuals, such as friends or relatives? Why and when should a Will be made?

What is the expert, economical service offered by the Public Trustee?

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"Your Estate"

obtainable free from any office or agent of the Public Trustee, or free by post from the Public Trustee, Wellington.

Short-wave Jottings

MR. SELLENS'S (Northland) report for the weeks is as follows:—

Saturday, March 23.

P.C.J. was held from 5.30 a.m. till 7.30 a.m. Signal strength from R8 at first to R7 at close of transmission. Reception was mushy for first hour, but cleared up after.

G5SW opened at 6.25 a.m., with their tuning whistle. The opening announcement was very clear. The talk from London was not clearly readable.

W2XAD and W8XK (KDKA) were both transmitting the same item till just after 3.30 p.m.—an American Senator talking politics. 2XAD carried on with a musical programme at R8 after the talk. SXX closing down.

PCJ from 3.30 p.m. (did not try them before) till 5.30 were received perfectly, volume was easy R9 towards the finish.

They concluded with "Goodbye, don't forget to write."

Sunday, March 24.

Z.L2AX was well received at about 11.30 a.m. Transmitting on the 80 metre band, signals were R9, with slight fading.

KDKA at 1 p.m. were readable at R3-4, which is early for this station to be good enough to follow talk. At 3.30 p.m. a tribute was paid to the late Marshal Foch, an orchestra playing the "Marseillaise"; this was followed by the "Last Post."

After the weather forecast, which was not very promising, music and messages to the Far North, also to the Byrd Expedition were relayed from the Italian dining-room of the William Penn Hotel. The station closed at 4.30 p.m.

W2XAF and W2XAD were transmitting the same programme during "Lucky Strike" hour, from 2.30 till 3.30 p.m., after which a special programme for the Byrd Expedition was put on. At 4.30 p.m. 2XAD was R9, while 2XAF was R8. The former station was much the clearer. A station was heard on about 52 metres; their call was not picked up, but it was probably W1.W. At 9.30 p.m. RFM was transmitting some orchestral music, which was very fine.

Monday, March 25.

3LO from 6.30 a.m. was R9, clear and steady, with slight slow fade. RFM, at 10.15 p.m., talk; R8; static bad.

Tuesday, March 25.

UP too late for duplex between 5SW and 2XO.

G5SW opened at 6.27 a.m., announcing that they were radiating on aerial A for the first 25 minutes. Big Ben was followed by a literary criticism. The talk was very clear and steady, being 100 per cent. readable, RS-9. A French lesson was given later.

RFM: Talk as usual.

Wednesday, March 26.

G5SW, as usual, opened at 6.27 a.m. A talk by Mr. Al. Simpson followed the striking of Big Ben.

KGO was R8 at 6 p.m., transmitting a variety programme by "Radio Keith's Orpheans." A portion of the music was relayed from Los Angeles. They signed off at 7.30 p.m. (midnight, Pacific time). Wave-length given as 23.35 metres.

ZL2GK with some records was well received at R9.

Verification for S.F.R.

MR. J. RAIT, Brooklyn, writes: I am fortunate enough to have received a verification from the French short-wave station operating on 24.50; call is SFR; address is Societe Francaise Radio-Electrique, 79 Boulevard Haussmann, Paris. New stations heard are LAC and PKI, of Bandoeng, Java, operating on approximately 43 and 39 respectively; both work VK6AG on duplex. 3AN, Sourabaya, Java, broadcasts on Monday, Tuesday, Thursday and Saturday from 7 to 9 p.m., Java time. Wavelength 40 metres. When last heard was R4, wave unsteady. Address is 3AN, c/o Mr. W. H. Brussee, Sourabaya. I do not know whether any of your correspondents have received a Russian on about 22 metres broadcasting the same as RFM-N. From information received from a friend in Blenheim it is possibly RDRI, strength R3, wave steady. PCL, Kootwijk, Holland, was heard from 1.35-2 a.m., March 22, broadcasting the business of the League of Nations. Fading was bad, a short, sharp swing. QSA3; wavelength 18.4 metres. The announcer stated how wonderful it is to be able to speak to Australia and New Zealand, United States of America, India. Mention was even made of the Chinese famine.

The following is a translation of the letter from SRF:—

WE beg to acknowledge receipt of your letter reporting the reception of our stations, and warmly thank you for same. Broadcasts are effected through the 15 k.w. crystal-controlled station at St. Assise. A system of twin antenna is employed, one for Saigon, Indo-China, and the other for Buenos Aires. The former operates on a wavelength of 24.5 metres and the latter on 15.55. The studio is at Paris.

The transmissions for Saigon to the present have been irregular as regards the hours of operation and have been one way only. Excellent results have been obtained. The station has been reported in the Dutch East Indies and in Japan; in both cases the reception was perfect.

With Buenos Aires a special service of two-way communication has been attempted with good results. The telephonic systems of Buenos Aires and Paris have been connected with the radio, so that it has been possible to carry out trans-oceanic conversation with the ease and facility of ordinary phone conversation. This is to be developed into a public service, for it has been possible to recognise even the individual characteristics of voice. Moreover, by the means of the international system of telephonic cables, successful trials have been conducted with the European capitals, London, Brussels, Amsterdam and Berne.

We shall be pleased to receive any further advice from you and shall welcome opportunity to furnish you with all information which may be of interest.—Societe Francaise Radio-electrique, 79 Boulevard Haussmann, Paris (VIII e.).

THE General Electric Company's station KGO, Oakland, California, is conducting a series of Saturday evening programmes from 9 o'clock till 12 midnight (American time), which corresponds with 4.30 o'clock till 7.30 o'clock Sunday afternoon (N.Z. time), and they are working on about 21 or 22 metres.

Southland Notes

W.G.L. Southland writes: Conditions in Southland have been poor, but following is my log:—RFM has not been received with much volume in Southland lately. Only on a clear night does it have anything like volume, but the winds as we get here affect this station.

Friday, 15th: PCJ in the morning was R8, very clear and steady. RFM in the evening with his usual talk was R6.

Saturday, 16th: PCJ was heard again with some good music. R9. RFM was R3 in the evening.

Sunday, 17th: 2XAF with music was R7; some static was interfering and I was rather late in getting on to this station, but I listened to the end when the announcer said it was 1½ minutes past 12 E.S.T. RFM was R6.

Monday, 18th: 3LO Melbourne in the morning came in with great volume, strength being R9. Nothing was heard on Tuesday or Wednesday on account of rough weather.

Thursday, 21st: RFM was the only station heard, being R4, with music.

The Story of the Valve

A Romance of Invention

WITHOUT the invention of the radio valve broadcasting would be impossible, and radio would have stayed where Marconi had placed it—solely as a means of Morse communication. In the year 1884, what is known as the "Edison effect" was noticed in the Edison laboratories. When a metal plate was placed between the two edges of an ordinary carbon filament electric lamp, a stream of electrons passed from the negative leg of the filament to the plate. Professor Fleming, an English scientist of note, conceived the idea of turning this Edison effect to account in the year 1904, and produced a two-electrode valve. His experiment had proved that a carbon filament, heated to incandescence, and surrounded by a metal plate, acted as a rectifier, but was not as sensitive as a crystal detector.

In the year 1903 Lee de Forest, experimenting in wireless telegraphy, observed that a spark coil, when connected to a source of current supply, affected the light from a Welsbach incandescent gas burner. He deduced that heated gas molecules were sensitive to high frequency oscillations. In 1906, de Forest added a grid, or third electrode, to Fleming's two electrode valve, and termed the resultant valve an "audion." His circuit arrangement for testing out this three electrode valve was just a simple one-valve circuit.

Since that time the improvements on the first valve have been rapid. In 1918, Captain Round introduced an improvement to prevent Cathode rays, as the electron streams are called, from reaching the walls of the glass enclosing bulb or tube. In order to accomplish this, he completely surrounded the filament with a grid of wire gauze, protected by a metal cylinder.

Baird Television

According to a Press Association cablegram from London the British Postmaster-General has agreed that the B.B.C. plant may be used, outside ordinary broadcast hours, for further experiment with Baird's television apparatus. It is stressed that this does not imply any immediate revision of the B.B.C. attitude following on earlier experiments.

3DB Almost Ready

THE Melbourne "B" class station, 3DB, is on the eve of transmitting television. Several sets of equipment operating on the Baird principle have been obtained and are being assembled, and early demonstrations are promised. While it will be agreed that the experiments should receive as much assistance as possible from the Postal authorities, it is as well, however, to remember that the solution of the problem of television is by no means completed.

Several systems, all similar in basic principle, have been devised, and all are capable of transmitting moving images. This, however, does not mean that development has been carried to a point from which effective permanent services can be begun.

Wireless telephony under certain conditions was possible early this century, but it was not until 15 years after the first successful transmissions of speech by wireless telephone were held that broadcasting became possible. Television is in much the same position today as broadcasting was before the development of valve transmitters.

Some qualified technicians who have discussed television have advanced the assertion that the broadcasting of moving pictures by wireless will never be possible. They are able to support this statement on sound scientific grounds, but in spite of this developments in applied science occur so rapidly that it is not too much to expect that the main obstacles to the opening of commercial services will ultimately be overcome.

The various systems being employed are undoubtedly capable of providing a broadcast television service, but such a service would be most unlikely to prove permanent. It would command considerable support at the outset as a novelty, but unless a remarkable improvement in the size and quality of the broadcast pictures could be made before this interest passed services could not survive the passing of their novelty. Additional research is therefore required, and it is interesting to see an Australian company joining in this work.

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