List of Stations Available to N.Z. Listeners--Full-Wave Battery Eliminator Valuable Hints for Beginners



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London Successfully Re-Broadcast by 3YA

Epoch-Making Event in World Radio

Broadcasting history was established in New Zealand on the night of Friday-Saturday, November 11-12, by the successful rebroadcast by 3YA Christchurch of the short-wave transmission on 24 metres by 5SW, Chelmsford, of the celebrations in connection with Armistice Day. The celebrations were broadcast in three sessions, the first being that of the service in Canterbury Cathedral, which was receivable in New Zealand as from 11.15 p.m. to 11.45 p.m. Friday evening. This was followed by the organ recital at St. Mary Le Bow at 1 a.m. to 1.30, and then by a tenminute address from the Director-General of the British Broadcasting Corporation. These two sessions were successfully re-broadcast by 3YA.

The third feature in the day's celebrations in London-that of the "Daily Express" Remembrance Festival in the Queen's Hall on the evening of Armistice Day, due in New Zealand at 8.30 to 10.30 Saturday morning, was wholly unsuccessful, so far as adequate reception was concerned, by any of the Broadcasting Company's stations, and so far as we know at the moment of writing, also by any other receivers in New Zealand.

The result was not unexpected by the engineers of the British Broadcasting Corporation, who announced beforehand, in line with the results secured by the careful tests carried out for the preceding week, that they anticipated that the first two events would be received satisfactorily, but that they had doubts as to the successful reception in New Zealand and 'Australia of the Queen's Hall celebrations, on account of the greater period of daylight through which these waves would have to pass at the reception end. These expectations were justified by the outcome.

expressed at the very successful outcome of the efforts of the Broadcasting Company of New Zealand to pick up the earlier sessions. The rebroadcast of the service at Canterbury Cathedral was wholly successful, and it was no doubt with a great deal of satisfaction that the announcer at 3YA was able to say: "You have just been listening to a rebroadcast of 5SW, Chelmsford, which has been broadcasting the Armistice Day Remembrance Service at Canterbury Cathedral. Station SYA is now closing down till 1 a.m., when the organ recital at St. Mary's Le Bow will be rebroad-

WELLINGTON RECEPTION.

Reception in Wellington of the Canferbury Cathedral service was not so good as that experienced in Christ-At Mr. Seilens's residence, church. where the writer listened, the earlier part of the service was received at phone strength, but from the period of "The Last Post," sounded after the two minutes' silence, reception improved sufficiently to lift it on to the loudspeaker, where it was possible to maintain it at weak strength till the end of the service. The service was of a most impressive character, and the intoning by the congregation of the Lord's Prayer could be heard with

THE ORGAN RECITAL.

Reception of the organ recital at 1 o'clock in Wellington was even better again. At the conclusion of the musical programme 6SW announced: "Calling Australasia, 5SW, Chelmsford, calling Australasia. This is -Director-General of the B.B.C. I hope you can hear me, at any rate as well as we have heard you on some recent occasions. It is unfortunate that the experiments provide little hope . ." (a few sentences were then lost, but the words "short-wave transmission" were heard, after which these words: "We shall naturally endeavour to improve on to-night's transmission."

The speaker's further remarks were recorded as follows in shorthand, so far as they could be heard:-

"I am taking this opportunity of speaking to listeners, not only in Britain, but in every part of the world. We have celebrated Armistice Day . . British Commonhere, have wealth of Nations have . . . It is inevitable that in such a war -and so a new conception of wo peace That movement will necessarily grow from one generation. Real progress has been made, which is a matter for pride, and exemplifies that effective co-operation of the British Commonwealth of Nations of the world may yet be realised . in this country. World's broadcasting . . . broadcasting services of the world are correspondingly great. I am sure our listeners here in the British Isles . -and I send greetings to all those thousands of listeners overseas, and particularly to those in Australia and New Zealand and the Malay States . . . hearing this transmission will be particularly interested. It is thrilling to hear you speak, and we hope you can hear us speak too."

The station announcer then said: "This is 5SW, Chelmsford. 5SW, Chelmsford, is closing down now until 8 o'clock this evening."

THE EVENING PROGRAMME FAILS.

On the occasion of the British evening transmission the conditions for reception in New Zealand were not good. On tuning in at 8.30, New Zealand summer time, the carrier wave of 6SW could be detected, but the interference of howling valves was very marked, and no clear-cut vestige of sound of either speech or music could

be detected, nor could any rebroadcast, if any such were attempted, by either New York, Schenectady or Australian stations, be secured. Some experienced operators think that, if the howling valves had been absent, some part of the transmission might have been secured. On the occasion of the 24-hour test from 5SW a week ago, it was found that reception in New Zealand deteriorated very rapidly with the approach of daylight and its extension over this side of the world. One listener recorded reception of 5SW on that test upto 10 a.m., although at much weaker strength than had been secured earlier.

On the whole, however, the first Empire broadcast undertaken by the Bri- . tish Broadcasting Corporation can be regarded as having secured a very encouraging measure of success. Reception of the day sessions in London was quite good in New Zealand, but reception of the night session, which had to contend with the daylight enemy, was unsuccessful. From the point of view of New Zealand reception, the latter is most important to us, because most of the big functions and better-class programmes which would be most welcome in New Zealand naturally take place in London's evening hours.

THE RECEPTION IN CHRIST-CHURCH

IMPRESSIVE CEREMONY.

Crystal set users in Christchurch listened in on Friday night and early on Saturday morning to music and voices broadcast from England. It was an

epoch-making occasion.

To station 3YA has fallen the honour of having been the first to rebroadcast an English station and to permit people in New Zealand to listen-in to happenings halfway round the world.

happenings halfway round the world.

Those who were privileged to listenin were elated. Many a "humble crystal set" owner must have stared agape when he realised that what he was hearing was being said in old England. It was an achievement that makes a crystal set no longer a "humble crystal set." It stands exalted now. It has heard London calling. It heard the morning service in Canterbury Cathedral, the congregation singing, the Archbishop preaching, even the two minutes' silence, then the impressive "Last Post," further singing, the chanting of the Lord's Prayer, followed by a lengthy prayer, the singing of "God Save the King," and the pronouncing of the Benediction.

It was wonderful, and listeners who

sat up late were well rewarded. As the rebroadcast proceeded reception improved. The volume was always good, but it became clearer.

The broadcast commenced at 10.45 a.m., English time, corresponding with 11.15 p.m., New Zealand summer time.

Good as this fest had been, the best was to come. It was not the organ recital in St. Mary le Bow Church, wonderful as it was to hear the pealing notes of the organ.

The best portion of the test was a ten minutes' speech which reached New Zealand about 1.30 a.m. The speaker was the head of the broadcasting in Britain. From his introductory remarks: "It is the director-general of the British Broadcasting Corporation speaking," until the announcer closed down, procedure of the British Broadcasting Corporation speaking," until the announcer closed down, practically every word was intelligible.

The director-general, Sir J. Keith, sent a greeting to Britons overseas, in every part of the world. A fine Armistice Day sentiment expressed revulsion against war and the view that in the British Commonwealth of Nations there was promise that the world would yet be redeemed from the shadow of war. and he believed that wireless would help immensely. The British Broadcasting Company had a motto, "Nation shall talk with nation." Radio had no fron-tier, no boundaries, no politics.

Sir J. Keith said it was thrilling to have heard the recent broadcast from Australia, but it could have been no-thing to the thrill which a crystal set user in Christcharch experienced when he heard 5SW, Chelmford, England.

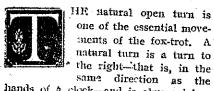
Great hopes were entertained that the speech which the Prince of Wales was to deliver in the Albert Hall, London, would be heard in New Zealand, but this portion of the test failed. The broadcast was picked up, but not suffi-ciently strong to be rebroadcast, and as the day waxed the power waned till it disappeared completely.

APPRECIATION OF BROADCAST.

G.C.H., Masterton: I would like to express appreciation of the action of the Radio Broadcasting Company of New Zealand in rebroadcasting from 3YA the initial official broadcast of the Chelmsford (Eng.) short-wave station 5SW, who were relaying from Canter-bury Cathedral a special Armistice Day anniversary service, and later an organ recital from St. Mary's, London. The Broadcasting Company also deserve great credit for the very successful manner in which the rebroadcast was effected, and I am sure all who listened to SYA last evening and early this morning will endorse these remarks. This transmission marks a new era in radio broadcasting, and after such very satisfactory results being obtained it is to be hoped that the company will continue to rebroadcast 5SW whenever possible for the benefit of those listeners but necessing chert were not possessing short-wave receiving sets The company can rest assured that very few listeners would not take advantage of the opportunity of listen-ing to rebroadcasts of this nature.

Do You Fox Trot Correctly?

Miss Phyllis Bates Teaches the Natural Open Turn from 2YA:



hands of a clock-and is always taken on a forward step with the right foot, or on a backward step with the left foot. To make my subsequent description clear I will explain what is meant by half and quarter turns.

HALF AND QUARTER TURNS.

Face North; a quarter turn will bring you facing East, while a half turn will bring you facing South.

MAN: First Half (one bar of music). Right: Long step forward on the heel (Fig. A) rising to the ball of the foot and taking a half turn to the right, wnweighted left foot moving round the right. Count "1, 2."

Left: Very short step to the side and slightly to the rear on the sole (Fig. B). Count "3"

Right: Short step backward on the wile (Fig. C). Count "4." Second Half (one bar of music).



Fig. A.



Fig. B.

Left: Long step backward on the ball of the foot, dropping to the heel and taking a quarter turn to the right, drawing the unweighted right foot back to the left (Fig. D). Count "1, 2" (for step and turn).

Right: Short step to the side on the sole (Fig. E). Count "3."

Dancers are advised to study last week's article in conjunction with

Photos posed by Miss Phyllis Bates and Mr. Ivor Critchley.

Photographs by S. P. Andrew.

This completes the open turn. Follow with the "Brush Step." Draw the left foot up to the right and step straight forward (Fig. F). Count "1,

GIRL: Pirst half (one bar of music) Left: Long step backward on the ball of the foot (Fig. A) dropping to the heel and taking a half turn to the light, drawing the unweighted right foot back to left. Count "1, 2."

Right: Take the weight on the sole,



Fig. C.



Fig D



Fig. E.

right foot close to and slightly in advance of the left (Fig. B). Count "3:"

Left: Short step forward on the sole (Fig. C). Count "4."

Second Half (one bar of music).

Right: Long step forward on the heel (Fig. D), rising to the hall of the foot and taking a quarter to the right, unweighted left foot moving round the right, Count "1, 2."

Left: Step to the side on the sole (Fig. R). Count "3, 4."

This completes the open turn. Follow with the "Brush Step." Draw the right foot up to the left and step straight backward (Fig. F). Count "1, 2."

WHEN PRACTISING.

If you refer to last week's lesson you will realise that the first half of the open turn is really a three-step movement. However, a learner is advised at first to take two beats for each step.

NOTES ON THE TURN.

On the first half of the turn the man On the first half of the turn, the man is on the outside of the turn. He, as it were, steps around the girl, so that while after turning, the girl's right foot is close to her left. The man must take his step on the left foot slightly to the side in order to maintain a directly opposite position of the feet. On the second half of the turn, the reverse is the case, the girl stepping

around the man. Both take a step to the side, but the girl's step will be slightly longer

In the fox trot there is a reactionary movement of the trunk in opposition to movement of the trunk in opposition to the movement of the legs. By "opposition" I mean contrary. For example, when the right foot is forward and the left foot backward, the right hip and shoulder will be backward, when the left foot is forward, and right foot backward. The left hip and shoulder will be backward. This contrary movement originates at the hips and travels up the trunk to the shoulders. It is entirely natural and there must be no forced movement of the shoulders. When the feet are level there is no opposition of the trunk. there is no opposition of the trunk.

This contrary movement is very important on turns. A step on which a turn is taken is longer than an ordin-

walk, this increases the opposition.

When turning on a forward right foot or a backward left foot, the left hip and shoulder come forward and round. As turns taken from both these positions are investigated in the state of th tions are invariably turns to the right, it will be seen that on all right turns it is the left hip and shoulder which comes forward and round. Opposition gives the lead and the impetus for turns. It is most important that the dancer should remember and practise



Fig. F.

AMERICAN TASTES

MANY DISLIKE JAZZ

BEETHOVEN PAVOURITE.

The musical taste of radio listeners of the American nation is very much higher than is commonly supposed, according to the tabulated results of a widely circulated questionnaire, it was announced last month by Arthur Williams, vice-president of the New York Edison Company. The questionnaire discloses Ludwig van Beethoven as the favourite composer and Richard Wag-ner's overture to "Tannhauser" as the favourite type of music. The opinious were obtained in connection with the

were obtained in connection with the company's hour of music which is broadcast over WRNY, New York City. Radio listeners number 4800 had cast a total of 79,800 votes for lifty composers and eighteen types of musical compositions, he said. Beethoven, resided 3015 across these Press Calment and posers and eighteen types of musical compositions, he said. Beethoven, received 3245 votes; Franz Schubert ranked second with 2071, and Victor Herbert third with 2035. The next in order were: Richard Wagner, Felix Mendelssohn, Fritz Kreisler, Franz Liszt and Charles Gounod. Johann Strause, the Vienna waltz master Strauss, the Vienna waitz master, ranked infecently.

Favourite Compositions.

The first ten favourite compositions in the order of their preference were: Overture to "Tannhauser," by Wag-ner; "Poet and Peasant" overture, von ner; "Poet and Peasant" overture, von Suppe; "March Militaire," Schubert; Fifth Symphony, Beethoven; "Unfinished" Symphony, Schubert; ballet musica from "Faust," Gounod; "Meditation from "Thats," Massenet; "Liebesfreud," Kreisler; "H.M.S. Pinafore," Sullivan; and "Nuteracker Suite," by Tschaikovsky.

"One of the significant things shown in the questionnaire," said Mr. Williams, "which seems to indicate that the tastes of listeners everywhere are

the tastes of listeners everywhere are alike, is that relative positions of the leading composers and compositions

were the same for each thousand questionnaires tabulated.

"The space provided for remarks provoked much lively comment. The more had more to say and were much more positive in their opinions than women. Thirty asked for jazz, and more than 135 denounced it in no gentle terms. Instrumental solos proved to terms. Instrumental solos proved to be more popular than vocal solos, with 2720 votes for the former and 1422 for the latter. Orchestral music alone received 2110 votes."

NEW MICROPHONE

THE CONDENSER TYPE.

A new type of radio microphone, which has proved successful in tests at WJZ, New York; WYG, Schenectady, and KDKA, Pittsburgh, soon will be made available-for all stations, acceptable. cording to a statement made on October 6 by S. W. Goulden, an engineer of the Radio Corporation of America. The new device known as a condenser microphone, is said to reduce the effect of extraneous noises caused by mechanical vibrations at the point where the programme originates. Rushing noises, often present when programmes are picked up in crowded dance halls and hotel dining rooms, are climinated by this instrument.

Eliminates Blasting.

"Organ music broadcasts," said Mr. Goulden, "have been found greatly improved when the pick-up is effected in the new type. One microphone can be used, so placed that its position is at the focal point of the vibrations coming from various sections of the instrument. It has been found practically impossible to 'blast' the condenser type of instrument, even when a great amount of sound energy is directed upon it, thereby greatly improving the quality of transmission."

Mr. Goulden said WEAF, New York,

had already ordered one of the new microphones, and that WENR, Chicago, will operate -twenty-one condenser microphones in connection with its new fifty-kilowatt transmitter, which

is a duplicate of the Bellmore station of the National Broadcasting Company.

The Radio Broadcasting Co. of New Zealand has already some microphones of the condenser type.

OFFICE MICROPHONE

By instelling a microphone and suitable cheap apparatus on his office desk, Henry C. Mahoney, sales manager of a big London firm, claims to have cut down by half the time occupied by his daily correspondence; to have life ened the life of his secretary; and to have surpassed anything yet done in

the office speed-up line.
The "mike" hangs in front of him on his desk. His secretary sits in another room, at some distance away, at her typewriter. With both hands free, Mr. Mahoney can quickly deal with his letters and reference files. When a letter is to be dictated, he presses a but-ton to call the attention of his secretary, and she, donning a pair of head-phone 3, can take down the letter with-out stirring from her chair.

That letter having been disposed of as far as she is concerned, the manager can then get busy on other matters.

The lead terminals on storage batteries are liable to corrode. The white, moist powder or light yellow paste that collects on the posts should be wiped off as it collects. This substance can be kept from adhering to the posts by thinly coating them with vaseline or automobile grease.

What Won the Cup?

Tune in to Christchurch during Carnival Week on a Gilfillan, and get all the latest.

Call in and inspect the world's best Neutrodyne. Demonstrations any afternoon or Friday evening.

There is no better set you could buy than a Neutrodyne. Why Hesitate? A child can handle it. Terms arranged.

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CHRISTCHURCH. (Opp. Beath's) CASHEL STREET Also T. H. Blain, High Street, Rangiora; R. F. Joyce, Kaiapoi.





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9 MAJORIBANKS STREET,

WELLINGTON.

The Chit-Chat Club-

Points from Papers Put "Over the Air."

(Set Down by "Telanother")

Pertinent Points on:

"Nonsense, sir," said the oldest member vehemently, "any pedestrian is entitled to the road as much as a car. If I get half a chance I'll make these blessed car drivers get out of the road."

"And one of these days," said Harrison, to change the topic and divert the stream of eloquence that usually poured forth.

"Mr. Rahson agreed with that to

Blinks, looking prophetically over the top of his huge horn-rimmed glasses, top of his huge horn-rimmed glasses, "they'll put you out of their road. A fair thing's a fair thing, and there are pedestrian road hogs as well as motorist road hogs."

"That's true," affirmed Larton, who, having but recently bought a car, felt keenly on the matter.

"Put the motorists are the worst"

car, felt keenly on the matter.
"But the motorists are the worst," said Wishart. "After all, a pedestrian has only his own life to fool

with, but a motorist has his own and a dozen others as well."

"A car properly driven," said Thribs portentously, "is never a menace. It's only when fools get behind the wheel that it becomes dangerous."

"Wisdom from our profiteer," said Blinks facetiously. "Wonders will never cease. Do you know, Winton, your very sentiments were expressed over the air recently by Mr. R. W. Robson, Traffic Inspector for Riccarton Borough Council. And I might add," said Blinks, with a twinkle, "he



-Steffano Webb, photo.

MR. ROY AUGUST, OF 3YA. To listeners, Mr. August and his ukulele are well-known. He plays and sings well, and is always welcomed on a programme.

9]247461216183363363313131316163631313163376376376376376376376376377776377 indicated that there were some idiots of pedestrians who didn't know how to cross roads."
"They shouldn't issue so many licen-

"They shouldn't issue so many heenmes," said Harrison. "Half the people
who drive should never be allowed
near a car."

"That's all very well," said
Blinks. "When they go up for a
license they can and do drive all
right. Once they've got it they disregard every rule of the road. How
can a traffic inspector know they're

regard every rule of the road. How can a traffic inspector know they're going to do that?"

"What I'd do," growled the oldest member, "is to tie up the carburettors so that they couldn't get more that 25 miles an hour out of any car. I'd fix 'em, and," he added vindictively, "if I got a hold of the young devil who nearly ran me down last night, I'd give him ten years."

I'd give him ten years."
"Didn't you get out of his road quickly enough?" asked Blinks inno-

quence that usually poured forth.

"Mr. Robson agreed with that to some extent," said Blinks. "He said that in cases where carelessness was proved, licenses should be cancelled, and where drink was responsible, gao should be added to the punishment."
"With a minimum of ten years,"
said the oldest member fiercely.

"Just as well you don't drive, or you'd be a 'lifer'," said Blinks.
"I can hold my drinks," said the

oldest member.
"That's exactly what the blighters who drive cars when drunk think,"

DRUNKEN MOTORISTS.

"Cancel all licenses in cases of proven carelessness, and where drink is responsible add the penalty of gaol. Why should the use and enjoyment of one of the finest inventions of the age be spoilt by such people?"

R. W. ROBSON,

Traffic Inspector, Riccarton, From 3YA.

affirmed Blinks. "No one who has even a couple aboard should go driving a car, for it makes them take risks."

"Once a chap's had a car for a while he gets careless," said Wishart.

"There's no reason why he should,"
said Larton who heing a new and

said Larton, who, being a new and careful driver, thought that he would

"Take most of the accidents that happen on the Hutt road" said Blinks, "and hardly a week goes by but that there isn't a minor one. They are all caused through chaps taking unnecessary risks, and so are most of those in the towns. As Mr. Robson said, every motorist should slow down and give a signal indicating his intention at all corners, and should sound his horn at all crossings. Any fellow who speeds round corners should have his license cancelled. The type of fellow who says he has been driving for years, and that his brakes will pull the car up in a few feet is cheef the prost degree of

feet is about the most dangerous of all."
"Those rules are all very well for the towns," said Wishart, "but what about the hills and dangerous roads such as the one over the Rimutakas?"

"There's really no more need for accidents there, than anywhere else," said Blinks. "I've been over there with chaps dozens of times, and its a jolly good road. If the downhill motorist would always give way to the man coming up the hill, there would be few accidents even on dan-

gerous hill roads."
"I'd prosecute the jolly cyclists who get in the centre of the road and stick there," said Larton, "and the pedestrians who did so too."

"You'd play the Devil, you would," said the oldest member annoyedly. "I'll rush out of the way of no infernal car.

"Mr. Robson agrees that pig-headed cyclists and pedestrians deserve no sympathy," said Blinks. "There will have to be stricter rules about them in the cities, and they will have to be prosecuted for by-law breaches as well as the motorists. It's a difficult rapidly growing cently.

"I didn't damn well try to," said the oldest member, "and he had the motorists, that we can get along we can get along

"ON THE EDGE OF THE EAST."

MEDITERRANEAN TRIP."

"CARS AND CARELESSNESS

"PHYSICAL FITNESS."

without more accidents and fatalities

that we have to-day."

"What the old 'un here needs," said Brenton, the physical culture fiend, "is the bit more physical training to reduce that corpulent feeling, and let him spring out of the way of the motor."
"Physical training—ugh," said the

oldest member disgustedly. "We didn't need it in my young day, sir. What did we do? Walked our ten, fifteen or twenty miles a day, did our work, and drauk our three, four or five bottles, like men. Those were

the days."
"They were," said Blinks satirically.
"Most of your drinking partners have been dead for twenty years or more. Killed most of them off before they were fifty."

"Look at me," said the oldest mem-

"Look at me," said the oldest member proudly.

"A beautiful picture indeed," said Blinks. "Apollo after his fortieth carousal we could call it."

"Damme, sir," said the oldest member, flaring up at this indication of his habits, "I'd have run you through if you'd said that when I was twenty. Would physical culture do me any good?"

"It might," said Brenton critically. "Rut I suppose you're too far gone

"But I suppose you're too far gone really. Have you forgotten Napo-

THE VALUE OF HEALTH.

"It's a shame more people don't know what a great thing it is to be healthy through sane living. I not only don't smoke or drink, but I have honestly made a serious study of diet, training, and physical conditioning."

GENE TUNNEY,

Champion Heavy-weight of the World.

"No, I haven't," said the oldest member irascibly. "But what the deuce has he got to do with physical culture? He never took it."

"No, to his sorrow," said Brenton. "If he had, the world's history might have been very different. He started as a venue fit keep hysical general.

as a young, fit, keen-brained general, and ended up a corpulent wreck, flee-ing in a cab from his last battlebroken and decrepit through over-

eating and under-exercising."

"Who told you that, Brenty?"
queried Thribs. "I've never heard
that said before.'

"It was in a recent physical culture lecture of Norman Kerr's," said
Brenton. "He was pointing out how
entirely dependent we are on our
bodily health for success, and guoted bodily health for success, and quoted Napoleon as an instance of what can occur when physical fitness vanishes. I don't know whether his listeners can all appreciate the somewhat heavy points he is inclined to make, but underneath them, there is sound commonsense. With proper exercise, the muscles, the lungs and the body can be trained to give maximum efficiency."

efficiency."

"Health is an axet that we all treat too lightly," said Thribs.

"There's something in physical culture, believe me."

"You bet," said Blinks. "There's weight reduction as far as you're concerned, eh Winton? Down to the thirteen stone mark yet?"

concerned, eh Winton? Down to the thirteen stone mark yet?"

"Not yet, but I will be before the end of the summer," said Thribs good naturedly.

"It's the rotten food we eat that does half the trouble," said Brenton.
"As Norman Kerr said, civilisation's a disease and our nerves were never "As Norman Kerr said, civilisation's a disease, and our nerves were never meant to stand the strain of modern hustle. The healthiest chaps in the world to-day are the peasants in Russia and Ireland."

"Well, why the Devil don't you go and join them?" said the oldest member, whose temper was never improved with physical culture talks. "And take that Kerr man with you."

"These peasants," said Brenton, ignoring the interruption, "live on black bread, potatoes and other foods like that. As Gene Tunney, the world

like that. As Gene Tunney, the world champion boxer, said: Exercise, fresh air, enough sleep, the right food, and

air, enough sleep, the right food, and refusing to worry are the things to keep you fit."

"I'll tell you a lecture that fascinated me," said Harrison. "It was one from 1YA on a new book called 'The Edge of the East."

"I'm sick of that Suez stuff," said Brenton. "Too much of the shick stuff in it for me."

"This is different," said Harrison. "It's a book written by F. Horace

"It's a book written by F. Horace Rose, and it deals with a trip from Durban in East Africa up the Coast and through the Mediterranean ports to England. The lecturer said that the book, unlike so many of those travel books, was always interesting. The writer doesn't think much of the Portuguese, and gives interesting pen

pictures of a new and strange world [seen in the ports visited. He has a wonderful opinion of Nyasaland. Listen to what he says: 'Nyasaland is one of the comparatively little known achievements of colonisation which makes Great Britain the marvel and envy of the world. Locked away in the heart of the dark Continent, given over only a few years ago to the most appalling barbarism, and sunk in sloth, ignorance and superstition of countless ages, it poss sees to-day a regular railway service, settlements lit by electricity, vast tracts under scientific cultivation, an ex-port trade in some of the most profitable products of the earth, a highway 500 miles long, a good stable government and other evidences of law and order.' Mozambique, Zanzi-

THE EDGE OF THE EAST.

"I prophecy that long after London and New York are as dead as Memphis, our African cities will be rearing their magnificance beneath the tropic sun to be the wonder of history and the envy of the world."

F. HORACE ROSE,

Journalist and author. THE REPORT OF THE PROPERTY OF

"Port Said springs upon one sude denly on the horizon, the town seeming to stretch up out of the water itself. There is no suggestion of the or itself. There is no suggestion of the brilliancy of the East about Port Said at first glimpse, and Mr. Bull described it as a medley of strange nationalities. Although Port Said is supposed to be the most wicked city in the world—with the possible exception of Yankeeland's Chicago—it doesn't bear the marks of its singultwardly. Like many another place outwardly. Like many another place famed for its vice, the traveller had to take the stories as gospel, having no opportunity to prove or disprove them.

"Oh, for a life on the ocean wave," sighed Blinks.
"Especially across the Bay of Bis cay," said Harrison cynically. "Comfort with a capital C, and a big arm chair is your forte, Blinks. You're the cut out for the adventure method." not cut out for the adventure m

"Adventure and romance died forty years ago," said the oldest member "when I was a young man."

"I almost believe you're right for once," said Blinks, with a shade of wistfulness in his voice, "but as it late I'm not going to argue about it."

MISS MURIEL JOHNS, MISS EDNA JOHNSON, MISS DOROTHY JOHNSON

Three bright entertainers, who regularly sing and play at 3YA. These entertaining young ladies will appear at 3YA on Saturday evening in some more of the happy songs which have made them so popular with listeners.

GENERAL MENTERS DE LEGE DE LA COMPTENZA DE LA

bar, Mombasa, and dozens of other little known places creep into this fascinating volume . . . "

fascinating volume"

"As far as the Mediterranean is concerned," said Thribs, "it would be hard to hear a better address than that given by Stanley Bull some little time ago. He dealt with the trip from England, through the far-famed Bay of Biscay, and out through Gibraltar, Marseilles, and Italy to Port Said—that sink of the world's iniquity."

"From what he says the approach to Marseilles is most picturesque, and

to Marseilles is most picturesque, and the town looks well from the sea, but closer inspection makes one realise the truth of the old adage "all is not gold that glitters.' Stromboli, that ever active volcano of Southern Italy, must be a magnificent sight, especially at night, while the romantic isle of Crete, figuring in Biblical times, seems to have hit his imagination."

C BATTERY ADVISABLE

VOLUME WITHOUT DISTORTION.

In New Zealand, and particularly In New Zealand, and particularly in Wellington, there are many owners of crystal sets with valve amplifiers who have omitted to use a "C" battery. Using about 90 volts "B" battery on the amplifying valves, the owners sometimes complain of the poorness of tone, while they probably are not aware that a "C" battery will greatly improve it.

improve it.

A "C" battery connected in the grid circuit of an amplifier valve makes the grid more strongly negative and permits greater "B" battery voltages while working on the straight portion of the curve. Louder signals are thus obtained without distortion and the current drain upon the "B" battery is reduced.



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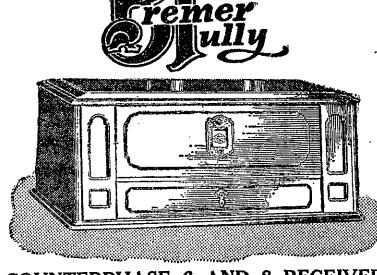
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Sales Ltd. Sonora

HIGH STREET

CHRISTCHURCH.

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CHRISTCHURCH "SUN" OFFICE
AUCKLAND "STAR" OFFICE
AUCKLAND "SUN" OFFICE
THE BEST WAS REQUIRED—
BREMER TULLY WAS INSTALLED!

"THE WORLD'S BEST"

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The Pioneer Radio Firm CAREY'S BUILDINGS.

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Radio Record

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A. J. HEIGHWAY,

Managing Editor, "The N.Z. Radio Record,"

P.O. Box 1032. WELLINGTON.

WELLINGTON, NOVEMBER 18, 1927.

THE PRESS AND BROADCASTING.

After being established nearly a century and a half, the Press has attained a very high degree of development. Its growth has been a matter of steady evolution, and the adding of one service after another as it has discovered the needs of the public, and has developed the means of meeting those needs. Speaking broadly, the initiative and enterprise shown has been very commendable, but there have been long periods of inertia and poor service, from which the Press has been lifted only by two things—the genius of outstanding leaders both in Britain and America, and the use made of improved mechanical methods and scientific invention. Back of the splendid service now given the public by the Press lies a long period of patient evolution and the shaping and adaptation of machinery and men to the requirements of the public.

Now comes broadcasting. Just as the modern Press has thriven by its means of multiplying the printed word recording news and views, so broadcasting leaps into popularity by its magic means of multiplying sound waves and diffusing them instantaneously to the ends of the earth. Inevitably the Press sees in this newcomer to the field of news diffusion a rival which naturally enough tends to colour the treatment given broadcasting. There are bound to be psychological reactions throughout the community because of broadcasting, and its influence as more and more use is made of it here and elsewhere for placing the multitude in direct touch with the utterances of leaders on historic occasions. This shortens the contact, and to that extent reduces the possibility of misinterpretation or the colouring of views. The influence wielded by powerful Press interests at various times is well known. This is very much to the credit of the British Press throughout the world that its influence has been outstandingly for good. The point we are making, however, is that with the development of broadcasting, the Press for the first time sees what some may regard as a possible rival in some phases of its field. Over a period of time, the two interests will be found to be mutually complementary, each serving the public effectively. In large measure the rapidity of the growth of broadcasting is due to the publicity given by the Press, and that is all to its credit. The tendency in some quarters, therefore, to be unduly critical of broadcasting developments, or ungenerous in comments on such evolutionary events as the short wave transmission from Albert Hall, must be accepted by listeners as natural in the circumstances. And if comparisons are to be made, it may be remembered that after more than a century's development, the perfect newspaper has not yet been developed, or one which will satisfy in all phases the critical tastes of readers. A plebiscite of readers on that point would be informative and amusing. In any such comparison the general progress of broadcasting, and the speed and efficiency with which it has been adapted to modern civilisation, stands out as a remarkable achievement for the few short years it has been operative. With the short wave era opening a new field for listeners is developing-and a new stimulus for cable and news services which will unquestionably add to the value of the service given the public.

If you want SHORT WAVE OUTFITS, COILS, CONDENSERS, or CHOKES.

-you want BREMER TULLY PRODUCTS.

If you want FINE RESISTANCES, RHEOSTATS, JACKS, PLUGS, CON-VENIENCE OUTLETS, for SPEAKER, BATTERY, AERIAL AND GROUND CONNECTIONS, in any ROOM, or AUTOMATIC CONTROL,

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Tyou want PRECISION CONDENSERS for WAVE TRAPS, T.C. SPECIAL RECEIVERS, DOUBLE ROTOR COILS, R.F. CHOKES, 6-1 TRANSFORMERS, NEUTRALISING CONDENSERS, IMPEDANCE COUPLING UNITS, OUTPUT DEVICES. -you want SAMSON PRODUCTS.

If you want A GOOD SPEAKER TO WORK OFF YOUR OWN CRYSTAL

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If you want THE BEST SETS OR PARTS that money can buy, ASSIST-ANCE, ADVICE or REPAIRS, —you want

WELLINGTON.

land House of Service), where the HIGHEST QUALITY GOODS

AUCKLAND NEXT

SPECIAL BROADCASTING WEEK

CHRISTMAS ATTRACTION.

A very successful broadcasting campaign synchronised with Carnival Week in Christchurch, Station 3YA excelled itself. It was on the air morning, afternoon, and night, with a variety of attractions. The describing of the racing played a prominent part in the week's programme, and was very success-ful. The breakfast session was a distinct innovation, as was also the describing of the ladies' dresses on the lawn at the races, and the dinner session of orchestral music at night. The evening programmes might. The evening programmes were specially prepared for the occasion, and were distinctly varied and bright. Altogether, 3VA made Carnival Week a memorable one, not only to the people of Christchurch, but to every valve set owner throughout New Zealand. If statistics could be secured it would be found that every set that could pick up 3YA was tuned in during Carnival Week. Christchurch was well advertised.

One feature of the week was the One feature of the week was the increased interest in the racing, as has been demonstrated by the totalisator figures, which were greater than those of last year. This is a great tribute to the value of the publicity given by broadcasting casting.

The radio dealers of the city made the most of the occasion and

did good business.
At Christmas time the Broadcasting Company intends to conduct a similar "Broadcasting Week" in Anckland on the occasion of Race

The company's efforts, combined with the special broadcasting attractions, should help to popularise the use of radio and provide a great advertisement for the Queen City

THE COUNTRY VIEW

DISAPPROVAL OF CRITICS

CARNIVAL REACTIONS.

During Carnival Week a large mumber of visitors were shown over 3YA.
They included many country folk and
many people from the smaller towns,
including radio dealers. many people from the smaller towns, including radio dealers. All were intensely interested in all they saw. The only thing they could not form a due appreciation of was the immense amount of work involved in preparing the programmes before they go "on the air." It was interesting to endeavour to find out from these visitors what was the most attractive feature of a prothe most attractive feature of a programme—and no two expressed the same opinion. One man extolled Uncle Jack and Uncle Sam, another the news and commercial information. "The Adams of the Adams of dington stock report is invaluable," he said. "I know farmers who cannot afford a valve set and who travel miles to hear it every Wednesday. It's a great report."

The studio concerts came in for very

high praise. "That's Mr. Allardyce," said a memr of the staff who was showing a party around when the sporting announcer passed by into another room.
"I.et's have a 'screw' at him," said
one of the party as they retraced their teps. "I've heard him often enough."
Then the visitor insisted on shaking hands with the sporting narrator, and

went away pleased.

"Really," said another visitor, "I don't think even the Broadcasting Company itself knows what it is worth to us. I'd like to wring the necks of those critics who write to the city papers."

"HEAR HERE!" STIRTON'S Music and Radio Store. PETONE.

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Weekly programmes, hints and

Broadcasting Religious Services

THE PROBLEM OF A PROGRAMME

GENERAL CONFERENCE TO BE HELD THIS MONTH

With the question of the broadcasting of religious services now somewhat prominent, a brief explanation of the position may be opportune.

In response to numerous requests the Broadcasting Company has en-

deavoured to accede to what would seem to be the simplest solution of the problem, namely, a fair rotation of the various principal denominations with no two of the same denomination on the air at any two of the New Zealand stations on any one Sunday night. This would seem to be easy to arrange, but in practice it has so far failed.

At best this solution would please only a small percentage of the minority of listeners throughout New Zealand who have valve sets. Only a small percentage of those with valve sets would be concerned with any particular service. So it follows that the number of listeners to whom the rearrangement of the services would be a satisfactory solution would be very small. The great majority of listeners have crystal sets, and these listeners would not be affected by the regrading. Also, it may be pointed out that even some of those listeners with valve sets in the cities would find it in practicable to tune in to the station they wanted if their own station were on the air. These facts show that very few people would benefit from such an arrangement, even if it could be satisfactorily carried out.

As a matter of fact it would break down at once. The same number of denominations do not broadcast from each station. In two cities there are five, in two seven. In certain cases a church, while strong in one city, is too weak in another to be able to broadcast. Where it has a strong membership it is fully entitled to a turn, but as the number of broadcasting churches is not the same a set rotation cannot be followed. Then, also, it has been found that in numerous instances churches cannot or do not it has been found that in numerous instances churches cannot or do not want to take their turn and a church of another denomination has had to fill the breach. Thus it might happen that two, three, or even four stations might be broadcasting services by the one denomination on the one night. The default of one church to take its turn throws the whole rotation out of order and when this happens repeatedly it is not possible for such an arrengement to last.

AN INDEPENDENT ROTATION.

All that the Broadcasting Company can do is to be undenominational in All that the Broadcasting Company can do is to be undenominational in this matter and to work each station independently, giving each church a turn regardless of its numerical strength; but the churches do not always desire to be broadcast in the order arranged. Some prefer to arrange amongst themselves, for various reasons of their own—perhaps because of special (such as anniversary) services—and others again have been very indifferent in taking advantage of the opportunity to broadcast their services.

THE ANGLICAN CHURCH PROPOSAL.

One can take it as a further tribute to the power of broadcasting that the Church of England is now considering the erection of a transmitting station for the purpose of broadcasting religious services.

The Church of England has been very slow in recognising the value of broadcasting as a means of disseminating the Gospel and has not availed itself of the opportunities which the company has offered it. Other churches have gladly accepted every chance to broadcast, and this state of affairs has resulted in the impresson geting abroad that the Broadcasting Company has been differentiating against the Church of England. Nothing of course could be further from fact. The Broadcasting Company has been, is, and will be absclutely impartial.

will be absolutely impartial.

The Broadcasting Company will certainly state its case to the authorities in regard to the application by the Church of England to secure a broadcasting license, and that will be tantamount to protesting against the granting of the application. It is in the interests of all listeners that such a station should not be erected. If a license were granted, the purpose of the Act would be denarted from and a precedent would be set, so that every denomination and sect in New Zealand would seek a license. The result would simply be chaos and it would seem unlikely that a license for such a station as the Church of England people are thinking about will ever be granted. By far the great majority of listeners have crystal sets of poor selectivity, what would be the result when several such stations were broadcasting simultaneously?

It will be far hetter for all concerned if the Church of England will

were broadcasting simultaneously?

It will be far better for all concerned if the Church of England will agree to work in with the other churches in regard to the broadcasting of services. For months the Broadcasting Company has had under consideration a proposal for reaching a working basis among the principal denominations. The Broadcasting Company is quite impartial in the matter of which church service it broadcasts. It thinks that it is up to the varous religious denominations to agree amongst themselves as to the best way to take advantage of the great power which has been placed at their disposal for spreading the Gospel. The Broadcasting Company could do no more than it has done and can do no more in an impartial way than it offers to do

offers to do

The first conference between the various churches will be held in Christchurch this mouth, and it is to be hoped the Church of England will send a representative, and that an amicable arrangement will be arrived at, when the Breadcasting Company will be only too pleased to lend what help



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CHRISTCHURCH.

CALL DURING CARNIVAL WEEK. Free demonstration arranged in your own home.

'PHONE 4778.

DE FOREST WINS

LENGTHY LITIGATION

THE FEED-BACK CIRCUIT.

Dr. Lee De Forest's victory last month in the United States Circuit Court of Appeals at Philadelphia, de-claring him the original inventor of the feed-back regenerative circuit and oscillating audion (vacuum tube), is not expected to disturb the radio in-dustry, leaders in the business said to a New York reporter. Further court action is expected, and possibly a final decision by the United States Supreme

Edwin H. Armstrong, heretofore credited as the inventor of the regenerative circuit, whose patents are controlled by the Westinghouse Electric and Manufacturing Company, said he had maintained silence on the subject during litigation which has been in progress for the past five years and did not care to change his policy.

FURTHER ACTION POSSIBLE.

Victor Beam, representative of the Westinghouse Electric and Manufacturing Company, said he believed further action would be sought. He said that he could see no way in which the present decision would affect the present ac-tivities in manufacturing radio sets to be marketed through the Radio Corporation of America.

Judge Woolley, of the United States Circuit Court of Appeals, declared in his opinion (endorsed by his associate Judges) that the evidence showed that Dr. De Forest came upon the pos-sibilities of the use of the audion in radio on August 6, 1912, while experi-menting with a "two-way telephone re-peater" in the laboratory of the Federal Telegraph Company at Palo Alto, California, where he was chief of the research department. That date was research department. earlier than those claimed by the other three inventors, the nearest of whom was Major Armstrong.

ENTITLED TO BROAD USE.

While not disputing the "discovery' by De Forest, the Westinghouse company, which holds the Armstrong pat-ent, claimed that De Forest was "ig-norant" of the real importance of his discovery and had merely "stumbled on it"; that he had not found it as the result of any research radio work, and therefore its use could be applied so far as he was concerned, only to wireless or telegraph.

Judge Woolley declares, however that DeForest is entitled to much

As ground for taking this view the Court pointed out that about two weeks after the date mentioned Dr. De Forest and his laboratory assistant, Herbert B. Van Etten, made a new feed-back hook-up, which, while it was different from the first when the discovery was made, produced practically the same results. This showed, the Court says, that De Forest under-

A PARLIAMENTARY CRITIC SATISFIED

"I HAVE BEEN ONE OF THE WORST CRITICS OF THE BROADCASTING COMPANY, BUT I MUST SAY THAT THEIR SERVICE IS BECOMING VERY GOOD INDEED. I SAY THE COMPANY IS RENDERING BETTER SERVICE NOW THAN IT EVER DID BEFORE.

Mr E. J. Howard, member for Christchurch South, during the Committee discussion on the Post and Telegraph Amendment Bill in the House of Representatives.

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"It is doubtful whether the case will be heard by the Supreme Court," said S. E. Darby, Jun., patent attorney for the De Forest Company. "The case is based on old questions of law which are treat exhibited and therefore present. well established, and, therefore, present nothing novel to warrant the Supreme Court considering the case. There is no appeal from this decision as a matter of right. It is a mere matter of grace and is wholly dependent upon whether or not the Supreme Court cares to review it by granting a writ of certiorari.

FAR-REACHING EFFECT.

rist is difficult to predict how far-reaching the effect will be. One thing is certain, the so-called 'Armstrong licensees' who have been paying trib-ute to the Armstrong patent will now realise that they have been paying that tribute to the wrong parties and will be liable to the De Porest Company, the owners of the DePorest patents, for all infringing operations since Sep-tember 2, 1924, the date of issuance of the DeForest patent."

OTHER CLAIMS OVER-RULED.

The Court, in a verdict by Judge Vicfor Woolley and concurred in by Judges Buffington and Davis, over-ruled the claims of the Government that Alex-ander Meissner, a German inventor, discovered the feed-back and audion; those of the Westinghouse and Manufacturing Company that Major Edwin North Island: "I hope your addresses H. Armstrong, a Columbia University graduate, was the inventor, and the claims of the General Electric Company day one of the lads said to me after-that the vital radio discoveries were wards, 'You've been listening to Uncle made by Irving Langmuir.

The practical effect of the Court's decision is somewhat moot, for Judge Woolley in his opinion calls attention to references of counsel in a suit between De Forest and the Radio Corporation of America that should the Court decide in De Forest's favour it would simply mean that the West inghouse company and the General Electric would be permitted to use the De Forest invention without the payment of royalties, as they have licenses from the American Telephone and Telegraph Company, to whom De Porest grant Telephone

Forest gave a license years ago. Had the decision been in fayour of any of the other three parties the victor would have royalty claims against Dr. De Forest and all the others, it was explained.

CRIBBING FROM UNCLE SAM.

Uncle Sam, who conducts the children's service at 3YA on Sunday evenings, received a letter the other day from a Sunday school teacher in the North Island: "I hope your addresses are not copyright, as I have cribbed wards, 'You've been listening to Uncle Sam.' I had."

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GETTING TOGETHER

COMPANY AND LISTENERS

INTERESTING PROPOSAL.

Listeners are soon to be offered an opportunity of taking more active in-terest in broadcasting. It is the intention of the Broadcasting Co. to put into practice a scheme whereby licensed holders will be able to co-operate with the company in the difficult task of putting on the air "what the people want," and in seeing that they receive in good order and condition what is sent to them.

A detailed announcement of what the company's proposals are will be made very shortly, and it is to be hoped that the licensed holders generally will enter into the spirit of the company's offer, and not leave the duty to a few.

The company's scheme will provide a unique opportunity for those who are served to co-operate with those who are served to co-operate with those who serve, and, if the listeners make the most of the chance, the success of broadcasting in New Zealand is assured, for listeners will be a very large and well-satisfied body.

The company's proposals go further or are wider in some respects than might have been expected, but, for all that, there need be no surprise when the proposals are made known. They are only in accordance with the com pany's policy to provide the best ser vice possible, now that it has complet ed its constructive operation.

The company has of late been stead ily increasing its staff, and improving its organisation, with a view to creasing the value of its service to listeners, and now the stage has been reached when the listeners are to be asked to co-operate and to lend a hand in an advisory capacity. The latest moves by the company should be widely approved by all, for the company's proposals will then ensure that the viewpoint and wishes of all listeners will be placed directly by the lis teners' own representatives before the officials responsible for the programmes, and license holders will be able to rest assured that everything possible is being done, not only to broadcast programmes which will meet the general approval, but to ensure that as perfect reception as possible is being obtained. These new proposals will be awaited with interest.

TOTE FIGURES

INCREASE IN CHRIST-CHURCH

BROADCAST PUBLICITY.

Carnival Week in Christehurch, which has figured so prominently in the radio world of late, has been strikingly successful, not only from a broadcasting point of view, but from the viewpoint of the Canterbury Jockey Club, Canterbury Trotting Club, and of the A. and P. Association. The publicity given resulted in record attendances, and a complete answer has been given to those people who think that the broadcasting of descriptions is detrimental to sport. The totalisator figures for the three.

lavs of trotting showed an increase of £26,398 compared with last year. The racing figures were:—£201,449 10s. compared with £197,305 last year, an increase of £7144.

MAORI ARTISTRY

DELIGHTFUL PROGRAMME FOR

A programme such as no other part of the Empire could provide will be "on the air" on the evening of Thursday, December 1, broadcast by 2YA, on relay from Otaki Maori College. New Zealand is justly proud of her Maori citizens and of their musical gifts. A richly varied bill of fare, affording ful. scope for the display of their vocal, instrumental, and linguistic talents has been planned Among the soloists will be Miss W. Tahiwi, Mrs. Roiri, and Messrs P. Tahiwi, Kingi Tahiwi, and H. Mahima. The instrumentalists will be Mrs. Wills (piano), Miss May Cook (violin), Mr. P. Tahiwi ('cello', and Mr. Renken Gilbert (guitar). Concerted numbers, both vocal and instrumental, will be given by members of the Tawill be given by members of the Ta-hiwi family and also by the college

boys and school children.
Much of the programme will be typic Much of the programme will be typically reminiscent of the old-time Maori. There will be an appropriate "opening scene," per medium of a series of choral melodies descriptive of "Maoris at Home," and by way of an equally appropriate finale there will be heard the thrilling strains of the haka. Be sure to "time in" for this unique broadess, entertainment east entertainment.

"With any discussion of broadcasting one must give thought to static and the fluctuating transparency of the at-mosphere as experienced in radio transmission. Hence the question:

"It will be difficult, of course, to entirely climinate static, or rather over-come its interference. But engineers have made notable strides in overcom-ing the handleaps of static by the creaing the handcaps of state by the cital-tion of the wire network system of broadcasting for the distribution of pro-grammes, by the use of greater trans-mitting power, and by a corresponding increase in the efficiency of broadcast receivers."

Make This a Radio Xmas

A GREAT OPPORTUNITY FOR THE TRADE

From a broadcast standpoint the past year has been a notable one in the annals of New Zealand. Radio broadcasting in the Dominion has, since last January, grown out of swaddling clothes, and has now reached the stage of adolescence. During this year the Radio Broadcasting Company of New Zealand, through the installation of high-class broadcast stations, has raised the popularity of broadcast listening to a degree which was undreamt of two or three years ago. From a total of about 10,000 listeners the number of radio licenses have increased to the astonishing aggregate of over 35,000 during the past twelve months. This is striking proof that the enterprise and endeavours of the Broadcasting Company have been directed along successful lines. The Dominion, through the establishment of the super-power Wellington station, 2YA, can boast of the possession of the second most powerful broadcast station in the British Empire, and this alone is striking evidence of the desire of the company to place broadcasting on a firm basis in this country.

A fitting occasion to signalise the undoubted success of broadcasting in New Zealand is offered the radio trade in the approaching Christmas season by making this a "Radio Xmas." Within the next few weeks there will be abundant scope for the radio trade to bring broadcast listening before the N.Z. public in a way that has not yet been attempted in the Dominion. The Yuletide, with its age-old custom of the gifts of presents to the young, and also the exchange of gifts among adults, opens up a most attractive opportunity for the radio trade to cater for this approaching demand. The slogan among radio dealers throughout New Zealand should be: "Make this a Radio Xmas." But the slogan must be amplified by attractive window displays and the liberal ticketing of goods suggesting their suitability as Xmas gifts. Large show cards in the windows, appropriate decorations and the cultivation of an atmosphere calculated to arrest the attention and interest of the public will combine to capture trade to an extent which will make this a truly "Radio Xmas." The juvenile will be in quest of a present, and paterfamilias, no doubt, can be relied upon to purchase that which will please the recipients most. The humble crystal owner may be reasonably regarded as a potential valve-set purchaser sooner or later. And paterfamilias, himself, may feel inclined to launch out on the purchase of an addition to the household chattels which will distribute enjoyment for all. The season is opportune, and the radio traders should rise to the occasion. This is their chance to "Make this a Radio Xmas."

NEW WONDER VALVE

FOR RADIO FREQUENCY

NOT ON MARKET YET.

A new four-element radio valve, designed to give greater amplification with a minimum of howls, was announced recently by Rimer R. Bucher, representative of the Radio Corpora-tion of America. The new valve is be-ing circulated among manufacturers licensed under the RCA patents to see what applications they can make of the device, because it is radically different from standard valves now in use. It is designed for battery operation and so far not for use with the light socket

"This tube when placed on the market will not render present sets obsolete," said Mr. Bucher, "nor will it cause any revolutionary developments in the radio industry. It is merely a means of improving radio frequency amplification The tube is in the experimental stage at the Ceneral Electric Company and the Westinghouse Electric Manufacturing Company, where it is being developed for the Radio Corporation of America. It will not be adaptable to present-day sets. Each stage of radio frequency must be shielded and three tubes should be used to obtain the best

Big Amplification Factor.

"The number of the tube is UX-222," said Mr. Bucher. "The voltage amplification factor is from 150 to 200. The average radio frequency amplifier gives an amplification of six. The plate volt-age is 135 maximum. The filament voltage is 3.8 and it requires .13 am-

"The applications of the new tube are not fully understood. It is not a

cure-all. However, I know that experimenters will have lots of fun with this tour-element device."

Make-up of New Tubes.

The new valve has a plate, filament, and two grids. The standard valve has a plate filament and one grid. It is the outcome of the development of the four-element valve now being used successfully in short wave transmitters built by the General Electric Company. It is this valve as a generator of electrical oscillations which has euabled the development of the five-meter transmitter with which engineers at Schenectady are now experimenting. The addition of the fourth element

in the valve is said by engineers to make the circuit more stable by preventing teed-back. No neutralising methods are required in the receiving circuit when the four-element valve is employed, thus the construction is simplified and the set is more easily controlled without the customary howls often caused by feed-back or self-oscillation.

Mr. Bucher said that he did not know when this valve would be marketed.

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63 COURTENAY PLACE.

From the Woman's Point of View.

TO-DAY AND TO-MORROW

A Super-woman.

From America comes this interesting statistical item: "And only a woman! In the thirty years of my married life I have served 295,425 meals, made 33,190 loaves of bread, 5930 cakes, and 7960 pies. I have canned 1550 quarts of fruit, raised 7660 chicks, churned 5540 pounds of butter, put in 86,461 hours sweeping, washing, scrubbing. I estimate the worth of my labour con-servatively at 115,485 dollars 50 cents, none of which I have ever collected. But I still love my husband and children, and wouldn't mind starting all over again for them." And yet only a Surely she must be a superwoman to have kept such minute re-cords for thirty years.

Her Retort.

Here is a story of an old woman, ailing and half deaf, who was called by an official of the Ministry of Health.

"I'm not a bit worried about the Minister's health," she snapped. "I've been laid up with the rheumatics myself these last two years, and he's never come near me." And she slammed the door.



MISS NELLIE LOWE, OF 3YA.

One of the finest contralto soloists in Christchurch, and a regular singer at 3YA, she is one of the most popular artistes at this station. Leading musical societies are always anxious to secure her services as a soloist at their concerts.

Quaintly Put.

At a gathering of provincial advertising men in England recently one of the speakers created laughter by reading the following advertisement of a certain Indian native newspaper:—
"The news of England we tell the latest. Written in perfect tyle and much earliest. Do a murder get commit we hear and tell of it. Do a might chief die merchelicht in hear mighty chief die we publish it in bor-lers of sombre. Staff has each one been college, and write like the Kip-ling and the Dickens. We circulate town, and extortionate not for adver-tisements."

Schoolboy English.

A Manchester schoolmaster the other day asked his children to write some-thing about sheep. One paper said: "The sheep is noted for its woolly coat and in a St. Luke's." Read it aloud and you may, perhaps, gather what the



--Steffane Webb, photo.

MRS. HELEN MURDOCH.

A talented artiste, who frequently sings and plays at 3YA. She has a fine mezzo-soprano voice, and she ac-companies herself. Many of her songs are her own composition, both words and music.

The Retort Negative.

A friend from New York brings me a tale of a mild little man who was waiting in one of the hotel telephone waiting in one of the moter techni-booths for the operator to take some notice of him. At last she designed to look in his direction. "Are you want-ing a number?" she asked, "Oh, no, look in his direction. "Are you wanting a number?" she asked. "Oh, no, miss," was the reply, "I just stepped in here to develop a photograph."

The Aspirate and the Aspirant.

A certain vicar has a worthy, if somewhat illiterate, lady who comes in daily to "do the chores." One morning she told him that the tram fares were to be raised; but a day or two later informed him that this was not so, and she supposed it was only a "humour." The vicar, highly amused, repeated this to smile, but said, "Yes, those kind of people do drop their "aitches," don't they?"

For the Dressing Table.

A set of mats in jade green organdie A set of mats in jude green with a are picot-edged and bordered with a single line of jade green wool, corners are decorated with Chi with Chinese oddments and characters in bright shades of crewel wool. Wee birds of royal blue sewing silk, tiny green wool leaves, and bright orange buds are be-sprinkled discriminatingly here and

A Distinctive Posy.

A wonderful large white lily for wear with a frock of silver is made from white silk chiffon velvet. The pointed petals are arresting in their pale purity. A vivid splash is Her expression of regret brought by the bright orange stamens, That she had never yet and the flower is set in green chiffon Been at a BORNING.

MISS MOPPET

Miss Moppet, five Years old, but wise And very much alive, Did once surprise And shock two ladies (prim's the only word), Who had an odd obsession

That children should be seen, not heard, By chatting gaily from her sofa-corner, Indifferent to pained glances cast upon her,
And finally making use of an absurd

Expression.

Miss Moppet, talking nincteen To the dozen, Detailed how she had been At the WEDDING of her cousin Jane, and when Uncle Jack married Aunt Claire, She too had been there;

At various BURYINGS she had played Minor or major as the corpse interred Was human, cat, dog, monkey, rabbit, bird:

So she related with a touch of art. She had helped at more than one CHRISTENING (She wondered if for such the vicar paid

Then fell upon the listening Ears of those prim ladies, Without warning, -A. C. S. Scringeour. TO-DAY AND TO-MORROW

The Fc.Mailed Fist.

If you have ever had the privilege of attending a bargain sale at the end of a London Season—of visiting that bourne (and Hollingsworth) from which no traveller returns unscathed-I think you will agree with me that the much vexed question, "Should women attend boxing matches" is an interrogation of supererrogation. The "brutalities" of supererrogation. The "brutalities" of the ring seem to me to compare favourably with the brutalities of the bargain counter, for our woman-folk emerge from a jumper-fight in a far worse battered condition than our heavy-weights from a glove fight.

I have seen the violet eyes of the morning reduced to over-ripe damsons by the evening; shell-like ears have attained the size and consistency of crumpets; damask cheeks have proven that when Woman has a cause at heart she can always "come up to scratch." I have even known a permanent hair wave to be carried home in a paper bag." By all means, then, let women By all means, then, let women attend the ring. The only thing is—won't they find the proceedings a trifle slow and tame?

The Real Trial.

The minister was going round the prison, stopping every now and then to speak to one or other of the prisoners. "Ah, my dear unfortunate friend," said he to one of them, "this is a world full of trials." "It ain't the trials that worry me, guv'nor," came the reply, "it's the verdicts!" Recipe for Christmas Cake,

11b. butter, 11b. sugar, 8 eggs, 11b. flour, 11b. currants, 11b. sultanas, 1 tablespoon treacle (if a dark cake is liked), 41b. cherries, 41b. almonds blanched and chopped, 41b. dates (if liked, stoned), 4lb. prunes (stoned), 1 teaspoon each of vanilla, almond, and teaspoon each of vanilla, almond, and of the common essences, 1 glass whisky (rum or brandy, if liked). Cream butter and sugar together; add eggs, beat well; add the fruit, cleaned and dried, the chopped almonds, prunes, dates, and cherries, and then sift in the flour; add the treacle and flavourings, and lastly, the spirits. Beat well, put into a lined tin or into two medium-sized tins, and bake in a slow oven for four or five hours. If the fruit is put in before the flour it will not sink to the bottom.

Grilling and Toasting.

These can be managed quite successfully with an electric range, provided the upper element is red-hot before commencing. It should be turned to high at least eight min-ntes before beginning to cook. No one attempts to grill over a fire which has just been lighted—the same thing applies to electricity.—From a talk by Mrs. Sinclair at 2YA.



-Steffane Webb, photo.

MISS BELLE RENAUT, OF 3YA.

The possessor of a beautiful contralto voice, and very popular with listeners, Miss Belle Renaut is a member of the Christchurch Broadcasting Vocal Quartet, which is such a feature on 3YA programmes. Her solo work is excellent, and her voice blends admirably with the voices of the quartet. She is particularly well equipped for radio work, her voice being of sonorous toned and soft blending quality. Miss Renaut's home is in Lyttelton. She is a pupil of Miss Woodhouse. MISS BELLE RENAUT, OF 3YA.

Woman's Last Word. One afternoon during carnival week a lady rang up 3YA: "How is it we are having so much gramophone? I thought we were going to have a description of the races, with gramo-

phone between."
"So you are," was the reply from the

"It seems to be all gramophone,"

she retorted. "Well, you're having all 'he races."
"No, we're not," said the lady, and promptly rang off.

A Smart Repartee.

Yvette Guilbert, who recently has been recalled to mind as a contemporary of Cavalieri in the programmes of the



—Steffano Webb, photo MISS THELMA AYRES, OF SYA. Rangiora is this young lady's home, but all listeners-in to 3YA know well her beautiful soprano voice, which broadcasts excellently. Miss Ayres was very successful at the recent Wellington Competitions.

Folies Bergeres and Ambassadeurs, once evoked from Oscar Wilde one of the neatest of his reportees. He met her for the first time in her dressing-room in a Paris theatre. Continuing to get ready for the stage, as she looked in her mirror, Guilbert murmered, "You know, M. Wilde, I believe I am the ugliest woman in all Paris," to which Wilde replied with his most courtly Wilde replied, with his most courtly bow, "Du mende, madame."

The Letters of Annabel Lee

My Dear Elizabeth,

With the rest, on Friday the 11th I stood in silence with bent head, as is enjoined on us lest we forget, amid the hurtle of things, those who fought and died that we may live, those who "will not grow old as we who are left grow old." 'Twas a strange calm that fell on our bustling town for those two long minutes, not the scrape of a tram or the smack of a hammer broke the stillness, even a cold little breeze that blew seeming to hold its breath, while all sorts and conditions, wool king and wharf lumper, just and unjust, bond and free, stood motionless and communed with the past. Time halted, nine years were as nothing, while our hearts remembered a past sunny November morning. Clearly I recalled the bells clashing the tidings to joyfully incredulous ears; and afterwards, as I stood in a garden on Wellington Terrace, there came a sudden clear singing of children. Piercing and joyous and sweet was that paean of joy; to overwrought nerves telling of hope fluttering a shattered wing, a new dawning after the world's long nightmare.

English Elsie, whom I chanced to little about it. Greatly does she pine for London the beloved, with which she hopes to be more and more in contact through broadcasting, that miracle of the air profoundly mysterbought tickets for the Doll's House now being raffled for the R.S.A., without hope of winning it on my part, for I'm not one of the lucky ones, as a stout and stodgy matron observed with truth when discussing my chances of attaining the holy estate!

"Look not thou down, but up!" Rabbi Ben Ezra's counsel in Browning's great poem, might serve as text for "Seventh Heaven," a production of the Fox Film Company, screened privately last week at the De Luxe Theatre. Not for those who boast they are tired of the war, and all

the emotions even of those who, like The remaining soloists were ade-Hermione, are not prone to tears. It is a story of Paris, and the love of a "sewer rat" and gutter girl, whose shabby garret so near the stars was to them a paradise. Much of a braggart is the aimple, valiant Chico, something of an atheist, a great deal of a hero; his ambition being to forsake his horrible task amid the refuse of the slums and become a street cleaner. This hope is realised through the kind offices of one of those padres whom the war taught us to revere. But Chico did not long revel in his rise to fortune; for the Great Clash came, there was no opportunity for even the briefest of wedding ceremonies, only time for a clasping of hands, the words exchanged "Chico, Diane-Heaven!" and another soldier of France tramped away to the melancholy and majestic music of "The Marsellaise." The girl who calls forth his chivalrous devotion is appealing and tender and true; and when her bold and careless lover returns from the war, battered and blinded, it is through her faith and lovalty that this Quixote of the slums finds his belief in meet on Friday, was in Salonica when le bon Dieu whom he had doubted. many, th epockets and close-fitting news of the Armistice came through, So the wistful story ends on a note "cloche" adorned with a flat, flat but, true to her reticent type, says of hope, and is superbly acted by the flower of red, which was very smart two stars Janet Gavnor and Charles and extremely reminiscent of an en-Darrell, who, it is not surprising to larged decorative postage stamp. learn, found themselves famous after Also I saw a flowered blue georgette, their great performance in this film. with crystal buttons, the ubiquitous

ious to me, but concerning which she lucky in its conductor, Mr. Colin of white fox; and a cream georgette has a quite amazing knowledge. We Muston, and that the audience ap- flatly pleated over flesh pink, worn preciated him was manifested by acclamation. Also the soloists were whole thing eminently becoming to artistic, conscientious, and some of some slim girl, or even one not so them dramatic. Miss Kate Campion slim. is the possessor of a pure and flexible soprano, and a temperament admirably adapted to emotional display. Mr. Barry Coney, as always, miraculous skill midway between the gave a delightful rendition. Mr. Hubert Carter's voice and interpretation were beyond cavil, while Miss plume of the ekind worn by the Mina Caldow's beautiful contralto was very effective though she might. with advantage, have infused more fervour into the music. Mr. Harison Cook is always worth while, pertaining to it, is this poigant story whether in excerpt from opera, rol-

that grips the interest and plays on licking barcarolle, or Scottish ballad. quate, the choir and orchestra more than common good. Altogether a distinctive rendering of Verdi's fiery and dramatic work, which in its Oriental blaze and splendour was produced in Australia a year or so ago by the Quinlan Opera Company. To the jigg and jazz, and amid the spectacular decorations of the Ritz tea-room, I saw a mannequin

parade of champagne shoes and stockings (only one pair of patent leathers), hats large and befeathered enough to satisfy Mrs. 'Enry 'Awkins, and some very lovely frocks and frills, the latter being quite noticeable as a trimming. Such a crowd of worshippers at the sartorial shrine. I had positively to work my passage through the patient queue to reach my place in the sun, or rather the electric light, so pleasantly dimmed by the fascinating colourful shades that are a feature of this restaurant. The garments on show included a filmy frock of the tint known as bsicuit, the wide hat attractively trimmed with a huge matching poppy. You would have liked a sports suit, of the blue beloved by The Choral Society in "Aida" was fur slung round the shoulder being with the prevailing large hat-the

You should send for an apple green velvet coat which I admired, very shirry and shmimery, and ruffled with collar and hem; also a hat of your favourite beige, with a drooping Duchess of York. You see there is plenty of choice when you come to make your Christmas purchases. I do hope that will be quite soon .-

ANNABEL LEE.

From a Cynic's Cyclopaedia,

knowledge more.

Alliance: The union of two or more people or peoples, because they knew too much about each other for their individual safety, if alone.

Bourgeois: An adjective generally descriptive of the man who uses it.

Cleverness: Knowing how stupid you are, and hiding it. Empty Purse: The best friend of a

man's virtue, and the worse enemy of a woman's. Flapper: A young girl who knows as much as her mother and enjoys the · A CYNIC'S COURTSHIP.

Love threw me a rose In kindly thought, At summer's close Love threw me a rose; It ended in blows And later in court: Love threw me a rose In kindly thought.

Headlines in an Up-country Paper.

**

*

"Flying the Irish Sea; Lady Bailey's Great Feet!" Orange Cake.

2 eggs, 6oz. flour, grated rind large orange, strained juice of 1 orange, 50z. butter, 60z. sugar, ½ teaspoon baking powder, little milk. Method: Cream the butter, sugar, and orange rind; add eggs, beat well, then add flour; add the orange juice and milk, beat the mixture well, and stir in I bring powder. Put into a greased sandwich tin and bake half an hour. When cold spread with the following icing and sprinkle some coconut round the lges; Orange leing: Mix 60z. leing sugar with sufficient orange juice to make thick, colour yellow, and use.

Some Features of Next Week's Programmes

3YA'S FINE TRIO

NEXT WEEK'S ATTRAC-TIONS

WORKS OF THE MASTERS.

The Christchurch Broadcasting Trio, whose playing is so eagerly looked forward to by all lovers of good music, has an excellent repertoire for next week. The well-known composer, Reissiger, has been drawn upon for much of the classical portion of the programme. His famous movements much of the Classica. Programme. His famous movements, "Moderato allegro passionata" (from Trio in D Major), "Andante quasi allegreto" and "Capriccio," as well as the bright and lively "Scherzo," will be

The trio will also give selections from that fine French composer of fascinating grace and polish, Delibes, when ballet music from "Copellia" will be played. In his genre of composing ballet music Delibes was little short of a genius. He was a master of grace, and an inventor of entrancing melodies. This ballet was ritten nearly half a century ago, yet its charm is undiminished, and with each hearing its grace and beauty make fresh appeal.

"Dreaming," a selection ir n Schu-mann, will also be played. A small, though exquisite, work of genius is this beautiful sonnet. Just why agic may sometimes lie in a few simple notes is one of the things that has never been satisfactorily explamed, but when we hear Schumann's "Reverie" we feel that something exquisite has reached out to us from the soul of the composer. Once heard, it is never

Thetrio will also play the celebrat-ed "Nocturne" of Chopin. This noc-turne is still the most popular composition in this form that the Polish genius wrote, and the public have decided to choose this one in preference to many others.

Another piece to be played will be "Romance," by Mozart. This charming number is of a strongly rhythmical character, in which the optimist ten-dency of much of Mozart's music is clearly defined.

1YA FEATURES

Among the singers on Tuesday even-ing will be Mr. Hartley Warburton and Mr. Morris Schroeder. Both are popular baritones, and their items are sure to please.

The Griffiths Duo, always so welcome at 1YA, will entertain listeners with two sketches on Tuesday evening. They are called: "A Visit to a Doctor" and "On Holiday."

Mr. and Mrs. Cyril Towsey will appear on Tuesday's programme. Chopin's "Fantasie Impromptu" will receive skilful treatment at the hands of Mr. Towsey, while Mrs. Towsey's beautiful soprano voice will be a sheer delicht in the same Third be a sheer delight in the songs which she has chosen to sing.

Making her second appearance before the microphone on Tuesday even-ing, the items which Miss Louise Jourdain, elocutionist, will give will be keenly looked forward to. Her previous efforts delighted everyone.

The entertainment for Wednes-lay evening has been arranged by Mr. Phillip Lewis, who is well anown on the Auckland concert platform. The programme includes a number of quartets, duets and humorous items. The artists in-clude Miss Stella Thompson, Mr. Stan Pitken, Mr. Len Crutcher, Mr. Phil Lewis, and Harmony Hob.

known elocutionist, has been engaged for Thursday evening. His numbers will include "The Old Bachelor" and "The Safety Pin." There may, and there may not, be some association!

Some excellent instrumentalists will the performing at 1VA on Thursday. These include Miss Marjorie Tiarkes ('cello) and Mr. Eustace Tregilgas (cornet), while Mrs. Hugh Morton will contribute for the contribute of the contribute contribute foxtrot medleys.

Mr. Arthur Colledge's resonant bass voice, so popular at IYA, will delight listeners in some of his best

The sweet-voiced boy soprano, David Campbell, who has pleased listeners on

divers occasions, will sing again on Thursday. One of his songs is the ever-green "Eileen Allanah."

Mr. Robert Peter, a well-known NEXT WEEK'S BROADCASTS member of the St. Andrew's Quartet will be singing at 1YA on Friday. Mezzo-soprano solos will be tendered by Mrs. B. Jellard, whose numbers will include "My Ships" and "The Meeting of the Waters."

Two popular cornetists, Messrs. Salthouse and Davies, will play duets at 1YA on Friday, and Mr. Norman Watson, violinist, will also play.



MR. JAMES LITTLER.

Mr. Littler has a baritone-bass voice of exceptional quality, and was a notable prize-winner both in the 1925 and 1927 Auckland festivals. This year he took first place in "Bass "Operatic," and "Oratorio" sections, and carried away the vocal championship. He is widely known, both on the wires and the concert platform, and is a general favourite in Auckland. He sings regularly from 1YA.

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Mr. Arthur Wilson, Auckland's well-known organist, will give a recital on Friday. He will be assisted by several vocalists. On Sunday, after the church service, the municipal organ recital, to be given by Mr. Maughan Barnett, will be relayed from the Town

The concert for Saturday evening will be provided by the Auckland Municipal Band under the conductorship of Mr. Christopher Smith. They will present their usual high-class prowin present their usual mgh-class programme of instrumental selections. This will be followed by a relay of dance music from the Click-Clack Cabaret, where the orchestra is under the conductorship of Mr. Walter Smith.

LECTURETTES FROM 2YA

MR. AMERY MAY SPEAK.

During the week some very interest ing speakers will be "on the air." Mr Douglas Tayler, supervisor of school music under the Education Department, will on Tuesday evening deliver another of his illustrated talks on

"The Romance of the Press" will be the subject of Mr. Arche. Sando's lecturette on Thursday evening.

On Friday at 7.40 Mr. D. G. Paris will continue his instructive talks on

On Friday, too, at 9 p.m., the editor-announcer will deliver the regular weekly lecturette on Imperial Affairs.

Mr. L. C. M. Amery, the distinguished British statesman, is ex-pected to be in Wellington on Sat-arday, November 26, and if an arrangement suited to his convenience can be made he will, it is hoped, broadcast from 2YA an address to

the people of New Zealand.

Speaking from 2YA on the evening of Monday, November 21, at 9 o'clock, Captain Hugo, Inspector of New Zealand Fire Brigades, will tell you something interesting, startling, you something interesting, startling, and instructive about "unintentional fire raisers." Listen in. What you hear will make it possible for you to save your home from destruction.

King in Radio

Browning Drake Sets, made up to order.

From £8/5/-.

..... From £5

One-valve Amplifier, including Batteries, Loud

SPORTING

TROTTING AT DUNEDIN.

On Friday and Saturday next week (November 25 and 26) the meeting at Forbury Park will be broadcast. Mr. Allardyce, the Radio Broadcasting Company's sports an-nouncer, will be at the microphone to give a running description of all the races.

The first race commences at 12.15 p.m., and the last one 5.30 p.m. each day.

ARTILLERY BAND

TO PLAY AT 2YA.

The Wellington Artillery Band, which is to play at 2YA on Thursday, is a splendid combination, under the experienced baton of Captain T. Herd. A treat is in store for all listeners. Captain T. Herd is a native of the North of England, where he received a thorough training in brass band work from many of England's well-known band trainers. He took charge of the



CAPT. T. HERD.

late Wellington Garrison Band in January, 1890, the band at that time being in a very poor state; but by dint of hard work and perseverance on his part he soon worked it up into good contesting form, with the result that under his careful training the band won twelve firsts, three seconds, one third, one fourth, prizes in selection contests—principally "test" selec-

For some eight and a half years in uccession the Wellington Garrison succession the Wellington Band won in New Zealand first prize and won in New Zealand first prize in every selection contest in which it took part. It also won five first prizes in marching and military drill contests, and several minor prizes. It won outright Boosey and Company's large number of special prizes, such as accounts troubers wheten madels at cornets, trombones, baton medals, etc., and last year the Artillery Baud, at the contest held in Wellington, won the marching and military drill competition and the Cartright Silver Cup.

MADAME SPILLANE'S WANGANUI PARTY

SOME OF OPERA'S BRIGHTEST CEMS.

In association with the Symons-Ell-wood-Short trio, who will provide the instrumental portion of the programme, Madame Spillane and her party of Wanganai vocalists will again entertain from SYA on the evening of Monday from 2YA on the evening of Monday, from 2YA on the evening of Monday, 21st inst. The programme to be presented will include some fine operatic numbers, such as the beautiful "Duet of the Flowers" (from "Madam Butterfly"), "Caro Nome," "Il Baieu" (from "Il Trovatore"), and "Che Faro."

A particularly delightful number will be that most beautiful duet sung by "Nedda" and "Silvio" in their love scene in the first act of "Tegliacci," truly a vocal gem of richest melody.

truly a vocal gem of richest melody. The cultured voices of these visiting The cultured voices of these visiting singers from the river town will also be heard in "O Vision Entrancing," from "Esmeralda," by Goring Thomas, and "O Maritana," a charming duet from the sparkling opera of that name. In addition to the concerted numbers, the programme will also be notable for some fine songs. These will include programme will also be notable for some fine songs. These will include the charming modern song, "Yesterday and To-day" (Spress), and "When the King Goes Forth to War" (Koenemann), and "Oh, Could I but Express in Song" (Malashkin), both of which have been sung by the famous Russian singer Chaliapin.

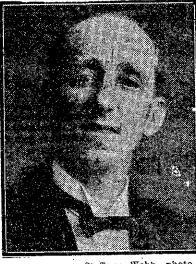
Miss Nora Greene,

Contralto—Open for Engagements.)
(Winner of the Ada Lewis Scholarship, R. A. M., London.)
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3YA FEATURES

Taking advantage of the presence of Mr. A. J. Cadman, of Wellington, in Christchurch, 3YA has secured his services for Monday evening, and his splendid bass voice will then delight all in "If Thou Wert Blind" and "Mandalay." Mr. Cadman "found his voice" when in the trenches in France, and since coming to live in New Zealand he has had it trained under Miss Goodman. Mr. Cadman has sung in many parts of New Zealand, and his services are in general demand, for talent as a singer is acknowledged. He is a prize-winner at competitions.

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-Steffane Webb, photo.

MR. H. INSTONE, OF 3YA.

With many years' experience as an entertainer, and a prominent performer at practically every town within reach of Christchurch, Mr. Instone specialises in humorous recitations, sketches and monologues, many of which are original. He is a perplar contributor to several Ausmany of which are original. He is a regular contributor to several Australian humorous magazines, and some of his contributions to those publications are included in his repertoire. He has also appeared in Christchurch in amateur pantomimes and short plays. Mr. Instone's next appearance at 3YA will be on Friday, November 25 November 25.

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Mr. Fred. Fox, expert cornet player well known throughout New Zealand, will contribute items on Monday evening. New artists on the programme with him will be Mrs. A. H. Burley, L.A.B. (mezzo-soprano) and Mr. Joseph Foster, who will contribute musical monologues.

Mr. Raynor White, so well known as an organist, will tell some of his musi-cal reminiscences at 3YA on Monday evening.

Wednesday's entertainment at 3YA will be provided by the Edge-ware Concert Party, of which Miss Wednesday's D. C. Rapley is the chief organiser. Many of the members of the party are competitions winners. The programme, which will be of a mis-cellaneous nature, will comprise solos, duets, choruses, monologues and recitations. A number of the items will be given to ukulele, xylophone, and guitar accompaniment, and the whole entertainment should be delightful.

The next astronomical address to be given by the Rev. B. Dudley, F.R.A.S., will be on Wednesday evening, when he will talk on "The Sun and his woulderful story."

One of the quartets to be sung on Thursday evening will be "Dreaming," adapted from Schumann's well-known "Traumerei." It makes a most charming quartet Another quartet will be the "Spring Song." by Pinsuti the "Spring Song," by Pinsuti

the "Spring Song," by Pinsuti
"The Raft," a song almost unknown
nowadays, will be sung by Mr. T. D.
Williams on Thursday evening. It is
a descriptive song of the libre of
"The Desert," which Mr. Williams
rendered so gloriously a few weeks ago.
"The Raft" describes the feelings of a man who is adrift on the eternity of the ocean. It is a song that is very seldom sung, for bass-baritones with the necessary range (two octaves) are rare. Another item to be given by

SYMONS-ELLWOOD-SHORT TRIO

Personnel—Miss Ava Symons (violin); Mr. Geo, Ellwood ('cello); Mr. Gordon Short (Piane).

On their appearance at 2YA during the week, November 21—26, this trio of brilliant instrumentalists will pres-ent another string of richest gems from the world's best music.
The Brahms trio in C major is one

of four masterpieces in trio form written by this great composer. The first one in B major, played during recent weeks, gave striking testimony to the rich wealth of melody possessed by Brahms. The trio in C opens with a Brahms. The trio in C opens with a stirring rhythmical figure which immediately grips the attention. The second movement consists of a slow inclody. as simple as a folk-song, afterwards treated in the form of variations. The catchy tune of the middle section of the scherzo is in marked contrast to the faucifulness of the opening part. The joyousness of the last movement gives a brilliant conclusion to the whole work.

Dvorak was the son of a village but-cher-innkeeper in Bohemia, and became the greatest composer of his country. He made full use of the folk-songs and dances he had learnt in his boyhood amongst the country-folk, which gives a particularly national colour to his compositions. No writer of chamber music has written more brilliantly for the instruments, dazzling combinations of sound being represented in his

scores.
The so-called "Dumky" trio to be played this week is one of the most popular of trios by reason of this special quality. "Dumky" is a word frequently used by Dvorak to indicate a movement of melancholy character, and this trio consists of a series of short movements linked together by a common bond of poignant expression. Bright dance tunes are interspersed between these sombre moods.

The first movement of a trio in G major by Reissiger will also be played. The work of this composer caught popular fancy in his day by reason of its clearness of melody and simplicity, of form. Mr. George Ellwood and Mr. Gordon

Short will play the slow movement of Grieg's sonata for 'cello and piano. The tune of it is one of haunting beauty. Miss Ava Symons will play as a solo the lovely "Romance," from the second

oncerto by Wieniawski. Mr. George Ellwood's solo will be a sonata by Corelli, one of the greatest violinists and composers of his time.

Mr. Gordin Short will play the most beautiful of Chopin's four Impromptus.

that in F sharp major.

Mr. Williams will be the fine and stire ring "Soldiers' Song," by Mascheroni, Miss Lucy Cowan, the well-known

teacher of elocution, who is a very popular contributor to 3YA's propopular contributor to 3YA's programmes, will give a humorous selection, and also "Maoriland," Mr. Arthur Adams's poem descriptive of New Zealand.

Mr. Gregory Russell, the popular Christchurch baritone, will be heard in solo items on Thursday evening. He is also singing a duet with Mr. T. D. Williams, "Army and Navy," and he will share in quartets with Misses Renaut and Hamerton and Mr. Wil-

The final of the talks which Mr. Hayward has been giving descriptive of a tour round the Southern Lakes, will take place on Friday evening.

Friday evening's concert at 3YA will centre round Marston's Band. which will supply dance music and various other selections, among which will be blended numerous attractive items. Mr. Rishworth will sing some old favourites. Mr. Instone and Miss Lilv Kinsella will contribute considerable huma-our, while Miss Mahel Dadney, L.A.R., a sourano sifted with an excellent radio voice, will also

(Continued on Page 12.)

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Full Programmes for Next

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NEWS AND NOTES

(By "Switch.")

When His Majesty the King broadcasts a special microphone is brought out. This instrument, reserved for the Royal use, is covered with silver wire and bears the Lion and the Unicorn in gold. Intrinsically, it is said to be the most valuable in the world.

In place of the former independent programmes, since July 17, Spain's six leading stations, Madrid, Seville, Salamanca, Bilbao, San Sebastian, and Barcelona, are now giving a single one, by the aid of land lines, which link them all in a national network.

During a recent thunderstorm in Middlesbrough (England) four houses were struck by lightning and badly damaged. When the matter was reported to the Middlesbrough Housing Committee it was stated that the houses were situated in an area thick with were situated in an area thick with wireless aerials and were about the only four not equipped.

A fully charged wet A battery cell remains at 2 volts for the first half of the discharge period. During the next quarter period the voltage remains at 1.95 volts. In the final quarter of the discharge, the voltage drops off rapidly to 1.8 volts in the first period rapidly to 1.8 volts in the period rapidly the period rapidly to 1.8 volts in the period rapidly the period the p to 1.8 volts, which is considered to be the lowest value to which the voltage of a radio cell should be allowed to fall.

From time immemorial, the story-teller of the East has been a picturesque leature in public places, entertaining an audience who had no books or newspapers. Now, with the introduction of broadcasting in Turkey, shops and baths aave installed radio sets; and the ag-grieved story-tellers have appealed to the Government for protection against this competition.

Station WLBW, Oil City, Pennsyl-rania, utilises no iron in its aerial sup-ports. The towers are built like the familiar type of oil derrick; and guyed by wooden supports—hickory "sucker jods" formerly used in pumping crude petroleum from the wells, and thorough-by saturated with the insulating fluid. it is believed that this construction climinates many of the troubles caused by chattering aerial capacity. by changing aerial capacity.



-Photo., Tornquist.

MR. IVAN PERRIN, OF 3YA.

A very clever pianist heard frequently at 3XA in classical and popular music, and in improvisations and extemporisations, in which he excels.

. Some good suggestions for the erection of aerial masts are contained in the United States Government Bureau of Standards Handbook No. 10 of Safety Rules for the Installation and Maintenance of Electrical Supply and Com-munication Lines. In accordance with these recommendations, wooden poles whose total length is 20 to 25ft. should be set 5ft. in the soil, 30ft. poles 5.5ft., 35 to 40ft. poles 6ft., 45ft. poles 6.5ft., 50 to 55ft. poles 7ft., 60ft. poles 7.5ft., 65 to 70ft. poles 9ft., 75ft. poles 8.5ft., and 80ft. poles 9ft. and 80ft. poles 9ft.

Recently, before broadcasting the play "R.U.R.," in which a violent explosion figures, the London station 2LO sested its apparatus. The noisemaker caused real "blasting," for the current demand was too great and the safetyfuse of the transmitter operated. So this radio-dramatic effect had to be loned down for presentation.

Sofia, the capital of Bulgaria, is to be equipped with two radio stations, one to reach as far as London (1950 miles), by morse; and one for 'phone transmission as far as Vienna (600 miles). In addition to this, it is stated that the Government is about to license the use of private receiving sets, hither-lo forbidden; so that another market for apparatus is opened.

Calcutta's newest mosque is to be equipped, among other innovations, with a loudspeaker system. Mohammedans use no bells to summon the faithful, but only the human voice. This, rowever, may evidently be piously aided by radio.

Sunday, November 20th

1YA AUCKLAND (833 METRES)—SUNDAY, NOVEMBER 20.

6.55 p.m.: Relay of church service from the Pitt Street Methodist Church.
 Preacher, Rev. Leonard Dalby; musical director, Mr. W. Leather.
 8.30: Relay of municipal band concert from Town Hall.
 Christopher Smith.

9.29: A thought. 9.30: Close down.

2YA WELLINGTON (420 METRES)—SUNDAY, NOVEMBER 20-

6 p.m.: Children's session, conducted by Rev. E. Weeks.
6.55: Relay of evening service of St. Thomas's Anglican Church, Wellington
South. Preacher, Rev. C. V. Rooke, M.A.; organist and choirmaster, Mr. W. A. Collie, L.I.C.M.
8.15: Relay of Wellington Municipal Tramways Band concert from His
Majesty's Theatre.

2YA CHRISTCHURCH (306 METRES)-SUNDAY, NOVEMBER 20.

5.45 p.m.: Children's song service from 3YA by Uncle Sam. 7.30: Relay of Sunday school anniversary service from St. Peter's Presbyterian Church (juveniles and adults). Preacher, Rev. Lendrick Mc-Master, B.D.; conductor, Mr. Wm. Jones; pianist, Mr. C. Hall; assisted by orchestra. 8.30: After-service concert.

8.30: After-service concert.
9.15: Musical lecture from 3YA Studio, entitled "Centenary Festival Impressions in Beethoven's Birthplace," by Mr. Adolph Mann, examiner, Trinity College of Music, London (with illustrations).
Pianoforte solo—Mr. Adolph Mann, "Moonlight Sonata, Op. No. 2"; Movements, (a) "Adagio Sostenuto, Allegretto"; (b) "Presto Agitato" (Beethoven).
Trio—Miss Irene Morris (violin), Mr. Harold Beck (violoncello), Mr. Adolph Mann (pianoforte), "Trio in B Flat, Op. 11" (Brahms). Close down.

4YA DUNEDIN (463 METRES)-SUNDAY, NOVEMBER 20.

6.30 p.m.: Relay of evening service from the St. Andrew's Street Church of Christ. Preacher, Pastor W. D. More; choirmaster, Mr. A. Hickey; organist, Miss Stokes.

8.0: Relay from St. Kilda (weather permitting) of concert by the St. Kilda Band. Conductor, Mr. James Dixon.

Hymns, (a) "Sun of My Soul," (b) "Jesu, Lover of My Soul."

March, "The Twentieth Century."

Selection, "The Parsifal" (Wagner).

Trombone solo, with band accompaniment, Mr. T. Stalker, "The Trum-

Overture, "Raymond" (Thomas). Cornet solo, with band accompaniment, Mr. George Christie, "In a Monastery Garden" (Ketelby).

Fantasia, "Rustic Scenes" (Rimmer).

March, "March of the Fearless."

9.20: God Save the King.

Monday, November 21st 14A AUCKLAND (333 METRES)—MONDAY, NOVEMBER 21.

SILENT DAY.

2YA WELLINGTON (420 METRES)—MONDAY, NOVEMBER 21.

p.m.: Afternoon session-Selected Studio items. 3.30: Lecturette-Miss Mann, of James Smith, Ltd., on "Fashions."

3.45: Available sports results. 3.47: Selected gramophone items.

5.0: Close down.

6.0: Children's hour—Aunt Jo and cousins from Guilford Terrace Convent.

Chorus, school cousins, "The Change Ringers" (Markham Lee),

"Erin, the Tear and the Smile" (Moore). Aunt Jo sends birthday
greetings. Chorus, school cousins, "Beauty Bright" (Batock). greetings. Chorus, school cousins, "Beauty Bright" (Batock).
Lecturette, Fairiel, "Indoor Games." Song in unison, school cousins,
"The Chase" (Stanford). Aunt Jo, story time. Chorus, school
cousins, "The Sentinel" (Volksleid), "Autumn Days" (Davies).

7.0: News session, market reports, and sports results.

8.0: Chimes of the General Post Office clock, Wellington.

Vocal items arranged and sung by Madame Spillane and party.

8.1: Overture, "Lover's Lane Minuet" (Tours).

8.5: Ensemble—Madame Spillane and party, "The Barley Mow" ("Tom

Jones"), (German).

8.9: Bass solo—Mr. S. L. Kendall, "The Sailor's Paradise" (Koenemann).

8.14: Soprano solo—Miss Amy Eaton, "Caro Nome" (Verdi).

8.18: Instrumental trio—Symons-Ellwood-Short Trio, "Allegro from C Major Trio" (Brahms).

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8.28: Vocal duet—Madame Spillane and Miss Y. Werry, "Tutti I Fior" ("Madame Butterfly"), (Puccini).
8.32: Tenor solo—Mr. E. Reid, "O Vision Entrancing" (Goring-Thomas).
8.37: Contralto solos—Miss Marjorie Allomes, (a) "A Widow Bird Sat Mourning" (Sidney), (a) "A Prelude" (Scott).
8.44: Violin solo—Miss Ava Symons, "Romance" from "Second Concerto" (Wienjawski).

(Wieniawski). 8.50: Baritone solo-Mr. T. Meehan, "Il Balin" ("Il Trovatore"), (Verdi). 8.55: Vocal duct-Miss Eaton and Mr. Reid, "Oh, Maritana" (Wallace).

8.59: Weather forecast.

91: Contralto solo-Miss Marjorie Allomes, "Che Faro" (Orfeo ed Euridice),

(Gluck).
9.6: Bass solo-Mr. S. L. Kendall, "When the King Went Forth to War" (Koenemann).

9.11: Vocal duet-Madame and Mr. C. I. Spillane, "Eallor Perche" (Pagliacci),

(Leoncavallo).
9.17: Instrumental trio—Symons-Ellwood-Short Trio, "Andante from C Major

9.56: Mixed quartets—Madame Spillane, Miss M. Allomes, Mr. E. Reid, and Mr. T. Meehan, (a) "Will You Walk a Little Faster?" (Lehmann); (b) "They Told Me You Had Been to Her" (Lehmann).

3YA CHRISTCHURCH (306 METRES)-MONDAY, NOVEMBER 21.

3 p.m.: Afternoon session-Selected Studio items.

4.30: Close down. 6.0: Children's hour-Uncle Jack.

7.0: Close down. 7.15: News and reports.

7.30: Talk-Mr. E. J. Bell, on "Books."

7.45: Close down.

8.0: Chimes. Relay of orchestral selections from Strand Picture Theatre

Orchestra, under the direction of Mr. Harry Ellwood. 8.10: Studio concert by Christchurch Municipal Band, under direction of Mr. A.

8.10: Studio concert by Christchurch Municipal Band, under direction of Mr. A. J. Schnack, and assisted by 3YA artists.

March—The band, "Victor's Return" (Rimmer).
8.18: Mezzo-soprano solo—Mrs. A. H. Burley, L.A.B., "O Flower of All the World" (Finden).
8.22: Selection—The band, "William Tell" (Rossini).
8.37: Talk—Mr. Raynor White, F.L.C.M., "Musical Reminiscences."
8.52: Waltz—The band, "Songe d'Automne" (Joyce).
9.0: Relay of orchestral selections from Strand Theatre.
9.10: Hymn—The band, "Fierce Raged the Tempest" (Dykes).
9.16: Musical monologue—Mr. Joseph Foster, "His First Long Trousers" (Blashnich).
9.20: March—The band, "Punchinello" (Rimmer).

(Blashnich).

9.20: March—The band, "Punchinello" (Rimmer).

9.28: Bass solo—Mr. A. J. M. Cadman, "If Thou Wert Blind" (Johnson).

9.32: Cornet solo—Mr. Fred Fox, selected.

9.36: Musical monologue—Mr. Joseph Foster, "The Pickpocket" (Searson).

9.39: Overture—The band, "Poet and Peasant" (Suppe).

9.49: Mezzo-soprano solo—Mrs. A. H. Burley, "Should He Upbraid?" (Bishop).

9.53: Trombone: Humoresque Fantasia—The band, (a) selected; (b) "Le Cirque" (Lithgow).

10.8: Bass solo—Mr. A. J. M. Cadman, "Mandalay" (Willeby).

10.12: March—The band, "Old Faithful" (Holzmann).

10.16: God Save the King. Close down.

4YA DUNEDIN (463 METRES)—MONDAY, NOVEMBER 21. SILENT DAY.

Tuesday, November 22nd 1YA AUCKLAND (333 METRES)—TUESDAY, NOVEMBER 22.

p.m.: Afternoon session-Selected Studio items.

4.0: A literary selection, by Mr. Culford Bell.

4.30: Close down.

6.0: Children's hour. 7.0: Close down.

7.15: News and reports.
7.30: Talk on "In the East," by Mr. Stanley Bull.

8.0: Chimes. Relay of orchestral overture from Majestic Theatre Orchestra, under the direction of Mr. J. Whiteford-Waugh.
8.12: Baritone solo—Mr. Morris Schroeder, "The Song of the North Wind"

(Head).

8.17: Soprano solos—Mrs. Cyril Towsey, (a) "Slow, Horses, Slow" (Thomas) (b) "Beautiful Beatrice" (Mallinson).
8.21: Sketch—Griffiths Duo, "A Visit to the Doctor."

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8.27: Pianoforte solo—Mr. Cyril Towsey, "Fantasie Impromptu" (Chopin).
8.32: Baritone solos—Mr. Hartley Warburton, (a) "E Luce Van Le Stelle" from "La Tosca" (Puccini); (b) "Your Eyes Have Told Me So" (O'Hara).

8.41: Elocutionary—Miss Louise Jourdain, "The Ballad of Splendid Silence." 8.46: Mezzo-soprano solo-Mrs. W. J. Gatenby, "Viba" from "Merry Widow"

8.51: Relay of musical selections from Majestic Theatre.

10.0: A thought, 10.1: God Save the King.

2YA WELLINGTON (420 METRES)-TUESDAY, NOVEMBER 22.

p.m.: Chimes of the General Post Office clock, Wellington.

3.1: Selected gramophone items.
3.30: Lecturette—Mrs. Sinclair, of S. Brown, Ltd., "Electric Cooking."

3.45: Available sports results.
3.47: Relay of Manuel Hyman's Exhibition Band from the Adelphi Cabaret. 4.15: Selected gramophone items. 5.0: Close down.

5.0: Close down.
6.0: Children's hour—Uncle Jasper. Oh! What fun. A trip to Rotorua, the place of mysteries. Radio express leaves punctually at 6 p.m. On board—Chorus, Mdme. Mueller's pupils "October's Party" (A. Lee). Uncle Jasper sends birthday greetings. Song, cousin, "Lullaby" (Brahms). Chorus, Mdme. Mueller's party, "Music in the Air" (Groot). Stories, told on the train by Uncle Jasper. Duet, cousins, "The Cauld Blast" (Mendelssohn). Song, cousin, "The Little People" (Brahe). Chorus, Mdme. Mueller's pupils, "Away Now, Joyful Riding" (Keicken).
7.0: News session, market reports, and sports results.

7.0: News session, market reports, and sports results.
7.40: Lecturette—Mr. E. A. Bradshaw, "The Origin and Occurrencies of Petroleum."

8.0: Chimes of the General Post Office clock, Wellington,
8.1: Overture—"Stars and Stripes March" (Sousa).
8.4: Quartet—Orpheus Quartet, "When Evening's Twilight" (Hatton).
8.9: Trio—Symons-Ellwood-Short Trio, "Scherzo and Finale" (Trio in C

8.9: Trio—Symons-Ellwood-Short Trio, "Scherzo and Finale" (Trio in C Major (Brahms).
8.19: Elocution—Mr. A. Stanley Warwick, (a) "The Grave of a Hundred Head" (Kipling); (b) "The Post that Fitted" (Kipling).
8.27: Baritone—Mr. Len. Barnes, "Danny Deever" (Demrosch).
8.30: Clarionet—Mr. Leo. Power, "Rataplon" (Thiere).
8.35: Duet—Miss Lily Mackie and Mr. Arthur Coe, "Home to our Mountain" ("Il Trovatore"), (Verdi).
8.40: Cornet—Mr. T. Goodall, "Give Me Back My Heart Again" (Hartman).
8.46: Soprano—Mrs. Alice Harris, "Rose Softly Blooming" (Spohr).
8.50: Piano—Mr. Gordon Short, "Impromptu in F Sharp" (Chopin).
8.57: Weather report.

8.57: Weather report.

8.57: Weather report.
8.58: Lecturette—Mr. Douglas Tayler, "Music and Pictures."
9.14: Concerted—Mr. Len. Barnes and quartet, "Carry Me Back to Old Virginie" (traditional).
9.19: Elocutionary—Mr. A. Stanley Warwick, "The Parting" from "Ever Ready Plays," published by Messrs. Samuel and French, Ltd., 26 Southampton Street, Strand, London, W.C.2.
9.24: Quartet—Orpheus Quartet, "Tell Me, Pretty Maiden" (From "Floradora"), (Stawart)

(Stewart).

9.27: Clarionet—Mr. Leo. Power, "Traumerei" (Schumann), "Serenade" (Gounod).

9.32: Tenor-Mr. Arthur Coe, "The Sailor's Grave" (Sullivan). 9.36: Trio-Symons-Ellwood-Short Trio, "First Movement, Dumky Trio"

(Dvorak).

9.46: Contralto—Miss Lily Mackie, "Mountain Lovers" (Squire).
9.50: Cornet—Mr. T. Goodall, "Her Bright Smile Haunts Me Still" (Brang).
9.56: Quartet—Orpheus Quartet, "It Was a Lover" (Ambrose).
3YA CHRISTCHURCH (306 METRES)—TUESDAY, NOVEMBER 22.

SILENT DAY,

4YA DUNEDIN (463 METRES)-TUESDAY, NOVEMBER 22.

3 p.m.: Afternoon concert-Selected Studio items.

Town Hall chimes.

3.1: His Master's Voice recital.
3.16: Address on "Interior Decoration," by Miss M. Puechegud. 3.30: Studio music.

4.15: His Master's Voice recital.

4.0: Book talk, by Mr. H. Greenwood, of the Athenaeum.

4.30: Close down.
7.0: Town Hall chimes.

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Children's session—Big Brother Bill. Town Hall chimes.

8.1: Baritone solos-Mr. J. Macdonald, (a) "Ailsa Mine"; (b) "I Did Not Know."

8.1: Baritone solos—Mr. J. Macdonald, (a) "Ailsa Mine"; (b) "I Did Not Know."

8.7: Pianoforte solo—Miss A. Muir, selected.
8.12: Xylophone solo—Mr. Andrew Fraser, "Tickle the Ivories."

8.16: Soprano solos—Miss Lilian Macdonald, (a) "Love and Music" from "Tosca" (Puccini); (b) "Bird Songs at Eventide."

8.24: 'Cello solo—Mr. Alex. Blyth, "Am Mer" (Schubert).

8.29: Tenor solos—Mr. T. Bachop, (a) "Rosamund" (Forster); (b) "Nightfall at Sea" (Montague Phillips).

8.35: Relay of orchestral music from the Octagon Theatre Orchestra, under the direction of Mr. L. D. Austen.

8.45: Address—Pastor W. D. More, "Hard Up."

9.0: Mezzo-soprano solos—Miss Vera Hutcheson, (a) "Sometimes When Night is Nigh"; (b) "The Star" (Roger).

9.6: Pianoforte solo—Miss A. Muir, selected.

9.10: Mezzo-soprano solos—Miss Molly Vickers, (a) "Still as the Night"; (b) "Sigh No More, Ladies."

9.16: Xylophone solo—Mr. Andrew Fraser, "Four Little Blackberries."

9.20: Vocal duet—Miss Lilian and Mr. J. Macdonald, "Duet" from "Maritana" (Wallace).

9.25: 'Cello solo—Mr. Alex. Blyth, "Moment Musical" (Schubert).

9.30: Tenor solos—Mr. A. Blyth, "Moment Musical" (Schubert).

9.37: Piano solo—Miss A. Muir, selected.

9.42: Mezzo-soprano solos—Miss Molly Vickers, (a) "Lament of Isis"; (b) "Sing, Joyous Bird."

9.48: 'Cello solo—Mr. Alex. Blyth, "Thou Art Like a Lovely Flower" (Schumann).

9.53: Xylophone solo—Mr. Andrew Fraser, four-hammer solo. "Swanee River."

9.53: Xylophone solo—Mr. Andrew Fraser, four-hammer solo, "Swanee River." 10.0: Close down

Wednesday, November 23rd

1YA AUCKLAND (338 METRES)—WEDNESDAY, NOVEMBER 28. 3 p.m.: Afternoon session-Selected Studio items.

4.0: A literary selection, by Mr. Culford Bell. 4.30: Close down.

60: Children's hour.
7.0: Close down.
7.15: News and reports.
7.30: Talk on "Physical Culture," by Mr. Norman Kerr.

7.45: Close down. Chimes.

8.0: Chimes.
8.1: Vocal quartets—Phil Lewis's Quartet, (a) "We Are Phil Lewis's Quartet" (M.S.); (b) "Ragtime Medley" (M.S.).
8.9: Soprano solo—Miss Stella Thompson, "Danny Boy" (Old Irish).
8.13: Baritone solo—Mr. Stan. Pitken, "Friend o' Mine" (Sanderson).
8.18: Tenor solo—Mr. Len Crutcher, "Because" (d'Hardelot).
8.22: Vocal quartet—Phil. Lewis's Quartet, "Moonlight Bay" (M.S.).
8.26: Monologue—Mr. Phil. Lewis, "His Pipe."
8 30: Relay of orchestral overture from Strand Theatre Orchestra, under the direction of Eve Bentley.
8.40: Vocal quartet—Phil. Lewis's Quartet, "The Fireman's Dream."
8.45: Soprano solo—Miss S. Thompson, "Birth of Morn" (Leoni).
8.48: Baritone solos—Mr. Phil. Lewis, (a) "With Joy in My Heart"; (b)

"Swiss Yodel" (M.S.).
8.57: Vocal selection—Harmony Hob, "Novelties."
9.3: Humorous duet—Messrs. Pitken and Bennett, "Handy Little Book."
9.8: Weather forecast.
9.10: Relay of orchestral selections from Strand Theatre.

9.8: Weather forecast.
9.10: Relay of orchestral selections from Strand Theatre.
9.20: Tenor solo—Mr. Len. Crutcher, "Until" (Sanderson).
9.24: Baritone solo—Mr. S. Pitken, "Last Night Was the End of the World."
9.29: Vocal quartet—Lewis's Quartet, "Sing Heigh, Sing Ho."
9.34: Vocal selections—Harmony Hob, more novelty items.
9.40: Relay of orchestral selections from Strand Theatre.
9.50: Baritone solo—Mr. Phil. Lewis, "A Soldier's Dream."
9.54: Vocal quartets—Lewis's Quartet. (a) "Come to Tea": (b) "Fargwell"

9.54: Vocal quartets-Lewis's Quartet, (a) "Come to Tea"; (b) "Farewell."

10.1: A thought. 10.2: God Save the King.

2YA WELLINGTON (420 METRES)—WEDNESDAY, NOVEMBER 23.
SILENT DAY,

3YA CHRISTCHURCH (306 METRES)-WEDNESDAY, NOVEMBER 23.

3 p.m.: Afternoon session-Selected Studio items.

4.30: Close down. 6.0: Children's hour-Uncle Peter and Mother Hubbard.

7.0: Close down.

7.15: Addington market reports. 7.30: News and reports.

7.30: News and reports.

8.0: Chimes. Relay of orchestral selections from Crystal Palace Theatre Orchestra, under the direction of Mr. A. J. Bunz.

8.10: Opening chorus—Edgeware Concert Company, "May Morning."

8.14: Pianoforte duet—Ellis' Fraser and Olive Robson, "Qui Vive."

8.18: Vocal duet—Misses Daphne Lawrence and Hilda Smith, "Somewhere a Voice is Calling."

8.22: Violin solo—Miss Irene Morris, "Sicilienne and Ragandon" (Kreisler).

8.27: Elocutionary—Miss Esme Evans, "White Roses."

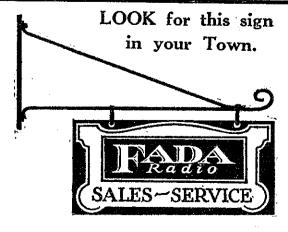
8.30: Instrumental trio—Christchurch Broadcasting Trio, "Moderato Allegro Passionata" from "Trio in D Major" (Reissiger).

8.40: Talk—Rev. B. Dudley, F.R.A.S., "The Sun and His Wonderful Story" (M.S.).

(M.S.). 8.55: Vocal solo, with humming chorus—Edgeware Concert Company and Master Gordon Smith, "Sleepy-Hollow Tune."

Part-song—Edgeware Concert Company, with xylophone accompaniment, "Moonlight and Roses."

9.2: Relay of orchestral selections from Crystal Palace Theatre.
9.10: Humorous recital—Miss May Trenberth, "Back at Squashville."
9.13: Pianoforte solo—Miss Edna Moore, selected.
9.17: Contralto solo—Miss Hilda Smith, "Break, Break."
9.20: Violin solo—Miss Irene Morris, "Adagio and Allegro" from "Sonata in a Major" (Handel).



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CHRISTCHURCH

An Linglish firm has just introduced commercially a radio burglar alarm, which adds new terrors to Bill Sikes' profession. When the alarm is set off, a small, battery-operated transmitter commences to send out a signal on between 600 and 800 metres; and this automatically brings a warning buzz from the loudspeaker of a six-valve receiving set, which may be 50 miles away, if so desired.

An Atlantic radio operator says: "The wave-length bands allotted to ship work are extremely overcrowded, and this is particularly unfortunate in areas where there are very many ships, like in the North Atlantic. At night the man at sea usually has anywhere from half-adozen to forty ship and shore stations assaulting his ears at once, and out of the melec he is able to pick perhaps two or three, the remainder interfere too much with one another. Add to this radio's arch enemy 'Old Man Static' and vou have a state of affairs that often amounts to a serious problem when one's ship is many hundreds of miles off shore and there is traffic to get through."

New Zealand listeners will have some New Zealand listeners will have some powerful Japanese stations to listen to in the near future. Broadcast stations, each of 10,000 watts power, are to commence transmitting within a few weeks at Tokio, Osaka, Hiroshima, Kumam, Oto, Kumamoto, Sendai, and Sappolo. Relay stations of from 3000 to 10,000 watts output power will operate at watts output power will operate at Kanazawa, Nagano, Hirosaki, and Notsukeushi.



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Programmes Continued

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9.23: Humorous chorus-Edgeware Concert Company, "Mary Had a Little Lamb," "Mother Hubbard."

9.30: Vocal solo—Ellis Fraser, selected.

9.31: Instrumental trios—Christchurch Broadcasting Trio, (a) "Serenade" (Lange-Muller); (b) "Dreaming" (Schumann); (c) "Entr'acte and Valse" from "Coppelia Ballet Music" (Delibes).

9.44: Vocal solo—Miss Elsie Burson, "She Sang Aloha to Me" (with steel

guitar accompaniment).
9.47: Part-song—Edgeware Concert Company, with steel guitars, "Hawaiian Part-Song."

950: Vocal duet-Misses Daphne Lawrence and Hilda Smith, "I Wish I Were a Tiny Bird."

a Tiny Bird."

9.53: Monologue—Miss Esme Evans, "Playtime."

9.56: Humorous recital—Miss May Ternberth, "Terrible Tommy."

10.0: Vocal solo—Miss Esme Evans, "Kreisler's Cradle Song."

10.4: Vocal duet and chorus—Ellis Fraser and Esme Evans (with xylophone accompaniment), "Tell All the World."

10.8: Vocal solo—Miss Marion Evans, "Youth and Spring."

10.11: Vocal duet-Misses Rose Smith and Kathleen Robertson, "Good Night, Pretty Stars."
10.13: Soprano solo—Miss Daphne Lawrence, "Wings."

10.16: Final chorus-Edgeware Concert Company, "Ghosts of Little White

Close down. . 4YA DUNEDIN (463 METRES)-WEDNESDAY, NOVEMBER 23. SILENT DAY.

Thursday, November 24th

1YA AUCKLAND (333 METRES)—THURSDAY, NOVEMBER 24.

p.m.: Afternoon session-Selected Studio items. 4.0: A literary selection, by Mr. Culford Bell.

4.30: Close down. 6.0: Children's hour.

Close down.

7.15: News and reports.

7.45: Close down. 8.0: Chimes.

8.1: Boy soprano-Master David Campbell, (a) "Someone's Singing in My

Gardens"; (b) selected.

89: Bass solo—Mr. Arthur College, "Up From Somerset" (Sanderson).

8.13: 'Cello solos—Miss Marjorie Tiarks, (a) "Le Cygne" (Saint-Saens); (b)

"An Old Italian Love Song" (Squire).

8.21: Soprano solo—Miss Adelaide Taylor, "Sing, Happy Hearts, Sing"

(Wood).

8.25: Pianoforte solo—Mrs. Hugh Morton, "Fox-trot Selections.".
6.30: Relay of orchestral overture from Rialto Theatre Orchestra, under the direction of Mr. Henry C. Engel.
8.40: Elocutionary—Mr. Thomas Harris, (a) "The Safety-pin"; (b) "Silly

Ass.

8.48: Cornet solos—Mr. Eustace Tregilgas, (a) "Click-Clack Polka" (Rimmer); (b) "Beneath Thy Window" (Di Capua).

8.56: Boy soprano—Master D. Campbell, "Believe Me If All Those Endearing Young Charms" (Allan).

90: Weather forecast.

90: Weather forecast.
9.1: Bass solos—Mr. A. College, (a) "A Vagabond" (Cendell); (b) "Glorious Devon" (German).
9.9: Taik on "Great Authors," by Mr. Culford Bell.
9.24: Relay of orchestral interlude frmo Rialto Theatre.
9.30: Soprano solos—Miss A. Taylor, (a) "The Dancing Lesson" (Oliver);
(b) "Dawn, Gentle Flower" (Bennett).
9.37: 'Cello solo—Miss M. Tiarks, "Prelude" (Rachmaninoff).
9.41: Pianoforte solos—Mrs. H. Morton, (a) "Hexantanz" (McDowell); (b)
"Jazz Medley."

"Jazz Medley."

9.48: Elocutionary—Mr. T. Harris, "The Old Bachelor."

9.51: Relay of musical entr'acte from Rialto Theatre. 9.57: Cornet solo-Mr. F. Tregilgas, Fantasia, "I Dreamt I Dwelt in Marble

10.1: A thought. 10.2: God Save the King.

2YA WELLINGTON (420 METRES)-THURSDAY, NOVEMBER 27.

p.m.: Chimes of the General Post Office clock, Wellington,

3.1: Selected gramophone items.
3.30: Lecturette—Representative of D.I.C., Ltd., "Fashions."

3.45: Available sports results.

3.47: Selected gramophone items. 4.15: Relay of Manuel Hyman's Exhibition Band from the Adelphi Cabaret.

4.30: Selected gramophone items.

5.0: Close down.
6.0: Children's hour—Uncle Sandy and cousins from Chilton House School—Vocal, cousins, "Waltz Song" (Gasti); vocal, cousins, "Love Me, I Love You" (Swinsliad); piano, cousin, "Capriccio" (Scarletti). Uncle Sandy, birthday greetings. Vocal, cousins, "Frere Jacques" (Old French); vocal, cousins, "Ave Mes Sabots" (Tiersot); recitation, cousin, "The Gift of Tritemius" (Whittier); vocal, cousin, "The River" (Sullivan). Uncle Sandy, story time. Piano, Cousin Thelma, selected. Vocal, cousins, "The Bumble Bee" (Medley); vocal, cousins, "The White Paternoster" (Davies). Lecturette, Captain Duffy, "Health"; recitation, cousin, "The Pipes of Pan" (E. B. Browning); piano, cousin, "Hungarian Rhapsody" (Liszt). Close down.

🟂 ระทักษณะสร้ายหมายกราชัยยิยังกรราชิกษณยะรายกับยากราสยองกมาราชากิกครราชยิยังกราชกิดยายระบายการบริกายกิดยะราชยายังราชยิยั

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35 CUBA STREET,

WELLINGTON.

Also at Auckland, Christchurch, Dunedin, Hastings, New Plymouth, Palmerston North, Nelson, Hamilton and Wanganui,

The Japanese are largely crystal set [users. There are about 380,000 broadcast listeners in Japan, and the majority live within a 25-mile circle of the various broadcast stations. The erection of more powerful transmitters now in progress is to bring broadcasting to a greater number who cannot afford valve sets.

Mr. Leslie B. Page, formerly station director of the Hull broadcasting station, who has taken up his duties as the Bombay station director of the Indian Broadcasting Company, said, in an interview to an Indian Press correspond-"If India is anything like Britain, then I think light entertainment must be our first objective. Personally, I am an advocate of education by radio."

What does a neutralising condenser accomplish? It is a variable condenser of small capacity used in radio fre-quency circuits to neutralise the internal capacity existing between the plate and grid elements of a valve. This conden-ser is an essential feature of the neutrodyne and Browning-Drake circuits. The latter is really a variation of the neutrodyne circuit.

Reaction or regeneration, when propcrly controlled, amplifies incoming signals many times, and the best results may be obtained by bringing the regenerator control up to a point just before oscillation starts. Oscillation, which causes a valve to howl, may be recognised by a peculiar continuous mushy sound in the telephones or loudspeaker. l'oc much reaction also causes a whistling. If oscillation commences or ceases with a "plop" the "B" battery voltage on the detector valve should be reduced.

CHARLEMENT CHARLES I COMPANION CHARLES EN CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR DE CONTRACTOR D



-Steflano Webb, photo.

MR. E. O'CONNOR, OF 3YA.

It is not very long since Mr.
O'Connor sang his first comic song at
3YA, but he is now a frequent contributor to Saturday night pro-

DESCRIPCIONES DE L'ARRESTATE DE L'ARRESTATE DE L'ARRESTATE DE L'ARRESTATE DE L'ARRESTATE DE L'ARRESTATE DE L'A

Some of the Australian companies have been endeavouring to establish relay stations for over a year, but they are held up by the Commonwealth Postal Department, firstly in the apparently unavoidable delay that must result in constructing the lines, and secondly in determining the location of the stations. 3LO Melbourne has been trying for about 18 months to establish four or five stations in Victoria, but for various reasons beyond their control, mainly those already indicated, the very much desired improvement of the service for country listeners cannot be given.

Never turn on the filament current of your valves more than is absolutely necessary or the lives of your valves will be shortened. Turn the rheostat until the best results are obtained and then stop if you find that turning the rheostat further makes no improvement.

8LO Melbourne is a sort of bureau for all kinds of inquiries and some very extraordinary requests are received from time to time. Recently a neat packet arrived by mail, and upon being opened it was found to contain a dead sea bird of some rare species litherto unseen on the Australian coasts. It was sent to 3LO Melbourne for identification, and a place has been found for it in the National Museum.

In building your own receiving set, there is perhaps no merit, other than rigidity, in using heavy-gauge wire in connecting a radio set. All wires carrying plate and filament currents should the plate and filament currents. be kept well apart and should be well insulated. "Spaghetti" insulation is good and often saves tubes from burning out and often saves tubes from purming our as a result of an accidental short circuit. Neat, right-angle bends in the wiring greatly enhance the appearance of a completed receiver; these are easily made even with comparatively heavy wire if a pair of round-nose pliers is used. The wire is held in its approximate. nate location and is bent while in position, thus saving much time.

To combat the local howling valve nuisance, a Gordon Hill (England) resi dent has offered through the medium of his local newspaper to give his services free in the interests of his long-suffer-ing neighbourhood. He states that he is most willing to visit anyone within a reasonable distance and (1) tell them if their set is causing interference; (2) tell them how to prevent it and at the same time get better reception for them-

7.0: News session, market reports, and sports results.
7.40: Lecturette, Mr. W. King, D.E.B.A., "Esperanto."

2.0: Chime of the General Post Office clock, Wellington.

2.1: Overture—Wellington Artillery Band, "Victoria Cross" (Greenwood),

3.6: Quartet—Apolle Quartet, "O, Lovely Night" (Chwatah).

3.10: March—Wellington Artillery Band, "Boots and Saddles" (Brown).

3.16: Baritone—Mr. Roy Dellow, "King Charles" (White).

3.20: Gavotte—Wellington Artillery Band, "Loving Hearts" (Beyer).

3.7: Duet—Messrs. Rodger and Duncan, "The Moon Hath Raised" (Benedict).

3.8: Fantasia—Wellington Artillery Band, "Minstrel Melodies" (Bourne).

3.40: Quartet—Apollo Quartet, "Soldier's Farewell" (Kintel).

3.44: Waltz—Wellington Artillery Band, "Summer Glory" (Greenwood).

3.50: Tenor—Mr. Sam. Duncan, "Angels Guard Thee" (Godard).

3.54: Flower Song—Wellington Artillery Band, "Love and Roses" (Danizet).

3.6: Weather report.

9.0: Weather report.
9.1: Lecturette—Mr. Arch. Sando, manager, "The Dominion," "The Romance

of the Press.'

of the Press."

9.16: Selection—Wellington Artillery Band, "La Somnambula" (Bellini).

9.26: Quartet.—Apollo Quartet, "In Absence" (Buck).

9.30: Idyll—Wellington Artillery Band, "In Love's Garden" (Danizet).

9.35: Duet.—Messrs. Dillon and Robbins, "The Battle Eve" (Bonheur).

9.40: Cornet duo—Bandsmen, "Jollification" (Anderson).

9.46: Bass—Mr. S. E. Rodger, "Little Irish Girl" (Lohr).

9.51: Quartet.—Apollo Quar'et, "The Goslings" (Lohr).

9.55: American march—Wellington Artillery Band, "Sambo's Wedding" (Edcn).

3YA CHRISTCHURCH (306 METRES)—THURSDAY, NOVEMBER 24.

p.m.: Afternoon session-Selected Studio items.

4.30: Close down.
C.0: Children's hour—Chuckie and Chook.

7.0: Close down.

7.0: Close down.
7.15: News and reports.
7.30: Talk—Mr. L. E. Vernazoni (Philatelic Society).
80: Chimes. Relay of orchestral selections from Everybody's Theatre Orchestra, under the direction of Mr. Albert Bidgood.
8.15: Soprano solo—Miss Frances Hamerton, "There Are Fairies" (Lehmann).
8.21: An interlude on the piano—Miss Aileen Warren, "In a Woodland Glen" (from "Scottish Tone Poems"), (Barrett).
8.25: West dust (tener and base)—Messrs. Gregory Russell and T. D. Wil-

8.25: Vocal duet (tenor and bass)—Messrs. Gregory Russell and T. D. Williams, "Army and Navy" (Cooke).
8.29: Instrumental trio—Christchurch Broadcasting Trio, "Romance" (Mozart).

8.29: Instrumental trio—Christchurch Broadcasting 1710, Romance (Mozart).
8.35: Tenor solo—Mr. Gregory Russell, "All Hail, Thou Dwelling" from
"Faust" (Gounod).
8.39: Vocal quartet—Misses Hamerton and Renaut and Messrs. Russell and
Williams, "A Spring Song" (Pinsuti).
8.45: Instrumental trio—Christchurch Broadcasting Trio, "Entr'acte" from

8.45: Instrumental trio—Christchurch Broadcasting Trio, "Entracte" from "Cavalleria Rusticana" (Mascagni).

8.50: Humorous recital—Miss Lucy Cowan, (a) "It May Be Life" (Herbert); (b) "Cuttin' Rushes" (Lucas).

8.56: Bass solo—Mr. T. D. Williams, "The Raft" (Pinsuti).

9.0: Relay of orchestral selections from Everybody's Theatre.

9.15: Contralto solo—Miss Belle Renaut, "O, Star of Eve" from "Tannhauser"

9.15: Contrato solo—Miss Bene Relati, O, Stat of Etc Tom Tammasser (Wagner).

9.19: Vocal quartet—Misses Hamerton and Renaut and Messrs. Russell and Williams, "Dreaming" (Schumann).

9.22: Instrumental trios—Christchurch Broadcasting Trio, (a) "Andante Quasi Allegretto" (Reissiger); (b) "Capriccio" from "D Major Trio."

9.25: Tenor solo—Mr. Gregory Russell, "Thine Only" (Bohm).

9.29: Further moments at the piano—Miss Aileen Warren, "Harlequin"

(Chaminade). 9.33: Soprano solo-Miss Frances Hamerton, "Skylark and Nightingale"

(Ireland).

(Ireland).

9.36: Instrumental trios—Christchurch Broadcasting Trio, (a) selected; (b) "Festival Dance" ("Copellia Ballet Music") (Delibes).

9.46: Bass solo—Mr. T. D. Williams, "A Soldier's Song" (Mascheroni).

9.51: Recital—Miss Lucy Cowan, "Maoriland" (Adams).

9.55: Tenor solo and chorus—Mr. Sumner and chorus (Misses Hamerton, Renaut, Messrs. Russell and Williams), "Sing Us a Song" (German).

10.0: Contralto solo—Miss Belle Renaut, "Beautiful Beatrice" (Mallinson).

4YA DUNEDIN (463 METRES)—THURSDAY, NOVEMBER 24. p.m.: Town Hall chimes. 7.1: Request gramophone concert.8.0: Relay from His Majesty's Theatre, concert by Returned Soldiers' Choir.

Friday. November 25th 1YA AUCKLAND (333 METRES)__FRIDAY, NOVEMBER 25.

3 p.m.: Afternoon session—Selected Studio items. 4.0: A literary selection, by Mr. Culford Bell, 4.30: Close down.

10.1: Close down.

vocal selections. Weather forecast.

9.17: Weather forecast.
9.18: Relay of orchestral interlude from Majestic Theatre Orchestra, under the direction of Mr. J. Whiteford-Waugh.
9.28: Tenor solo—Mr. R. Peter, "Cloths of Heaven" (Dunhill).
9.32: Violin solo—Mr. Norman Watson, "Melody in F" (Lawrence).
9.36: Cornet duos—Messrs. Davies and Salthouse, (a) "Barcarolle" (Offenbach); (b) "O, Lovely Night" (Cooke).
9.44: Mezzo-soprano solos—Mrs. B. Jellard, (a) "The Meeting of the Waters" (Allan); (b) "The String of Pearls" (Phillips).
9.52: Violin solos—Mr. N. Watson, (a) "Madrigal" (Simonette); (b) "Midnight Bells" (Kreisler).
10.0: A thought. 10.0: A thought.

2YA WELLINGTON (420 METRES)-FRIDAY, NOVEMBER 25.

3 p.m.: Afternoon session—Selected Studio items, 3.30: Lecturette—Miss Marion Christian, "Gas Cooking."

3.45: Available sports results.

3.47: Relay of Manuel Hyman's Exhibition Band from the Adelphi Cabaret.

4.15: Selected gramophone items. Close down.

Children's hour—Uncle Ernest and school cousins. Chorus, school cousins, "'Frisco Bay" (arr. Sharp). Uncle Ernest, birthdays. Solo, cousin, "Carrion Crow" (folk song), Round. Cousins, "Glide Along" (folk song). Recitation, cousin, "Granny" (Hoatson). Chorus, school cousins, "Down in the Cornfields" (Sharp). Uncle Ernest, story time. Part-song, cousins, "Sweet and Low" (Barnby).

Song in unison, cousins, "Market Square" (Simpson).

7.0: News sessions, market reports, and sporting results.

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WELLINGTON. **40 MANNERS STREET**

Children's hour-"Nod." 7.0: Close down. 7.15: News and reports. 7.45: Close down. 8.0: Chimes. 8.0: Chimes.
8.1: Tenor solos—Mr. Robert Peter, (a) "The Woodland Flower" (Thomas);

"Heart o' Fire, Love" (Fraser).
8.9: Cornet duo—Messrs. Salthouse and Davies, "Birds in the Forest."
8.13: Mezzo-soprano solo—Mrs. B. Jellard, "My Ships" (Barrett).
8.17: Organ—Mr. Arthur E. Wilson and assisting vocalist, organ recital and

Programmes Continued

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7.40: Lecturette—Mr. D. G. Paris, "Athletics" (lecture No. 4)
8.0: Chimes of the General Post Office clock, Wellington.
8.1: Overture, "In a Persian Market" (Ketelby).
8.5: Quartet—Philharmonic Quartet, "Ye Banks and Braes" (arr. Mc-

Naught).

8.9: Tenor solo—Mr. Edwin Dennis, "Warwickshire Wooing" (James).

8.14: Humorous recitai—Mr. R. Walpole, "Daylight Saving" (Walpole).

8.20: Instrumental trio—Symons-Ellwood-Short Trio, "Second Movement,
Dumky Trio" (Dvorak).

8.30: Quartet—Philharmonic Quartet, "Swing Low, Sweet Chariot" (arr.

Sawyer). 8.34: Contralto solo-Miss Madge Freeman, "The Lord Is My Light" (Allit-

son).

8.37: Hawaiian trio—Mr. James Goer and party, "Hawaiian Mediey."

8.42: Vocal duet—Messrs. Dennis and Marshall, "Excelsior" (Balie).

8.45: 'Cello solo—Mr. George Ellwood, "Sonate in D Minor" (Corelli).

8.50: Bass solo—Mr. W. W. Marshall, "Jungle Song" (Hiscocks).

8.55: Humorous recital—Madame Eugenie Dennis, "Young Wife's First Visit to Butcher's Shop" (anon.).

9.0: Weather forecast.

9.1: Lecturette—Editor-Announcer, "Foreign Affairs."
9.15: Quartet—Philharmonic Quartet, "Pro Phundo Basso" (Bliss).
9.18: Soprano solo—Mrs. Ellison Porter, "Carmena" (Wilson).
9.22: Instrumental trio—Symons-Eliwood-Short Trio, "Third Movement, Dumky

Trio" (Dyorak).

9.32: Bass solo—Mr. W. W. Marshall, "Devonshire Cream and Cider" (James).

9.35: Humorous recital—Mr. R. Walpole, "Monty on Bolshevism" (Milton Hayes).
al trio-Members Philharmonic Quartet, "Oars Are Splashing"

9.39: Vocal trio-(Giebel). 9.43: Humorous recital-Madame Eugenie Dennis, "An Old Maid's Prayer"

(anon.).

9.47: Tenor solo—Mr. Edwin Dennis, "Inter Nos" (McFadyen). 9.50: Hawaiian trio—Mr. James Goer and party, "Hawaiian Melodies." 9.56: Quartet—Philharmonic Quartet, "Good Night, Ladies" (anon.). 10.0: Close down.

3YA CHRISTCHURCH (306 METRES)-FRIDAY, NOVEMBER 25.

3 p.m.: Afternoon session-Selected Studio items.

4.30: Close down.
6.0: Children's hour—Big Brother.
7.0: Close down.

7.15: News and reports.

7.30: Lecturette-Mr. Hayward, "Conclusion of Motor Tours Through Southern Lakes District.'

8.0: Chimes. Relay of orchestral selections from Liberty Theatre Orchestra,

Lakes District."

8.0: Chimes. Relay of orchestral selections from Liberty Theatre Orchestra, under the direction of Mr. A. J. Bunz.

8.15: Baritone solo—Mr. Cyril Rishworth, "A Bandit's Life is the Life for Me" (Harper).

8.19: Dance music—Les. Marston's Orchestra, "Ain't She Sweet?" (M.S.).

8.27: Humorous recitations—Mr. H. Instone, (a) "Publicity" (Green); (b) "Dooley and His Tall Silk Hat" (Green).

8.33: Saxophone solo—Les. Marston, "Valse Vanite" (Wiedoeft).

8.41: Soprano solos—Miss Mabel Dudney, L.A.B., (a) "The Gift" (Behrend); (b) "Sing, Sweet Bird" (Ganz).

8.49: Dance music—Les. Marston's Orchestra, "Shepherd of the Hills" (M.S.).

8.57: Humorous recital—Miss Lily Kinsella, "Greetings" (Parker).

9.0: Relay of orchestral selections from Liberty Theatre.

9.15: Baritone solos—Mr. Cyril Rishworth, (a) "Oh! Oh! Hear the Wild Winds Blow"; (b) "Spring's a Lovable Ladye" (Elliott).

9.22: Pianoforte syncopations—Les. Marston, selected.

9.30: Humorous recital—Mr. H. Instone, "A Trip Through the Backblocks."

9.34: Dance music—Les. Marston's Dance Orchestra, "I Can't Get Over a Girl Like You Loving a Boy Like Me" (M.S.).

9.42: Soprano solos—Miss Mabel Dudney, L.A.B., (a) "Ships that Pass in the Night" (Stevenson); (b) "A Cradle Song" (Clutsam).

9.48: Dance music—Les. Marston's Dance Orchestra, "Blondy" (M.S.).

9.56: Humorous items at piano to own accompaniment—Miss Lily Kinsella, (a) "A Novel on Bovril Principle" (Fane); (b) "The Three Trees" (M.S.). (M.S.).

10.5: Dance music-Les. Marston's Orchestra, "She's a Bahy" (Marston). Close down.

4YA DUNEDIN (463 METRES)-FRIDAY, NOVEMBER 25.

12.15 p.m.: Description of Forbury Park trotting meeting.

5.30: Close down.

Town Hall chimes. Children's session-Big Brother Bill. 7.45: News and reports.

Town Hall chimes. Relay from His Majesty's Theatre of Fire Brigade charity concert.

Saturday November 26th 1YA AUCKLAND (333 METRES)—SATURDAY, NOVEMBER 26.

p.m.: Afternoon session-Selected Studio items, 4.0: A literary selection, by Mr. Culford Bell.

4.30: Close down.

6.0: Children's hour.

7.0: Close down.
7.15: News and sports results.

.45: Close down. 8.0: Chimes.

8.1: Relay of Municipal Band concert from Town Hall (bandmaster, Mr. Christopher Smith).

9.30: Weather forecast. 9.31: Relay of dance music from Click-Clack Cabaret by the Click-Clack Radio Orchestra, under Mr. Walter Smith.

11.0: A thought, 11.1: God Save the King.

2YA WELLINGTON (420 METRES)-SATURDAY, NOVEMBER 26.

p.m.: Afternoon session-Selected Studio items.

3.30: Available sports results.
3.32: Relay of Manuel Hyman's Exhibition Band from the Adelphi Cabaret.

4.15: Selected gramophone items.

Close down.

5.0: Close down.
6.0: Children's hour—Auntie Dot. Chorus, Wellington East Girls' College, selected. Pianoforte solo, cousin, selected. Playette, Wellington East Girls' College, "Midnight in the Vegetable Garden." Vocal item, cousin, selected. Recitation, cousin, selected. Chorus, Wellington East Girls' College, selected. Story, cousin, "The Three Bears." Chorus, Wellington East Girls' College, selected.
7.0: News session, market reports, and sports results.
8.0: Chimes of the General Post Office clock, Wellington.
8.1: Overture—Prelude, "The Rhine Gold" (Wagner).

Negro Spiritual Evening.
8.4: Ouartet—The William Reushaw Ouartet. "De Ringtail'd Coon (Scott-

8.4: Quartet—The William Renshaw Quartet, "De Ringtail'd Coon (Scott-Gatty).

8.7: Banjo—Mr. Chas. Brazier, "Beat As You Go" (Grimshaw). 8.10: Baritone solo—Mr. Thomas C. Wood, "Go Down, Moses" (Burleigh). 3.13: Soprano solo—Mrs. Amy Dunn, "Swing Low, Sweet Chariot" (Burleigh).

8.10: Baritone solo—Mr. Thomas C. Wood, "Go Down, Moses" (Burleigh).
8.20: Instrumental trio—Symons-Ellwood-Short Trio, "First Movement Trio in C Major" (Reissiger).
8.30: Tenor solo—Mr. William Renshaw, "Ma Little Banjo" (Dickmont).
8.33: Hits and harmonies—The Glad Idlers, (a) "Sleepy Time Girl" (Whiting); (b) "When the Love Bird Leaves the Nest" (Wade); (c) "Sitting on Top of the World" (Henderson).
8.40: Contralto solo—Miss Nora Greene, "Ma Curly-Headed Baby" (Clutsam).
8.43: Quartet—The William Renshaw Quartet, "De Ole Banjo" (Scott-Gatty).
8.46: 'Cello and pianoforte duet—Mr. George Ellwood and Mr. Gordon Short, "Andante" (Greig).
8.50: Baritone solo—Mr. Thomas C. Wood, "Deep River" (Burleigh).
8.51: Baritone solo—Mr. Thomas C. Wood, "Deep River" (Burleigh).
8.52: Tenor solo—Mr. William Renshaw, "Nuthin'" (Carpenter).
8.55: Banjo—Mr. Chas. Brazier, "Tune Tonic" (Grimshaw).
9.21: Contralto solo—Miss Nora Greene, "Honey, If You Only Knew" (Ball).
9.42: Quartet—The Wölliam Renshaw Quartet, "Good Night" (Scott-Gatty).
9.71: The Glad Idlers, in further hits and harmonies, (a) "You Never Seem to Look My Way"; (b) "Kitten on the Keys" (Confrey); (c) "Sweet Child" (Whiting).

Spring-cushioned valve sockets prevent the microphonic or "ringing" sounds caused by jarring the table on which the receiving set is placed. The majority of high-class American sets are now fitted with these sockets.

Now, you "DX" fans, who is going to be the first to report reception of these stations:—KOL, Tientsin, 480 metres, 500 watts output, owned by the Tientsin Broadcasting Co., Tientsin, China; RL20, Vladivostok, Siberia, 480 metres, 1500 watts output, owned by the Union of Soviet Workers' Radio Club, Vladivostok; JQAK, Darien, Kwantung, 395 metres, 500 watts output, owned by the Governmental Direction of Communi-Governmental Direction of Communi-cations of Kwantung.

The distance between 5CL, Adelaide, and Wellington, is about 1830 miles. The transmission from 5CL has to traverse 630 miles across land before it reaches the Tasman Sea. The wave reaches the Tasman Sea. from 3LO, Melbourne, traverses about 280 miles across land before it reaches the Tasman Sea in a line with Welling-

The efficiency of a receiving aerial is increased with its height. But the height of an aerial is not the distance from the horizontal wire to the ground, but the distance from the horizontal wire to the nearest grounded object directly underneath it, such as a roof, a fence, or a tree.

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-Steffane Webb, photo.

MISS NELLIE ELLWOOD, OF 3YA.

One of the brilliant family of musicians so well known throughout New Zealand, Miss Ellwood has often been heard on the air from 3XA studio.

). S.树冬树、树、树、树、木、枝、柳、树、树、树、树

Static is a natural electrical discharge occurring in the ether and in reality These electrical discharges have no definite wave-length, but are frequently scarcely evident on the short wave-lengths while they are heard loudly on the broadcast wave-length band.

Major-General James G. Harboard, president of the Radio Corporation of America, the most affluent radio business organisation in the world, had something to say about static and fading in a recent widely-published state-ment. He said:—

"Do you believe that within several years static and fading will have been overcome?

The capacity of storage batteries is referred to in terms of ampere hours, just as the capacity of a water tank is measured in gallons. If a storage battery is said to have a capacity of 20 amp. hr., it means that the battery is theoretically capable of delivering a current of 20 amperes for one hour, or l ampere for 20 hours, or any like quan-

When an "A" battery is recharged after being completely discharged, an amount of electrical energy must be put back that is equivalent to the amount that was taken out by the circuit to which the battery was formerly connected. In other words, if a completely discharged 20 amp. hr. storage battery is connected to a trickle charger that delivers a current of 0.4 ampere, it will take fifty hours to fully recharge the battery. This is true theoretically, but practically there is a slight variation due to electrical leakage within the battery.

Many of the imported receiving sets of four years ago were fitted with small inefficient audio transformers and accordingly reproduction had a "tinny" tone, or there was much distortion on load signals. tone, or there was much distortion of loud signals. A number of these sets have been vastly improved by the substitution of the up-to-date large transstitution of the up-to-date large trans-

9.15: Relay of Manuel Hyman's Exhibition Band from the Adelphi Cabaret. 11.0: Close down.

3YA CHRISTCHURCH (306 METRES)—SATURDAY, NOVEMBER 26.

p.m.: Children's hour-Uncle Sam.

7.15: News and reports.

7.30: Sports results. 7.45: Close down.

8.0: Chimes. Relay of orchestral selections from Grand Theatre Orchestra,

under the direction of Mrs. Black. 8.15: Baritone solo—Mr. E. A. Dowell, "The World is Waiting for the Sunrise" (Seitz).

rise" (Seitz).

8.19: Instrumental trios—Christchurch Broadcasting Trio, (a) "Air de Ballet" (Adam); (b) "Scherzo" from "Trio, Op. 50" (Reissiger).

8.27: Duet of happy songs at piano—Misses Dorothy Johnson and Muriel Johns, (a) waltz song, "To-night You Belong to Me" (David); (b) fox-trot song, "A Lane in Spain" (Lewis).

8.33: Scottish bagpipes—Mr. Angus MacKintosh, "The Old Rustic Bridge by the Mill" (M.S.).

8.36: Talk on the modern girl—Mrs. E. J. Temple, "The Flapper at Graball and Guys" (Searson).

and Guys" (Searson).

8.40: Instrumental trios—Christchurch Broadcasting Trio, (a) "The Countess of Westmoreland's Delight" (Shield); (b) "Waltz, Op. 66, No. 6" (Tschaikowsky).

(Tschaikowsky).

8.55: Contralto solos—Mrs. D. W. Stallard, (a) "An Old-fashioned Town" (Squire); (b) "Stimmung" (Henriques).

9.0: Relay of orchestral selections from the Grand Theatre.

9.15: Baritone solos—Mr. E. A. Dowell, (a) "At Peace With the World" (Berlin); (b) "A Dream" (Bartlett).

9.22: Scottish bagpipes—Mr. Angus MacKintosh, (a) "Bonny Dundee" (M.S.); (b) "A Hundred Pipers" (M.S.).

9.26: Duet of happy songs at piano—Misses Dorothy Johnson and Muriel Johns, (a) waltz song, "So Blue" (De Sylva); (b) fox-trot song, "He's the Last Word" (Donaldson).

9.36: Instrumental trios—Christchurch Broadcasting Trio, (a) "Celebrated Nocturne" (Chopin); (b) "Waltz" from "Copellia Ballet" (Delibes).

9.44: Contralto solos—Mrs. D. W. Stallard, (a) "My Roses" (Murdoch); (b) "Longing" (Murdoch).

9.50: Some more humour—Mrs. E. J. Temple, (a) "A Cottage Training" (M.S.); (b) "When Flossie Found Her First Grey Hair" (Clay-Smith). Smith).

9.56: Relay of dance music by Jackson's Orchestra, from Caledonian Hall (by kind permission of the Canterbury Caledonian Society and Mr. Reg. Stillwell).

11.0: Close down.

4YA DUNEDIN (463 METRES)—SATURDAY, NOVEMBER 26.

12.15 p.m.: Description of the Forbury Park trotting meeting.

5.30: Close down

Town Hall chimes. 8.1; Contralto solos-Miss Gwen Cooper, (a) "The Old Garden"; (b)

"Daddy" (Behrend).

8.8: Pianoforte solo—Miss Helen Wilson, "Valse Arabesque" (Rees-Newland).

8.14: Flute solo—Mr. C. E. Gibbons, "Masaniello" (Amber).

8.20: Light vocal—Mr. Billy Gay, with ukulcle accompaniment, (a) "Just Wait Till You See"; (b) "Cecilia."

8.27: Recital—Mr. A. Gorrie, selected.

8.31: Humorous song—Mr. Chas. Rowand, selected.
8.35: Pianoforte solo—Miss Marie Tucker, "Rustle of Spring."
8.39: Flute solo—Mr. C. E. Gibbons, "The Harp that Once Through Larz's Halls" (arr. Young). 8.44: Contralto solos-Miss Gwen Cooper, (a) "Just a Cottage Small"; (b)

selected. 8.50: Recital-Mr. A. Gorrie, selected.

8.55: Light vocal—Mr. Billy Gay, with ukulele accompaniment by himself and Mr. A. Bradley, (a) "Drifting and Dreaming"; (b) "Don't Sing Aloha When I Go."

9.2: Flute solo—Mr. C. E. Gibbons, "Martha" (Flotow). 9.7: Comic song—Mr. Chas. Rowand, selected.

9.7: Comic song—Mr. Chas. Rowand, selected 9.12: Relay of dance music from the Savoy. 10.0: Close down.

Sunday, November 27th 1YA AUCKLAND (333 METRES)—SUNDAY, NOVEMBER 27.

3 p.m.: Afternoon session-Selected Studio items.

4.0: A literary selection, by Mr. Culford Bell. 430: Close down.

6.55: Relay of church service from Beresford Street Congregational Church.
Preacher, Rev. Lionel Fletcher; choirmaster, Mr. W. Gemmell.
8.30: Relay of organ recital from Town Hall. Organist, Mr. Maughan Barnett.

9.30: A thought. 9.31: Close down.

2YA WELLINGTON (420 METRES)-SUNDAY, NOVEMBER 27.

6 p.m.: Children's service, conducted by Rev. E. R. Weeks. 6.55: Relay of evening service from St. Andrew's Presbyterian Church,
Preacher, Rev. R. J. Howie, B.A.; organist and choirmaster, Mr. Frank Thomas.

8.15: Relay of band concert of the Port Nicholson Silver Band from the Grand Opera House. 3YA CHRISTCHURCH (306 METRES)—SUNDAY, NOVEMBER 27. 5.45 n.m.: Children's song service from 3YA Studio, by Uncle Sam.

6.30: Relay of evening service from St. Michael's Church of England. Preacher, Rev. Charles Perry. Organist and choirmaster, Mr. Vernon Griffiths.
7.45: Instrumental selections from 3YA Studio.
Instrumental trio—Christchurch Broadcasting Trio, (a) "Allegro" from

'Horn Trio" (Brahms). .53: 'Cello solo-Mr. Harold Beck, "Hamabdil" (Bantock).

7.59: Instrumental trios—Christchurch Broadcasting Trio, (a) "Mazurka" (Malling); (b) "Autumn" (Tschaikowsky); (c) "Czardas" (Copellia Ballet Music), (Delibes).
3.12: 'Cello solo—Mr. Harold Beck, "Scherzo" (Van Goens).

8.15: Close down. 4YA DUNEDIN (463 METRES)—SUNDAY, NOVEMBER 27.

7 p.m.: Relay of evening service from the Trinity Methodist Church, Preacher, Rev. H. E. Bellhouse; organist, Miss E. Hartley.
8.0: Relay from St. Kilda (weather permitting) of concert by the St. Kilda
Band. Conductor, Mr. James Dixon.

THE POWER VALVE

9.20: Close down.

A DECIDED ADVANTAGE.

The construction of a power valve is such that it is able to reproduce considerably amplified signals with a minimum of distortion. The actual amplification factor of these valves is comparatively small-considerably less than an ordinary type of valve, which necessarily must amplify to a certain extent. Their use in the first amplifying stage will not, therefore, give a high degree of amplification, where the input of the grid of the valve is small. It is very necessary to make this point clear, on account of the prevailing opinion among many amateurs that a power valve possesses special amplifying qualities. Neverspecial amplifying qualities. Never-theless, they appear to give greater volume, because, as already explain-ed, they are better able to handle the

KEEP SPARE VALVES

Don't put too much faith in the valves you purchase, unless they are of a very reputable manufacture, and even then they are not always the best. Quite often considerable trouble can be traced directly to bad valves. If the receiver is not functioning as you know it should try several changes of valves. No volume, tinny resounding sounds in the speaker, undue noises and poor quality may be traced to the valves. Inability to get DX stations might be attributed to this, therefore occasionally substitute valves, even though they were just recently bought.
The wise radio enthusiast will have

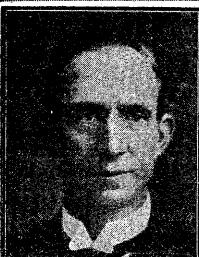
a fair supply of spare valves available, so that changes can easily and readily be made in the event he is not satisfied with the way the set is operating. Remember, a valve that does not work good in one certain type of circuit will function surprisingly well in another.

Programme Features Continued

A talk on the modern girl, called "The Flapper at Grabalt and Guy's," will be given by Mrs. E. T. Temple on Saturday. During carnival week Mrs. Temple proved herself a splendid elocutionist, and her reappearance will be keen-

In response to many requests for more bagpipe music, Mr. Angus Mac-kintosh will oblige on Saturday. He will play two stirring pieces, as

A STATEMENT CONTINUE OF THE OTHER CONTINUES O



Webb, photo.

MR. W. J. RICHARDS, OF 3YA.

A very successful singer at Christchurch Competitions—winner of a gold medal in 1921—Mr. Richards's goice is always welcome when on the air at 3YA. He commenced his musical and the commenced of the Line. cal career as a member of the Lin-wood Congregational Church. For heveral years he has been a pupil of Mr. Roland Boot, and is a valued member of the Christchurch Male Choir, singing bass.

TATALAH MESANGAN PENGESAN MENGESAN MENG

Two songs composed by Mrs. Helen Murdoch, of Christchurch, will be sung by Mrs. D. W. Stallard on Saturday evening. These songs are entitled "My Roses" and "Longing."

Mr. R. A. Dowell, always welcome at 3YA, will sing some old and new favourite popular songs on Saturday

St. Michael's Church of England will be broadcast on Sunday evening, after which the Christchurch Broadcasting Trio will provide a programme of de-lightful music from the studio.

4YA NOTES

The church service which will be relayed on Sunday evening is the St. Andrew Street Church of Christ, where Pastor W. D. More is the preacher Listeners who enjoy Mr. More's humor-ous talks each week will look forward to hearing him in the serious vein. The Church of Christ is one of the most recently built churches in Dunedin, and the acoustic properties are ideal for broadcasting.

If the weather is suitable at the close of the service, the St. Kilda Band will give another fine concert, which will be relayed. The programme contains some very popular numbers, by old and modern composers, and Mr. T. Stalker will be heard in a trombone solo, "The Trumpeter," with the band in accom-

Some listeners in Dunedin hold Big Brother Bill in such high esteem that they evidently feel that writing letters him is too commonplace. Instead they are sending him verses, most of which are very clever. "Big Brother Bill" will be "on the air" again on Tuesday and Friday evenings at 7 p.m., much to the delight of listeners young and old, who love to hear his travel talks about the "Wonder Car."

During the evening session on Tues day, listeners will enjoy the privilege of hearing some more of the best broad casting talent in Dunedin. Miss Molly Nickers, well known as a leading concert singer, will present two groups of Miss Lilian Macdonald, who is equally well known, and the possess or of a magnificent soprano voice, will contribute several numbers. Mr. T. contribute several numbers. Mr. T. Bachop, a well-known tenor, and Mr. J. Macdonald will also be heard. Miss (Vera Hutcheson (mezzo-soprano) will songs.

FEATURES (Continued). make her first radio appearance. Instrumental music will be rendered by Miss Alison Muir (pianiste), Mr. Alex. Blyth ('cellist), and Mr. Andrew Fraser (xylophonist).

> Another attraction on Tuesday will be Pastor W. D. More's address. His subject this time will be "Hard Up," which sounds like a feast of fun in store.

On Friday night, the Dunedin Fire Brigade is holding a benefit concert for the relatives of one of its late members, the programme will comprise only artists of the highest standing. This concert is to be relayed.

Saturday night's programme will contain something to appeal to everyone. Mr. Billy Gay and Mr. Charles Rowand will entertain with light popular num-bers, and Miss Gwen Cooper, well-known on the concert platform, will be heard in four delightful numbers. Classical piano solos will be played by Miss Marie Tucker and Miss Helen Wilson, and Mr. C. E. Gibbons will present some popular flute solos. At the conclusion of the studio programme, dauce music will be relayed from the Savoy.

THE WILLIAM RENSHAW QUARTET

On Saturday night, November 26, at 2YA, the William Renshaw Quartet will again demonstrate its versatility by presenting a programme of ever-popular plantation songs and quartets. Among the solo numbers will be that charming song "Swing Low, Sweet Chariot," in which Mrs. Amy Dunn's pure soprano voice should be heard at its best.

Miss Nora Greene, whose cultured contralto voice is pleasantly familiar to all listeners, will contribute "Ma Curly Headed Baby," a quaint lullaby that never fails to please, while Mr. William Renshaw's rich tenor voice will be heard in "Ma Little Banjo."

Mr. T. C. Wood's mellow baritone voice is invariably heard to advantage "over the air." On this occasion he will sing "Deep River."

The concerted items will be Scott Gatty's popular numbers, "De Ole Banjo," "De Ring-tailed Coon," and "Good Night." The last-named composition is known the whole world over, and the bleautiful blend of voices in this quartet will bring to a fitting conclusion what should be a most delightful feast of music.

"THE GLAD-I-ATERS."

An added delight to what promises to be an evening of sheer en-joyment on Saturday from 2YA will be provided by "The Glad-l-aters" -Miss Marilyn McGill and Mr. Hilton Osborne—a pair of talented artists who have appeared at the principal theatres in London and U.S.A., and have also appeared on this side of the water under both the J. C. Williamson and Fuller managements.

堻椺贕焇灩悧驑梑驆梑驑椕灩恘鑺偝贕傠賱貀 THE ORPHEUS QUARTET

A BRIGHT AND VARIED PRO-GRAMME.

Personnel-Mrs. Alice Harris (soprano), Miss Lily Mackie (contralto), Mr. Arthur Coe (tenor), Mr. Len Barnes (baritone).

The Orpheus Quartet's contribution to the programme of 2YA for the evening of Tuesday, 22nd inst., will be bright and varied. The concerted numbers to and varied. The concerted numbers to be presented will afford wide scope for the demonstration of the vocal "ersatility of the four singers. "Tell Me, Pretty Maiden." is the famous number from "Florodora," which Mr. Len Barnes recently conducted in Wellington. "Home To Our Mountains," one of the proof formus duets ever compage. of the most famous duets ever composed, is from "Il Trovatore." In "Danny Deever" we have one of Rudyard Kip ling's great poems, which is mid to have been inspired by an actual happening in India. Mr. Barnes was privileged to sing this song at the London Savage Club, where Colonel McKenzie Rogan informed the members that he was actually present at the hanging of the man whom Kipling had in mind when he wrote the poem. "Rose Softly he wrote the poem. "Rose Softly Blooming" is a beautiful melody, and one of Ludwig Spohr's most opular

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THE APOLLO QUARTET

What may be termed melodious variety characterises the contribution to be iety characterises the contribution to be made by the Apollo Quartet—Messrs. S. Duncan (tenor), W. Robbins (tenor), S. E. Rogers (bass), and Roy Dellow (baritone)—to the programme scheduled for Thursday, November 24. These singers will be heard in several popular part songs, including "O Lovely Night," "Soldier's Farewell," "In Absence," and "The Goslings." "In Absence" is one of Dudley Buck's most beautiful compositions, filled with exquisite melody, while in "The Gos-

TO A HOLD REPORTED BY THE REPORT OF THE REPO



-Webb, photo-

MR. L. E. VERNAZONI.

The first lecture on stamp-collecting is to be given by Mr. Vernazoni at 3YA on Thursday, November 24. Mr. Vernazoni is a-past-president of the Christchurch Philatelic Society.

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lings," which has a love episode for its theme, the Alpha and Omega of the story is cleverly portrayed by the in-troduction of both "The Wedding troduction of both "The Wed March" and "The Death March." duet and solo numbers an excellent selection is to be presented.

Mr. Rogers will be heard in a mel-

ody reminiscent of the Emerald Isle, "The Little Irish Girl," a very popular song concerning love and pigs. Two duets are scheduled—"The Battle Eve," a number thrilling with the spirit of war, and that dainty gem "The Moon Hath Raised," from "The Lily of Killerrer."

A song of the old Royalist days A song of the old koyalist days, "King Charles," will be presented in a fine baritone settling, while B. Godard's ever popular "Angels Guard Thee" will afford Mr. Duncan full scope for his rich and pleasing voice.

THE PHILHARMONIC QUARTET

A BUDGET OF SPARKLING PIEMS.

Personnel-Mrs. Ellison Porter prano), Miss Madge Freeman (con-tralto), Mr. Edwin Dennis ('ener), Mr. W. W. Marshall (bass).

Another delightful programme is being presented by the Philharmonic Quartet on Priday, the 25th inst. That haunting negro spiritual, "Swing Low, Sweet Chariot," will be one of the greater while the leaves of old Scotch quartets, while the lovers of old Scotch melodies will enjoy "Ye Banks Braes." On the humorous and light side, "Bao Phundo Basso" and "Good-

night, Ladies," will be offered.
In the trio, "The Oars Are Plashing Lightly," Mrs. Ellison Porter and Miss Madge Preeman will be joined by Miss Leonore Pattison, a delightful mezzo-soprano, who has previously given soprano, who has previously given pleasure to her listeners. Mrs. "Ilison Porter's pretty soprano voice will be looked forward to in "Carmena," while Miss Madge Freeman's rich alto voice will do full justice to "The Glory of

The ever-popular basso, Mr. W. W. Marshall, will sing "Jungle Song," especially written for the radio, and that quaint "Devonshire Cream and Zider." He will also be associated with Mr. Edwin Dennis in the duet "Excelsior," who will sing "A Warwickshire Wooing" and "Inter-nos" in his inimitable

Among the newcomers to radio on Priday night, the 25th inst, is Madame Rugenie Dennis, who will give that clever piece, "A Young Wife's First Visit to a Butcher's Shop." She is very well known on the concert platforni, and, in conjunction with her husband Mr. Edwin Dennis, has given several

When a power valve is inserted in the last stage it behoves the owner to increase his plate supply to this stage and balance up correctly with grid bias. Often this grid bias reaches as much as 42 volts, which, when com-pared to the usual 41 to 9 volts, is really astounding. But it is so, and it its necessary to apply the correct voltage-to feed the valve in other words. Read what the makers say and believe them.

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CLASSICAL MUSIC v. JAZZ

EDISON ON CULTIVATING THE TASTE

circled around the question of popular or classical, in other words, "highbrow" or classical, in other words, "highbrow" or "low-brow" music, it is interesting to note the views held by Thomas A. Edison, of phonograph fame, whose 48th anniversary of his invention of the incandescent lamp, father to the modern valve detector, was recently broadcast from New York.

There are millions of people imagine that they cannot enjoy classical music. They listen to symphonies, operas and other masterpieces of musical genius. They try to be interested, and brighten up considerably when they hear something that sounds like a tune. Then the tune fades away into an intricate maze of sound, which they fail to understand, and they throw up their hands, and turn to the latest jazz hit for consolation. Yet, on the other hand, increasing thousands are making classi-cal music more and more a part of Yet, on the other hand, their lives. What is the fundamental difference between these two classes of people? And because a million people love jazz for every thousand that love classical music, does it go to prove that there is something wrong with classical music? Mr. Edison thinks not. He says: "The jazz lovers get a strong, immediate sensation. The rhythm stimulates them but the effect soon Popular music has an obvious melody and few changes. It is immediately understood, but with repe tition it becomes at first wearisome and then intolerable. Classical music is more subtly compounded. Almost meaningless at first hearing, it becomes increasingly enjoyable as it becomes more familiar. Like a great painting or a great book, it broadens and enriches the lives of those who understand

Irritating The "Rods of Corti." "The reason why the average popular melody has so short a period of popularity has, most probably, something to do with the mechanism of the inner ear. The so-called "Rods of Corti" are located there-approximately 5000 small stiff rods, massed together like the hairs on a brush. Each hair is supposed to be tuned to a definite note in the musical scale. When the note is sounded, the hair vibrates, transmitting the sound through the nerves to the The too constant operation of any group of these trairs undoubtedly leads to irritation—possibly to an actual swelling at the base of the hairs No one knows enough to decide the exact effect of such an irritation on the brain, but it is the theory of many scientists that this may be one of the underlying causes for the rapid way we tire of popular hits, with their end-less pounding on simple sets of chords."

Need For Variety.

Mr. Edison is by no means of the opinion that people should give up socalled popular music and listen to no-thing but classical compositions. He realises that life is a complicated ex-perience. "One needs change from day perience. "One needs change from loar to day," he says, "and from hour to hour. Most of us like ice cream for dan't care for it at breakdinner, and don't care for it at break-fast. Jazz is a splendid thing for the right time and the right mood. into a rut in which it is the only source of musical enjoyment is, however, as dangerous as an unvaried diet of ice cream or candy would be. I know many people are in such a rut to-day We all naturally follow the crowd, and the crowd invariably chooses the easier It's the same with good music as with oysters or olives, or tobacco. You have to acquire a taste for them. When I was a boy, nobody ate tomatoes because the taste was supposed to be An increasing number of courageous people discovered that they liked them in spite of the popular prejudice, with the result that everybody eats them to-day—and likes them. Acquired tastes are stronger than those we are born with."

Advice to the Average Person.

"I'ew of us are born with a natural taste for the better class of music. Like olives, tomatoes and tobacco, it is an acquired taste. Most of us don't take the trouble to acquire a taste for classical music, and thereby shut ourselves out from an entire world of genuine enjoyment. I advise those who buy jazz records and tunes with simple melodies to buy at least one record of the better class each time. Play it as duty, much as you would take your morning exercises. You will gradually morning exercises. You will gradually find that you will acquire a liking for this different music. Once you have so acquired this taste it will live with you, opening up a new world to you which great composers have made so glorious."

Music and Children.

An interesting article somewhat on the same theme appears in a recent issue of the "Radio Times," from the

In view of the controversy that has pen of a music teacher, who is using ircled around the question of popular the broadcast programmes as a sensible aid to teaching by entertainment.

Even the most rabid opponents broadcasting—and their number getting beautifully less—are generally willing to admit its value as a medium for educating the musical taste of the nation. And it is the school music teachers especially who, if they are keen enough on their job to take a little extra trouble, will find in radio the greatest possible aid in teaching the modern child to know and love

the best in music.

Probably the least popular side of an ordinary class-singing lesson is the sight-reading exercise. Yet there is no longer any need for the teacher to cling to book exercises when broad-casting provides an opportunity to show the child that good tunes are not necessarily the monopoly of the jazz band. We can now give him something to read from the great store of good music, something that he can hear afterwards on the radio.

For the past two years and more the writer has been combining the teaching of class-singing and musical appreciation on these lines at a school near London where music has, until very recently, been given little attention. During that time the children have read at sight such melodies as the beautiful tune from the second movement of Bach's Concerto for two violins in D minor, the main themes of the slow movement from Mendelsof the slow movement from Mendels-soln's Violin Colicerto, and the first movement of Grieg's Piano Concerto, the tunes of Schubert's "Rosamunde" music, Elgar's Enigma Variations, and overtures such as the "Mastersingers," "Hying Dutchman," "Tannbauser," and "Figaro."

In each case the children are told a little about the composer and the general form of the work, with par-ticulars as to when and by whom it is to be broadcast. When they are given a song or an overture from an opera they are told the outline of the story; such arias as the Prize Song from "The Mastersingers," the Toreador Song from "Carmen," and many others have, in my experience, proved very popular, and of course may be sung to the words when satisfactorily read.

The child's interest is very greatly stimulated, and he or she will probably take the trouble to listen to a work which in the ordinary course of events would be dismissed at brow." At least 80 per cent brow." At least 80 per cent, of the children in this particular school have wireless in their homes; at least 65 per cent. of that number, however, re-ceive no encouragement to listen to good music, and would never think of raising an carphone to hear "a classi-cal piece." When, however, these children are shown beforehand that such a piece may have a good recognisable tune in it, and when at the same time they are told something about the composer and the circumstances under which the piece was written, their interest is manifestly quickened, and from listening to one work in an evening's concert they soon begin to enjoy a whole programme of classical music.

Unfortunately, it is not every teacher of music who has a good music library at his command, or is blessed with opportunities of attending many good concerts. But if he is a pianist he can find in the broadcast programmes many piano arrangements of orchestral music; if a singer, he can lay special stress in his lessons on the songs from operas, oratorios, and cantatas; and in the symphony concerts he will usually find some useful extracts from the scores of the works that appear in the programme, and if he is blessed with a good ear, he may jot down the more obvious of the themes.

In the teaching of musical apprecia-tion to-day there is, I am convinced, far too much willingness to accept merely passive listening to the words of the teacher. Let us then take advantage of the wonderful aid that broadcasting can be in our task of teaching the child that while learning to make music himself he may be able to listen with unexpected interest and enjoyment to the great master-

pieces of the world of music.

JOYCE HERMAN.

Mr. A. Stanley Warwick, the wellknown elocutionist, who has for some weeks past been heard from 2YA on Monday evenings, will be heard on Tuesday, November 22, in a sketch specially written for radio work, entitled "The Parting." Associated with him will be Miss Violet Wilson, whose work has given such keen pleasure to so many listeners-in. The action of the sketch is supposed to take place on Waterloo Railway Station. This is quite a new departure in regard to the spoken word from 2YA, and will doubt-less be watched with much interest. Mr. Warwick will also give two numbers by Kipling.

Ocean Deep Tone!

Arrange for a demonstration, and marvel at the wonderful depth of tone of the SONORA. It will surprise you.



RADIO

58 Willis Street WELLINGTON.

Our Mail

Appreciation of Carnival Programmes. Listener (Christchurch) .- As I have written a number of letters criticising certain parts of the radio programmes, may I also be allowed to say a word of sincere appreciation of the splendid service put on the air during carnival week in Christchurch by Station 3YA. The description of events, the informa-tion, and the music have all been splendid and most enjoyable. Especially has this been so with regard to the morning, or breakfast sessions, and if it were not for the fact that it might appear greedy, I should like to express the hope that we may be given further similar sessions in the future.

Programmes Appreciated.

J.H.N. (Pukehuia, N. Wairoa) —I feel that I must, like many more, write and tell you that I highly appreciate the efforts put forth to make the "Radio Record" a pleasure to look for each week. I have a 5-valve King Neutro-dyne, which gives a very creditable ac-count of its possibilities. I have also a short-wave adapter and already have received PCJJ (Holland) 30.2 metres on the loudspeaker. Band music could be distinctly heard 8 feet away, but for speech had to come close to speaker, which is a 8000 ohms Brown (Sovereign type). type). I much enjoy the children's sessions of the different stations, and am pleased to see the Uncles and Aunts, etc., put enthusiasm into their work, which I am sure all us older people admire them for. The programmes of music, etc. each week are a credit to all concerned.

The Bagpipes Wanted.

"Berhampore Highlander' writes.-Please do not think that I am going to criticise your programmes. Most decidedly I am not, as I can assure you that I appreciate nearly every item that comes through. Being a Scot, ye ken, I would like to suggest that, to my idea, and probably to many hundreds, the programme could be improved every few weeks with a wee bit skirt on the piece. bit skirl on the pipes. You have a number of Scotch items every now and again, and very good they are, but the "Real Mackay" has only been on once, and it was worth waiting up all night for. I am sure that many of your listeners would make it a special night.

Reception of Test.

B.C.S. (Tapanni).—Re test broadcast by 5SW, Chelmsford, Essex, England, Sunday, November 6, on 24 metres. As the announcer of the above station continually asked for reports on reception, I am sending this, trusting it will

be of service. I tuned in about 6 p.m. Sunday, and listened continuously till midnight. The reception during that time was wonderful for clarity and volume, coming in at good loudspeaker volume on 3 valves, and quite loud on 'phones with 2 valves. Amongst the things the announcer asked comments on was whether the transmission came through

well enough to be listened to with en joyment as a musical entertainment. I certainly did hear, even though it was mainly a programme of gramo-I consider that a firstphone records. lass programme could be listened to great enjoyment under the same tions. The reception here was conditions. about half as loud again as PCJJ Hol-The station closed for about fifteen minutes from 9.50 to 10.5 p.m. Opening again, they gave the following records:—Nos. C1285, 4434, 4456, 4468, broadcast record, 146B, 146A, 4468, records:—Nos. Cl285, 4434, 4496, 4408, broadcast record, 146B, 146A, 4468, broadcast record, 169A, 169B, short talk on broadcasting.—9242 (AX2535)—(A5486) 4409. Lecture from British Broadcasting Company Handbook on Empire broadcasting, 4460, continuation of lecture, K05312, continuation of lecture. Time midnight.

I inned in again this morning about

I tuned in again this morning about 6.30 a.m., when, till about 7.45, the reception was even better than before; but from then on the signals seemed to get gradually weaker. Could still get Could still get the wave about 10 a.m., but hardly loud enough for reception of programme. Taking it all round, the reception was astoundingly clear, the announcer's voice coming through almost as clear as from the local stations, I certainly hope that a regular service will soon be inaugurated.

Silent Day At 2YA. Wellington.

(To the Editor.) Vita Brevis (King Country): All listeners-in will admit the staff at 2YA require and deserve a well-earned hotiday once a week. The necessity, too, for overhauling the station machinery is also recognised. There is, however, another aspect to the question. Now that summer time is not a myth, but a reality, we, in parts "far from the madding crowd" seldom get good reception before 8.30, except from 2YA, and might it not be possible to arrange and might it not be possible to arrange a short news and report session, say, from 7 to 8 on Wednesday? If this could be done, and only a small staff would be required, it would be a great boon to country listeners-in, and the extra expense would be negligible. I might say, too, that we in farming districts would be satisfied with one re-port of prices of stock, produce, etc., whereas at present we get sometimes three or four reports from different sources, all virtually similar. The price of butter in London does not alter because it is reported through three or four firms, nor does the price of stock in Masterton. Again, prices from £5 to £9 is just as and more brief than £5, £6, £6 10s., £7, £7 10s., £8, and £8 10s.

Why is it that radio set owners make such a fuss about putting a little dis-tilled water in their storage "A" batteries; and yet willingly and religiously remove the floor boards from their auto-mobiles once a week and put water in their car batteries, although they have almost to tie themselves in knots and stand on their heads to do so? A radio storage battery can be ruined just as quickly and thoroughly as an automo-bile battery if it is not given a drink occasionally.

SHORT-WAVE NOTES

MR. SELLENS' REPORT.

Mr. F. W. Sellens, of Northland,

Wellington, writes:-My list of stations on short waves for the past week is not a large one, but includes the new B.B.C. station, 5SW, Chelmsford, both testing and on their first Empire broadcast.

On Friday evening, November 4, 6AG, Perth, gave some good musical items and appounced that he is testing almost every evening from 6.30 o'clock West Australian time (10.30 p.m. for New Zealand summer time). KDKA and 3AJ were both heard on Saturday KDKA afternoon, and in the evening RFN transmitted some enjoyable musical items, while 7CW was heard testing. Later on, about 11.50 p.m., 5SW, Chelmsford, England, was picked up on a wave-length of 24 metres. The transmission consisted of gramophone remission consisted of gramophone re-cords—the maker's name and number of record being given and sometimes the title. The only announcement heard was: Hullo! Hullo! Hullo! 5SW, Chelmsford, testing. Hoping to hear some notice of further tests, I listened till 2 30 a.m., getting a complete log of all records, names and numbers at

loudspeaker strength after the first half an hour.

On Sunday I tuned 5SW at about 3 p.m. and listened till 6 p.m.—most of the time on the speaker. During this time hadden the most call and support the speaker. time, besides the usual call and name of records, the announcer, who was a different one from the earlier part of the transmission, called several friends in different parts of the world, hoping to see them again soon, etc., and in several instances sending Christmas

greetings.

Just before retiring at 10 p.m., I listened again for a few minutes, but 5SW was getting very weak. Again in the morning at 7.30 a.m. he was only just audible. KDKA and 2XAF were both heard on Sunday afternoon, the latter at good strangth. the latter at good strength. A short wave friend said he heard 2XAF re-broadcasting 5SW, which was received louder than direct from Chelmsford. On Monday evening RFN put on some good orchestral music. 28S, New

good orchestral music. 288, New South Wales (another to the list) and 3AJ were heard on Tuesday evening. On Wednesday evening 3AU was the only station heard. This amateur was again heard on Thursday working 2RC. 6AG and RFN were also heard. RFN

While waiting for 5SW on Friday, a station on about 100 metres was heard. "Perth" was a part of the call, so it was probably 6WF.

From 11.15 to 11.45 p.m. the service from Canterbury Cathedral was heard, the latter portion on the speaker. All that was said could not be clearly heard, but the service could be followed The organ recital from St. Mary Le

Bow came through quite good, as did the ten minutes' talk by the Director-General of the B.B.C. nearly the whole of the speech being heard.

Although these proceedings were fairly well received, the volume or clarity was not quite as good as during the previous week-end when 6SW was testing. This probably would be on land nowadays.

account of the items being relayed from places at a distance from Cheims-

The Saturday morning remembrance festival was a failure as far as Wellington was concerned. At 8.30 the carrier wave was heard, but not a suggestion of speech or music. I heard more howling valves on the short waves on this occasion than ever before, spoiling both their own and other

listeners' chances of reception During the latter part of this (Saturday) afternoon, KDKA was good. They were relaying a programme from the Georgian Room of the Westing-

house Hotel.
A song by Carry O'Brien was an nounced to have never been broadcast

"RADIO RECORD" SHORT-WAVE ADAPTER

J. W. V. Masterman (Taumoana, Hawke's Bay) writes: The short-wave Hawke's Bay) writes; The short-wave adapter which was described in the "Radio Record" (August 19 and September 16) brings in Russian station at loudspeaker strength (heard 20 yards away). He has a nasty habit of knocking off for 15 minutes. Started about 9.10 p.m. Saturday night, 5th instant. May I suggest that instructions, say, about 20 minutes, he givtions, say, about 20 minutes', be given on short-wave every week, or a page in the "Radio Record" be set aside for same?

aside for same?

[We recognise the growing interest in short-wave work, and will give as much space as possible to help. Our adapter has already proved itself very safety and forther entire will feller. useful, and further articles will follow

REDUCED POWER

FOR KOA, DENVER.

A sweeping shake-up in the operation of eleven broadcasting statious in Den-ver and vicinity was ordered by the United States Federal Radio Commission to take effect on November 1. The changes were decided upon in the hope of clearing up congestion of the wave bands in the mountain regions.

The most important change was that affecting station KOA, Denver (often heard in New Zealand), which was authorised to continue broadcasting on its present frequency of 920 kilocycles, but to use a maximum power of 5000 watts only between the hours of 6. a.m. and 6 p.m., reducing this to 2500 watts between 6 p.m. and 6 a.m.
"The commission fully recognises

the admirable service rendered by station KOA, and the desirability of giving this station greatly increased power if its transmitter is moved," the order said, "but holds that "he location of its transmitter in relation to the residential sections of Denver is not such as to make the use of more than 2500 watts at night in the public

Seeing that the power of KOA has been reduced by half for night transmission, the big Denver station will be heard less frequently in New Zealand newsplant

THAT RUSSIAN STATION

The Siberian station RFN regular transmissions nearly evening on 60 metres, commencing about 10 p.m. (New Zealand time). Nearly all announcements are made in Russian.

A very strong harmonic of this station may be heard on 30 metres, and this is often mistaken for some other This explains the mystery on this wave-length, about station. station which many persons are talking. Num erous talks are given, with classical music and song numbers interspersed. The station may be brought in at good strength on a three-valve short-wave set.

NOT FOR LARGE BATTERIES

It is not a good plan to use a large lead-acid filament battery in conjunction with a trickle charger in the filament circuit of a radio receiving set. A bat-tery having a rated capacity of 100 ampere hours or more should be charged by a regular large-size battery charger such as a Tungar or Rectigon. These will recharge the battery at a rate of 3 to 6 amperes, depending on the type used, whereas the average trickle charger provides a charging current of 0.36 to 0.7 amperes. If a 100 ampere hour battery is used with a trickle charger, and the battery once allowed to become completely discharged, there is little likelihood that the trickle charger will ever have an opportunity to fully recharge the battery, unless the receiving set is not used for quite a long time.

ESPERANTO

Lesson XVII.

Lesson XVII.

(To be broadcast from 2YA on November 24, from 7.34 to 7.59 p.m.)

Bonan vesperon, Sinjoroj kaj Sinjoroj. AFFIXES. The following 28 suffixes and 7 prefixes should be carefully studied, since innumerable words of the finest shade of meaning can be formed by their aid: in fact, the affixes are the ground work of the language.

AU—denotes contempt; hundo, a dog; hundac'o, a cur.

AC—denotes contempt; hundo, a dog; hundae'o, a cur.

AD—denotes continued action; labori, to work laboradi, to keep on working.

AJ'—denotes something made from, or having the quality of what is mentioned, frukto, fruit; fruktaj'o, jam.

AN—denotes an inhabitant, member, adherent; asocia, association; asociano, a member of an association; Kristo, Christ; Kristano, a Christian, ano, a member.

AR—denotes a collection of what is mentioned: fadeno, a wire; fadenaro, a bunch (collection) of wires.

BO—denotes relationship by marriages filino, a daughter; bofilino, a daughter-in-law.

filino, a daughter; bofilino, a daugnerin-law.

C'J—these letters added to the first lew
letters of a masculine name make it an
affectionate diminutive: Vilhelmo, William; Vilc'jo, Vic'jo, Willie, Bill. For
feminine names add NJ instead of c'js
Mario, Mary; Manjo, Molly.

DIS—denotes separation (as in English): doni. to give: disdoni, to distribute,
EBIL—denotes possibility (English -able,
-ible): porti, to carry; portebla, portabla,
EC—denotes abstract quality (English
-ness): bela, beautiful; belees, beauty.

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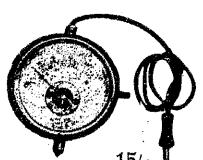
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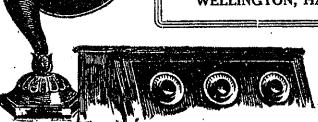
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Mainly about Construction

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A FULL-WAVE BATTERY ELIMINATOR the card between ends of laminations having been trimmed flush. These FOR HOME CONSTRUCTION

ADAPTING THE BH RAYTHEON TUBE

HEATING LAST AUDIO FILAMENT FROM ELIMINATOR

THE SMOOTHING CHOKE.

Radio chokes are not often included in an eliminator circuit, but they are simple to make, and are so effective that this eliminator will actually work without any other choke, but it is not advisable to attempt to do so, for the provision of a suitable choke certainly improves results somewhat, and more important still, ensures good working under more or less extreme conditions. However, the radio chokes cut out the provinciant for true chokes or two winds. for two chokes or two wind-

ings on the one core Ordinary black iron sheet running in thickness about 48 to the inch is suitable for the core. This same iron could be used for the transformer core if preferred, but the thinner laminations already specified make a very efficient already specified make a very efficient article, though there is more cutting. About 35 pieces of iron 5 by 3 inches are required for the core. A sheet metal worker will supply them cut to size for 2s. 6d. Then a cardboard template must be made with which to make the iron for further cutting. The card is cut the exact size of the iron and then dimensions shown are marked. and then dimensions shown are marked off and the "window" cut out of the centre with a sharp knife, and also two notches as shown. The straight edge of notch A is to be at exactly the half-way point of the full length. The half-way point of the full length. The iron is first cleaned by wiping with a rag and benzine, then the template is laid upon each, the window and straight side of the two notches marked by scratching. In cutting, the cuts at A and B are made first, continuing to geross the "window" about to the small cross shown. Then the two portions can be bent in the centre on dotted line, when it is easy to cut down the inside of the two arms of each. cut across the end, one arm must be bent down on the diagonal dotted lines in Fig. 2. Then the iron is bent back and flattened by hammering. The next operation is to give the laminations a coat of shellac all over. The shellac coat of shellac all over. The shellac is dissolved in methylated spirits and applied with a brush.

THE SPOOL.

The spool for the wire need not be very strong so long as the ends are well supported whilst the winding is in progress. Two squares of strong card-board are cut 23 by 24 inches with a square hole in the centre about 1 3-16 by 15-16 inch, but the exact size is to be made to suit the former with covering.

The former for the spool is a piece of wood exactly 2 13-16 long by 1 3-16 by \(\frac{7}{4} \) inches. A hole is drilled centrally through the length of this as accurately as possible by drilling part from each end, diameter to take a dowel-stick as a spindle. A strip of manilla or strong brown paper 2 13-16 inches wide is

wrapped two or three times round the former and well glued to itself, but not to the former. Now the square holes in the ends are cut to fit over the ends of the paper, and are fixed with glue and further strengthened by glueing in small bent strips of strong paper as shown in Fig 4. During winding, the spool ends are best supported by a piece of thin board about the size of the end, drilled to fit the spindle and held fast, pressing against the spool end, by a nail passed through a hole in dowel. Once the winding is complete, it is safe without these sup-

WINDING THE CHOKE.

The quantity of 30's enamelled wire required to wind the choke is 14b., and if this quantity is put on it will be quite sufficient for ordinary conditions, and will give about 5000 turns. There is actually room for about 7000 turns on the spool. The 30's wire gives the dethe spool. The so's wire gives the desirable low d.c. resistance. It is wise to solder on a short length of, say, 20's d.c.c. wire for a lead-out, and this is passed through the hole marked "in." The wire is then wound on in patches from one end, working towards the other, but not returning far over that already wound. A layer about one-eighth thick is put on in this way, irregularly wound, and then covered with tissue paper cut wider than the spool to allow for puckering. The next layer is then wound. Great care is required at the ends to prevent any turns of wire sinking below their proper level. The end of the wire is led out at the hole provided, and the winding e vered with suitable protection.

ASSEMBLING

The coil is then laid on the table ready for assembling the laminations in a flat position. Supports are provided for the portion of these outside the coil, with small strips of wood. The central division of the laminations, C.C. is to be outside the coil, and a piece of thin card is to be bent at right angles and stood upon the table in such a way as to be finally held between the two ends of the laminations, which are both pushed up against this card as they are assembled. This card forms a gap in the laminations, and its purpose is to safeguard the core from magnetic saturation by the direct current flowing through the coil. The laminations are assembled in alternate positions, so that the central portion comes evenly against one or other side of the card, but the joins inside the coil are in alternate positions, that is, brickwise.

The laminations should now be ten

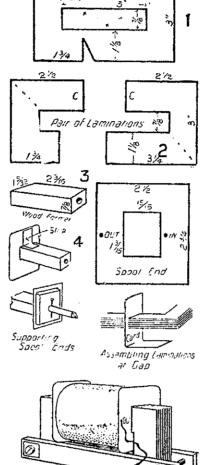
porarily held at the outside corners by iron screw clamps or other means, whilst the wood clamps are secured,

clamps are strips of wood 1 by \$ by 6\frac{1}{2} inches, drilled \$\frac{1}{2}\$-inch, \$\frac{1}{2}\$ centres. The strips should be shellaced and are secured in the same way as the transformer with brass plates and tin, brass bolts 2 inches long. The drawing of finished choke shows how brass angle-pieces would be provided at one end to provide for screwing to the parti-tion in an upright position.

GENERAL REMARKS.

The transformer as described is thoroughly efficient, and "wattless" on no load, and consequently does its work the minimum current consump-

Eardboard .



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"WHERE THE QUALITY GOODS ARE SOLD." \mathbb{Z}_{2} occoordage of the second of the

tion. This type of core is known as the "shell." It pays to have plenty of iron in a transformer core. A transformer with insufficient wire in the primary winding will consume a great deal more current than is necessary and will thus make the running cost

In running this eliminator, negative B must always be connected to earth, but as this connection exists already in most sets, no separate outside earth connection should be made. Care should be taken in connecting up special cir-cuits that there is no chance of shortcircuiting the A battery by having two earth connections.

If running filament valves, the two filament winding centres from transformer are connected together above the transformer, forming only one wire, which is B positive. This wire can be run down the transformer side of partition if preferred,

The eliminator is quite noiseless in working.

THE RAYTHEON TUBE.

For some considerable time the Raytheon rectifier tubes have been in use in America for B eliminators. The advantage of these tubes is that one tube gives double-wave rectification, without the necessity for a heating filament, and consequent extra consumption of current and expense of replacing valves with burnt-out filaments. These valves are at present

RADIO LITERATURE TE ARO BOOK DEPOT,

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very scarce in New Zealand, and inquiry of a number of leading dealers shows that they are not at present stocked in Wellington, though one or two stated that they would have them in stock at a future date. An Auckland firm has a limited number in stock, and "Megohm" procured one of these for 36s. On account of this approximately a state of the stock of parent scarcity, and many requests for constructional details of an eliminator, it was decided to describe the filament-valve type, so that constructors wishing to proceed with the work at once could do so, and get running with the two valves (P.M.4) until such time as the Raytheon tubes are available for all. The most suitable Raytheon tube for ordinary sets is type BH, delivering

85 milliamps at 200 volts.

A trial of this gas-filled tube proves its suitability for the work, and its adaptation to the present eliminator is an easy matter. The chief difference is that only only solve solve to the present of the control of t an easy matter. The chief difference is that only one valve socket (Ameri-can) is necessary, the filament winding on the transformer is not required for rectifying, and there are two small fixed condensers of 0.1 mfd. capacity to add one across each HT winding. These condensers are both screwed to the partition by the transformer. A wire connects one side of each condenser together, and runs to connect to HT centre tap. The remaining sides of the condensers are then connected, one to each of the back end of the HT fuses on transformer panel. The radio fuses on transformer panel. The radio chokes are still retained in the two plate circuits as before. Filament wiring is disconnected from the valve sockets, and if not required the ends must be insulated separately with adhesive tape. The two filament terminals on the valve socket is use are now connected to the two plates of the Raytheon tube. Each of these ter-Raytheon tube. Each of these terminals is connected through a radio choke to HT1 or HT2 of the transformer. The HT centre tap still forms B negative. The control tap still forms B negative. The common electrode of the valve is the HT output, and its terminal on the socket is the one marked P, which connects to one end of the filter choke in place of the filament centre tap. Other connections remain as before. If the transformer is content and relative the Glavnor winding structed without the filament winding, space is available for an extra layer or two for each side of the HT, which will give increased voltage, but results are quite satisfactory with windings as specified.

UTILISING FILAMENT WINDING.

A good method of getting cheap fila-ment current for the last audio valve is to arrange to heat this from the fila-ment winding on the transformer when liberated by the use of the Raytheon. The filament of a power valve runs quite noiselessly on raw a.c. in this way, and "Megolim" is now using this method, which gives current much more cheaply than by medium of an accumulation. ator. This is accomplished by taking away the three wires running down through the baseboard from the distribution panel. The bottom bolt connection is not now required. From the two bottom bolts to which the resistance wires are attached, is run a twin and a twinter the state of the state flexible wire or d.c.c. 18's twisted together, and these are connected across the filament of the last valve. The connection between the two terminals on the distribution panel is broken. If four volts are required for the filament, the terminals are connected to the respective bolts marked 30, and for six volts to 40 or 45. Voltage is then finally regulated by the two resistance wires, testing with a voltmeter. The centre tap of the filament winding is connected to B negative terminal, that is, a point past all smoothing condensers. It is a feature of the arrangement that the leads from the eliminator to the valve filament should be twisted together, as this eliminator the hum.

Grid bias for the audio valves can also be obtained from the eliminator, the filminator to the filminator that the condense is seeded to the condense in the eliminator.

but further experiment is needed to find the best method of effecting this before describing it.

The versatility of this climinator will now be apparent to the constructor and experimenter, and although it entails rather more work in construction than one designed with a single purpose only, its advantages more than outweigh the comparatively small amount of extra

MATERIALS REQUIRED.

When this eliminator was constructed no tally was kept of the amount of wire upon the transformer, but by cal-culation about 14th, of 34's enamelled will do the two HT windings and the two radio chokes. Nine sheets of tinplate 20 by 28 inches are required, costing od. per sheet. The Raytheon tube as already stated costs 36s., and P.M.

(Continued on next page.)

TO BUILDERS OF RADIO SETS

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4's cost 13s. fd. each. By-pass condensers, Dubilier, 0.1, 3s. each. "Royalty" or other variable resistances 1500-

alty" or other variable resistances 1500to 100,000 ohms, 8s. each; 2 mid condensers, 7s. each. Wire for smoothing
choke, 141b. 30's ename)led, 4s. Wire
for filament winding and internal connections, 11b. 18's d.c.c. 3s. 6d. Carborundum fixed resisters, 2s. each.
Rheostat (if required), 5s. Cleartron
Rectron valves, 12s. 6d. each.

"Megohm" is quite willing to answer
replies regarding the eliminator provided a stamped addressed envelope is
enclosed with each, and all questions
set out on a sheet with space for answer.
Questions must be put so that answers
may be made as briefly as possible.
Questions of general interest will be
answered in this page for the benefit of
others.

ANSWERS TO CORRESPON-DENTS

(By "Megolim.")

Browning-Drake.

A Whangarei constructor has built the Browning-Drake 4-valve set and gets good results from New Zealand stations, but Australians only at 'phone strength. The valves used are not as specified, so that a little more trial and experiment must be expected before the best results are obtained, but that results will be good is certain. The primary and tickler turns are im-The primary and tickler turns are important and are only found by actual trial, in the case of the primary to suit different valves from those specified, and in the case of the tickler the number of turns to secure oscillation on the high wave-lengths, which means increasing the number of turns until this is effected.

The weakness of Australian reception appears to indicate a poor earth, and this matter should be investigated. The dry weather is coming on, and no earth connection is better than one or two kerosene tins with connecting wire sol-dered on, buried down several feet where the ground is always damp. Coke placed round the tin helps to attract and hold moisture.

and hold mosture.

The increasing loud note you mention is probably caused by microphonic valves set in vibration by the sound from the speaker, which causes "booming." The remedy is to turn the peaker facing away from the set and not to have it too near. The valves are diffed do not give this microphonic specified do not give this microphonic

R.L. (Christehurch) hooked up his Browning-Drake components roughly as a preliminary test and had surprisingly good results, both as to quality and volume. A few queries are now asked in connection with final construction. In the R.F. stage 201A is preferable to 199. A good combination for American 6-volt valves would be 201A, 200A (det.), 201A, and 112 or 171 power valve in last audio. Grid bias at 90 and 135 volts on 201A is 4½ and 9 volts; on 112 for same voltages 6 and 9 volts, and on 171 for same voltages 16½ and 27 volts.

Loudspeaker Connections.

S.W.A. (Waikato) finds that he has Browning-Drake components roughly

S.W.A. (Waikato) finds that he has been running his loudspeaker for some time with connections reversed. Correct this and the plate current from your three-valve may slowly restore any strength of magnetism that has been lost, provided a choke filter is not in use, in which case no harm would be done either way.

The clattering sound you have re

cently noticed may be caused by small pieces of paper or other foreign sub-stance that has found its way in and rests on the diaphragm. All speakers should be cleaned occasionally to get rid of such possible source of trouble. Fluff can accumulate in time sufficiently thick to muffle sound when the space between the diaphragm and top cover is very limited.

Distance on Crystal.

J.A.J. (Christchurch) gets poor reception of 2VA on his crystal set, using carborundum crystal. Reception is nearas good without earth as with it. The earth is evidently a poor one, and instead of using the water-pipe, bury a couple of kerosene tins with soldered connecting wire. 3YA can be received around Wellington on the "Record" crystal set with carborundum and no battery, but other conditions must of course be good for such distance on any crystal set.

A Wellington listener writes to know why he cannot get IYA and 3YA on his crystal set on 2YA's silent night. The tuning coil of this set is wound upon a 3½in, wooden former covered with celluloid, and then wound with 278 turns of 20's enamelled wire, the length of coil totalling 10 inches. A coil of such dimensions should be equal to any contingency, but in actual practice 200 turns could be dispensed with and the "dead end" losses caused by the extra wire would then he cut out. The in-quirer should make up the "Record" crystal coil as already described, 70 turns, space-wound on celluloid strips, using the wire he has. Let the slider work close up against one of the strips. It could have a notch filed in to allow it to rest on only one turn at once. These coils are more suitable for con-denser tuning, in which case the number of turns would be about 50. Reception of 1YA and 3YA on a crystal near Wellington demands good conditions in every way, and much depends upon the situation.

Searching for KFON.

N.M. (Greymouth): It is impossible to give dialings for any particular set as varying factors alter readings. KFON is on 233 metres, so would be on a low reading, say about 30. KFON is three metres above Palmerston North's wavelength, and considerably below the old 2YK wave-length. Changes of wave-lengths are now being made in U.S.A., which will probably affect a good many stations.

The Children's Corner

By "ARIEL"

Dear Radio Children,-You will see that we are beginning our Pen Friends' Corner this week, so send along your names when you want to break out into letter-writing. We have also produced a Cross-word Puzzle at the special request of several Radio Children. I hope you will find it a nice The solution will appear easy one. next week, of course. What interesting Children's Hours we are having these days! I expect you all listenin as hard as ever you can. Which part of the hour do you most enjoy, I wonder. I think it would be rather difficult to say.

Who loves birds? Quite a number pay me a visit every morning. They sit in a row along the edge of the concrete path outside my window, waiting for crumbs from the breakfast There is one fat, round fellow who has always looked top-heavy. He seemed to be leaning against his next-door neighbour, and 1 thought what a lazy thing he must be, until one day I discovered that he has only one leg! And yet he is as nimble and quick as the rest and gets even more than his fair share of crumbs. On very windy days he is at a disadvantage-he can't stand still in one place for very long-the wind topples him over!

I have just had a letter from a little girl of 10 who lives far away in England. She tells me she thinks it must be dreadful to have Christmas in the summer, and she is so sorry for me because I don't have a proper

Christmas! Isn't she a funny wee soul? Of course, Christmas is just the same whether it is in summer or winter-the weather doesn't make a scrap of difference really-it's the "feeling inside" that counts. But I know just how she feels about it, because I spent all my Christmases in England when I was a little girl.

Here is a poem she sent me. fear it is too good to be original, but I think some of our rising poets will enjoy it:---

CHRISTMAS ABROAD.

It would not be a bit the same, Nor half as nice if Christmas came In summer-time, in June or May, It would not seem like Christmas Day. No tingling frost, no shining snow, And yet I'm told it's always so With folks who live the other side Of this round world at Christmas-tide. If I were there, I'd not believe Twas Christmas Day or Christmas Eve Should I look up and see on high, A summer sun in cloudless sky. I'd feel, just then, his burning face Was just a little out of place; And melted, all too soon, would be The candles on the Christmas Tree.

What do you think of it? I wonder what my little girl friend would say to a dip in the briny or a picnic on the shore on Christmas Day?-Love

Brother Bill's Recipes

(BY A FRANTIC FATHER.)

Oh! Brother Bill! Big Brother Bill! You're standing on a precipice, Broadcasting to our little folks Fudge and toffee recipes.

> Every little listener-in Is trying each prescription, The effect upon our pots and pans, Beggars all description.

So keen are they to try their skill. So filled are they with ardour, There's never sugar for our tea, Nor butter in our larder.

> Our grocery bills are mounting up, With sugar, raisins, honey. They're still too young to realise That all these things cost money.

From all their clothing every night The sticky mess needs scraping, And with all the chairs in similar plight, Dad's pants are not escaping.

> When we've finished cating dinner We are fastened to our seats; And find that we've been sitting on Some most adhesive sweets.

The cat sleeps on the hearth-ruy, Then finds it cannot budge.
It's sticking most securely where Someone's dropped some fudge.

> The parrot sitting on his perch Is trying in vain to screech; He finds a lump of stick-jaw forms An impediment to his speech.

Oh! for the past comfort of our home! It's time we parents took a stand, Our patience quite exhausted.

> So Brother Bill, Big Brother Bill, If you don't stop enticing Our children into trying to make Fudge, toffce, sweets, and icing.

Gonded to taking drastic steps Vour jocular vein we'll sever

And ensure that you go "off the air"

Or off the earth, for ever.

> Don't treat this as an idle threat, But as a solemn warning; Or else you'll find some afternoon You woke up dead that morning.

LIMERICKS.

When Dad made his first wireless set, He sent out some howlers, you bet, Till the people next door Could stand it no more, And now their nice home is "to let."

There was a lady of Gloster, Who had a white cat and lost her, She asked the Broadcaster To make known the disaster, And the cat was returned by a coster. A wee girlie named Dorothy Whyte

On the wireless listened one night,
She listened until
She heard Big Brother Bill,
Then she said, "My word, this is all
right."

There was a young man of St. Kilda, Of wireless sets he was a builder; His wife said, "My word," When Australia she heard, But 4YA programmes most thrilled her.

WANTED-A PEN FRIEND.

Mollie Fisher, aged 13 years, Box 16, Gore, Southland, would like to write to a Radio girl-cousin in the North Island. Will any other Radio Children requiring pen-friends please send in their names, addresses, and ages.

GENEROSITY

Mary had a lillle cold (She took it from her mother) She didn't really want it much, So she gave it to her brother.

He didn't keep it very long, He lost it even faster.
The following day he went to school
And gave it to a master.

THE RADIO EXPRESS

ANOTHER TRIP ARRANGED

DELIGHTFUL PROGRAMMES.

Children, did you hear the Guildford Terrace Choir sing at the Competitions? Well, on Monday, November 21, they will broadcast from 2YA some of their numbers to their many youthful cousius who will be listening-in. They

who will be installing in. They are excellent, we assure you.

We know you all love Auntie Jo's stories, so of course Auntie Jo will be there with more exciting tales to

tell."
Away, away up the East Coast!
Hurrah for the Radio Express! A trip
along the East Coast! What date?
Why, Tuesday, November 22. Fleeting views of Palmerston North, Napier,
Gisborne and many other delightful
places. The Radio Express is very
punctual. She leaves the station (2YA)
sharp at 6 o'clock. What fun, little
ones! Uncle Jasper and "Spot" on
board, too, with a number of merry
fittle cousins surrounding them. fittle cousins surrounding them.
'Isn't it kind of our cousins from

Chilton House to give us such a joy-ous hour as they intend doing on Thursday, November 24? Such a variety of items they are presenting, variety of stems they are presenting, too! Captain Duffy, another new friend, will have something very interesting to tell you, and Uncle Sandy will entertain you with more novelties. Such merry programmes, little folk, and all especially for you!

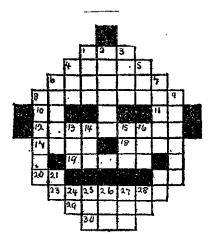
On Friday, November 25, another party of school cousins will entertain you. Oh, yes, they've been here before and given us such joily songs

fore and given us such jolly songs and choruses. Between them and and choruses. Between them and Uncle Ernest we can promise you a truly happy hour. We wouldn't miss it, and we know you won't. It is so good of our little cousins to come, and you will be there to welcome them.

This month the Lynior Red Cross

This month the Junior Red Cross Circle has another splendid concert for you. The pupils of the Wellington Rast Girls' College will this time be your cousins, and they are to present many enjoyable items on the evening many enjoyable items on the evening of Saturday, November 26. Amongst these will be a playette called "Midnight in the Vegerable Garden." Sounds very exciting, doesn't it? Altogether, a very full and very delightful programme for the week, don't you think?

THE CROSS WORE CLOWN.



Here is a crossword puzzle for those who specially asked for one. It is a portrait of a clown, but is worked out ust like an ordinary crossword puzzle. These are the definitions:—

Across.

1. A fruit.

4. A boat.
6. Conflict.
8. "An excellent substitute for butter."
10. For example.

11. A drink beheeded.

12. Answers. 17. A knot.

18. A throw.

19. A sail. 20 Therefo

22. Either. 28. An English county.

29. A well-known boxer.

30. A poet.

Down.

1. To cultivate 2. A baby.

3. The mark. 4. A conveyance.

5. A period.

6. A conveyance,
7. Ideal gardens,
8. Military dinners,
9 A season of the Church,
13. A lass with her tail clipped, 14 Exclamation of disgust.

Frozen water. 16. A grain.

21. A preposition. 22. All correct (slang). 24 Belonging to.

25. A tear. 26 Short for from

27. Short for open. 28. Behold.

Mr. R. M. Brasted, National Sec-

retary of the Y.M.C.A. in New Zealand, will talk to boys about boys during Big Brother's session at 3YA on Friday, November 25.

There are twelve hidden European rivers hidden below. The letters in each case need to be rearranged, that's You may look at your maps for

2. Le Roi.

7. Sewer. 8. Heron.

9. Sue me. 10. Red pine.

A BED-TIME STORY

THE FIRST THIMBLE,

Hundreds of years ago, in the days of the Crusaders, when all brave Christian knights and men went forth to the Holy Land to fight against the heathen, a little girl sat sewing in the courtyard of her father's castle in the sunny land of France. Her lady mother had given her a task of em-broidery to finish before sunset, and Yvonnes de Landes was working with all her might, for the close of the day was not far off. Indeed, she could see from her sundial on the castle wall that the summer afternoon was al-

ready half spent.

Now, in those days such things as thimbles did not exist, and Yvonne's thimbles did not exist, and Yvonne's second finger began to pain her as she untiringly pushed the needle through the stiff silk, not daring to pause lest her work should be still unfinished by sundown. Beside her was a silver cup filled with milk and a honey cake, with which to refresh herself during the

At length Yvonne's finger grew so painful that she stopped sewing to suck the bleeding finger-tip. And then she noticed with dismay that a drop of blood had fallen on the embroidery.

blood had taken on the characteristic filed her brown eves.

"O dear, O dear," she sighed, "my work is spoilt, and, even if I have finished it by eventide, my lady mother will be angry with me. I wish my father were not far away in Jerusalem, for he never lets my mother scold me when he is at home."
As she sat sobbing she did not notice

that an old man, wearing the hood and that an old man, wearing the hood that cloak of a Palmer, or pilgrim to the Holv Land, had crossed the drawbridge and was standing before her.

"Little maid," he said. "will you give

a poor traveller something to eat and drink?"

At the sound of his voice Yvonne

At the sound of his voice Yvonne looked up, startled.
"I dare not ask my lady mother for meat and drink," she said, "for she will be angry with me for staining my work; but, if you like, holy Palmer, you may have my milk and honey cake. I dare say I shall not feel hungry before the evening meal."

The Palmer gratefully accepted her offer, and, sitting down by her side, ate

offer, and, sitting down by her side, ate the honey cake and drank the milk in silence. In a little while he rose to go, but before leaving he furned to Yvonne, saying:
"Little maid, you will find a drop of

milk left in your silver cup. Rub the stain on your work with it, and no trace will remain to grieve your lady mother. And, in return for your kind charity, I ask you to accept this little shell which comes from the Holy Land." The Palmer dropped a little pink shell into Yvonne's lap, and, taking up his staff, went his way.

Yvonne at once rubbed her work

Yvonne at once rubbed her work with the milk, and was rejoiced to see that the stain completely disappeared. She then examined the shell which the Palmer had given her. It was shaped like an acorn-cup and was covered with little dents like pinpricks. "What a funny hell," thought the child, idly turning over in her hand. Without thinking, she poked the tip of her sore finger into it, and it fitted like a little cap "Why, this will stop my finger from being hurt by the needle," she suldenly thought, and, sure enough, on resuming her work she found that, not only could she sew without pain, but far Yvonne at once rubbed her work could she sew without pain, but far more quickly than before. So easily, did her needle pass through the silk that, long before sunset, she had fin-ished her task. Her mother, coming down from her chamber, was surpris-ed and pleased to find the work so-neatly done and kissed Vyone gently when bidding her good-night.

You may be sure that the little

French girl was most careful never to lose the precious shell which was so useful to her, and always kept 't ready in her pocket. She never saw the holv Palmer again, but she always remembered him with gratitude.

So that is the story of the first thimble. If Yvonne des Landes had not given her milk and honey cake to the old Pilorim, hundreds, of years again.

old Pilgrim hundreds of years ago; perhaps—who knows?—we should never have had the little silver caps to pro-tect our fingers when sewing, for it takes a very clever man to think of a very simple thing, and without the little pink shell to show the way, perhaps no one would have troubled to invent a shield for the second finger of a woman's hand.

A HIDDEN COUNTRY.

My whole in a country in Europe. My 1, 2, 7 is an extreme point.

My 3, 4, 5, 7 is what you will be when
you have solved this puzzle.

My 5, 2, 3, 1, 4 is in heaven.

My 4, 5, 6, 7 is the earth.

Which country am 1?

A SENSELESS SENTENCE.

Who is good at punctuation? Can vou put inverted commas, ordinary, commas, and any other punctuation marks, and make sense of this sentence? Try and see:—
"If is is not is and is not is is what is it is not is and what is it is is not if is not is is?"

It is not really so hopeless as it looks,

A WORD CHAIN. Here is something to keep you think ing for quite a long time. See how long a word chain you can make in

> SHE ERA RAP

if is not is is

You have to cut off the head of each word and add a tail to form a new word. Start with just any word of three letters you like and see how fax you can get, only von must not use the same word twice in one chain,

HIDDEN RIVERS.

1. Henri

3. A gust.
4. O sell me.
5. Set in red.

11. Nerves. 12. May dew. 6. Biter.

Stations Available to New Zealand Listeners

Special Schedule of Local and Overseas Stations and Operating Times



casting, not only by the Dominion's own excellent stations, but also by sta-

tions beyond our island shores. The very fact that New Zealand is an insular country and not very remotely removed from much larger and more densely populated countries with numerous broadcast stations favours our listeners to the extent of offering sup-plementary broadcast services and programmes of sometimes a higher standard of merit than is possible with New Zealand's relatively small population and a necessarily restricted amount of talent to choose from.

However, there is a spirit of camara-derie engendered by broadcasting, which, by the way, augurs well for its influence as a factor towards interna-tional peace and friendship, and the proprietors of broadcast stations in all parts of the world are most auxious to know when their transmissions afford pleasure to listeners in foreign or over-sea lands. Our brothers in Australia, particularly, value New Zealand listeners as an important section of their vast audiences. The Broadcast Company of New Zealand also reciprocates the friendly and appreciative attitude of the Australians, and the many letters which are received from Common-wealth listeners who pick up the New Zealand stations are cordially welcom-

Many New Zealand listeners who are resident in a highly favourable locality and have first-class equipment regularly pick up a dozen or more broad-cast stations located across the seas, and there are several who have "logged" fifty and even more stations outside New Zealand. "D.X." (long-distance) reception offers a particularly fascinating field for exploration rid enjoyment quite distinct from ordinary reception of the stations within the confines of New Zealand. The uppercritical may cavil at the musical quality of long-distance reception which is more or less affected by static, fading, and concomitant periods of distortion, due to natural phenomena over which human ingenuity has as yet contrived no means of control. Yet there are many occasions when stations even thousands of miles distant can be received with such defects scarcely in-trusive enough to spoil the real pleas-ure of the average listener. And there is a large body of listeners

tion and a certain amount of static.

This well-fixed desire for long-distance reception is exemplified by the

HW ZEALAND as a whole sufficiently intrigued by long-distance ference between success and failure. houses, etc.) are not directional; that of-town residents who have no water-is well served by broad-casting, not only by the brief periods of fading and distor-our reception from one or two points of the compass with equal strength. An wet channel and buried three feet bethe compass, others which are unfavourable only when reception is from one particular direction. The reason for tance reception is exemplified by the one particular direction. The reason for general demand by prospective buyers for high-class receiving sets that will and, on the other hand, are frequently "reach-out" beyond New Zealand. There are inevitably many disappointments in this respect. High-class, efficiently-designed receiving sets are merely a factor towards successful overmerely a factor towards a sea reception, and the other factors have mitting station and the receiving set. by preference be a water-pipe, and it proved to be equally important. A Radio engineers now lay it down that is best to solder the earth wire to it, favourable locality for the installation aerials which are over 35 feet in height although a patent clamp if efficiently of the receiving set makes all the dif- above all objects (bushes,

aerial lower than 35 feet in height is apt to receive with greater strength all stations in the direction of the lead-in end of the aerial, providing it is of the most approved broadcast receiving type,

namely—a single wire inverted I_t.

The earthing system is of equal importance with that of the aerial. The thicker and shorter the earth wire is the better it is. The "earth" itself should fences, fitted will serve admirably also. Out-

pipes will find kerosene tins filled with low the surface a capital "earth" to which the earth wire can be soldered. If a listener has a high-class receiving set and a poor aerial and earth installation he can only blame himself if he is not receiving the long-distance stations that the quality of his set warrants. Unavoidable difficulties, such as an unfavourable locality, must be endured, but the listener should first put his house in order by having the whole of his equipment thoroughly efficient.

The long-distance station seeker has a wide scope, but he must also acquire some skill in detecting and bringing reception up to its maximum. It is a ception up to its maximum. It is a home truth that some listeners possess distinct natural ability for finding the distant stations, others acquire it, and there are some who are destitute of sufficient patience to overcome the little difficulties that beset "DX" work.

In submitting a list of long-distance stations most frequently heard in New Zealand, one is confronted with the task of eliminating those which in some isolated localities are heard more often than in others. A number of the most successful listeners in various parts of the Dominion have been consulted, and their reports have been compared. The suggestion has been made by various correspondents that some of the minor New Zealand broadcast stations should be sandwiched in the list, and this has been followed. The various wavebeen followed. lengths are mainly those given in the official lists, but it is known that there have been slight variations to avoid heterodyning with other stations. The list compiled is the first of its kind pub-lished specially for New Zeland listeners, and if there are errors due to al-terations in broadcasting schedules and wave-lengths, the kind indulgence of our readers is solicited; any suggested revisions will be welcomed by the editor of "The Radio Record." While the Australian schedules are shown to commence at 10.30 p.m., it is not intended to convey that the Australian schedules are meant only for the even-ing programmes. The Australian sta-tions, of course, transmit day-time and early evening programmes, and it was not deemed necessary to remind listeners of this circumstance. The times given are New Zealand "daylight saving." The stations, for convenience in tuning, are listed according to their respective wave-lengths.

LONG-DISTANCE STATIONS MOST FREQUENTLY HE ARD IN NEW ZEALAND, AND MINOR N.Z. STATIONS.

Call.	Place.	Wave.	Power.	Schedule,
KEX	Portland, Ore., U.S.A	240	2500	Till 8.30 p.m.
KFON	Longbeach, Cal., U.S.A.	242	500	Till 8.30 p.m. daily.
3BY	Melbourne, Australia	250	50	1 a.m. till 4.15 a.m., Sun, and Mon.
ODL	Arcibourne, Austrana	200	600	11 p.m. till 1 a.m., Mon., Wed., Fri., Sat.,
5KA	Adelaide, Australia	250	000	and Sun.
3DB	Melbourne, Australia	255	500	10.30 p.m. till 1.30 a.m.
2UW	Sydney, Australia	267	500 500	From 10.30 p.m.
1ZB	Auckland, N.Z.	275	250	Sunday afternoon, Monday nights.
2ZF		278	230 50	From 7.30 p.m., Mon., Wed., Fri., Sat. Sun.
2KY		280	1500	From 10.30 p.m. daily.
2UE	Sydney, Australia	293	250	From 11.30 p.m. Tues., and Thurs., and
22 1/ 2/2	Syuney, Australia	200	2500	from 10.30 p.m. Sundays.
4ZF	Dunadin M7	300	50	Irregular,
CNRV	Dunedin, N.Z.	291	50	Till 7.30 p.m. daily.
WOAI	Vancouver, Canada Texas, San Antonio, U.S.	201	500 5000	Till 8 p.m. daily.
2GB		310	3000	From 10.30 p.m. daily, excepting ——?
5DN	Sydney, Australia	313	500 500	
	Adelaide, Australia	319		From 11 p.m. daily.
SUZ KNX	Melbourne, Australia	339	100 1000	From 10.30 p.m. Mon. and Wed. Till 8.30 p.m. daily, but occasionally fill
17.1.7	Hollywood, Cal., U.S.A	909	1000	
T2 110	Claration Street, TT Cl A	349	9700	10,30 p.m.
KJR	Seattle, Wash., U.S.A.	353	2500	Till 8.30 p.m. daily.
2BL	Sydney, Australia		5000	From 10.30 p.m. daily.
7BY	Bombay, India	357	\$000	From 4 a.m. daily.
JOCK	Nagoya, Japan	360	1500	From 10 p.m. daily.
KFWB	Los Angeles, Cal., U.S.A.	361	500	Till 7.30 p.m.
3L0	Melbourne, Australia	37 t	5000	From 10.30 p.m.
7CA	Calcutta, India	370	3000	From 3.30 a.m. daily.
JOAK	Takio, Japan	375	1500	From 10 p.m. daily.
KGO	Oakland, Cal., U.S.A.	384	5000	Till 8.30 p.m. Sundays, and 7.30 p.m.
*****	A. 1 . V	005	4000	Thurs., Fri., Sat.
JOBK	Osaka, Japan	385	1000	From 10 p.m. daily.
WBBM	Chicago, III., U.S.A.	389	5000	Till 8.30 p.m.
4QG	Brisbane, Australia	385	5000	From 10.30 p.m. daily.
5CL	Adelaide, Australia	391	5000	From 11 p.m. daily.
KZRM	Manila, Philippines	406	1000	From midnight.
KPO	San Francisco, U.S.A.		5000	Till 8.30 p.m. daily.
2FC	Sydney, Australia	442	5000	From 10.30 p.m. daily.
KFI	Los Angeles, Cal., T.S.A.	468	5000	Till 8.30 p.m. daily.
3AR	Melbourne, Australia	484	1600	From 10.30 p.m.
7 ZL	Hobart, Australia	535	3000	From 10.30 p.m. daily.

N the course of previous remarks in this column many considerations have been dealt with in an endeavour to give prospective purchasers of radio equipment a persective which would assist not only in the choice of the right class of apparatus, but would also lead to an idea of the correct expectations of performance of the apparatus. However, these considerations have been necessarily in the form of generalities, and in order to develop the perspective on the foundations already laid, more detailed information should be forthcoming. Previous discussions have been focused on the receiving set itself, naturally, as this is the main performer, but it is also necessary to consider the speaker or reproducer in particular, along with the other (so called) accessories that go with the receiver.

In looking over prices of receiving sets, do not be misled by a price quoted without accessories. In the first place a claim for wonderful reception, especially in terms of distance the price asked is palpably low for such results, should cause the prospective purchaser to think twice before entering into negotiations with the firm responsible. If claims of performance are made alongside a price which mereare made alongside a price ly represents the bare receiving set, it is a distinctly misleading and unfair method of doing business, unless the price complete with all accessories is quoted as well, and providing it is given reasonable prominence.

Misleading Methods.

It is extraordinary how certain methods of doing business, if carried out by one class of traders, would be considered almost dishonest, yet the same methods may be practised with impunity by another class of traders. For instance, vendors of motor-cars would get themselves disliked if they advertised their makes of cars at a certain figure, and when the prospective purchaser went along, explained that the advertised figure only represented the chassis, and that before the car could be put into commission a body would have to be fitted at the purchaser's ex-pense! This is exactly parallel to what is being put up to the public in radio to-day. The radio dealer who practises such methods may say that he doesn't know what sort of batteries, speaker, valves, etc., the buyer will choose, but this is just as logical an excuse for the motor-car vendor because the latter motor-car vendor because the latter doesn't known whether the next buyer who comes into his showroom will retuire a limousine, whereas the last chose a tourer. The engine and chassis may be identical in both cases, but his case for advertising a price for the chassis and leading the public to believe that it is a cast in complete spirit lieve that it is a car in complete going order is, to say the least, a poor one.

Therefore, a consideration of price should call for an examination of

Notes for Beginners: By M. I. R E,

In this article reference is made to misleading advertising in connection with radio. From a careful study, beginners will be able to avoid some of the pitfalls of the anwary amateur. The value of a good speaker is specially stressed.

bare should have the cost of accessories added, and a set quoted complete should include all the units to set it into operation, and the units quoted should be of an order of quality line with, or of a superior quality than, with, or of a superior quality than, the receiver they are accompanying. Obviously a receiver of good quality and price calls for a more dignified layout generally than that expected to be found with a cheaper variety. It is safe to say that a six-valve set valued at, say, £40 or £50 here would be very out of balance if connected to a lowdeneater valued at £2 or £3 for inloudspeaker valued at £2 or £3, for instance. There is certainly no standard design of speaker lower in price than £5 or £6 which would satisfy the user of the equipment, and probably at least £10 would be necessary to purchase a speaker which would give that ultimate satisfaction which could be forthcoming to owners of sets after they have had them installed for a sufficient period of time for the novelty to have worn off.

The Loudspeaker.

With the cheaper brands of multivalve sets the accompanying accessories will equal the value of the receiver, and may, in many cases, exceed it. Of course, as the value of the receiver increases, although the accompanying parts should increase somewhat also the proportion is less, and, in the case of the six-valve set mentioned before, which was valued at £40 or £50 here the accessories would be as low as 50

the accessories would be as low re so per cent. of this figure.

It is to be specially noted that as much attention should be paid to the purchase of a loudspeaker as to the receiver itself.

A receiving system consists, briefly, of an aerial or loop to pick up the signals a receiver to tune the aerial or loop and convert into electric currents capable of producing sound waves of an audible nature when passed through a reproducer or loudspeaker. Where, there-fore, is the logic when a chear reproducer is connected to a receive which is of such a quality as to be capable of carrying out its duties with absolute fidelity? Such a procedure can only be likened to substituting a tin horn in place of the beautifully designed sound box of a gramophone of costly manufacture. The record and pick-in arrangements are will as the

in every sense of the word.

Care in Selection.

The above statement should not be taken as in any way affecting many types of loudspeakers on the market to-day which are fitted with "tin" horns, not unlike the original form of plionographs. A gramoplione or pliono-graph reproducer is sufficiently far re-moved in design from a radio reproducer as to necessitate separate consideration altogether. As a matter of fact, although it is most usual to find horn types of radio speakers beying wooden, or partly metal and partly wooden, horns there are many makes of all-metal horns which give a fidelity reproduction equal to anything on the market for speakers of medium

To give an idea of the importance which faithful reproduction is receiving at the hands of manufacturers, there are now available on the New Zealand market two types of apparatus which sell for approximately £70 for the reproducer alone! This seems incredible first sight, but in view of the fact that they are selling rapidly, it is unnecessary to state that their performance is in line with their price. least two, to the knowledge of the writer, are being used to reproduce signals from a crystal set. This gives writer, are being used signals from a crystal set. This gives some idea of the importance paid by seekers after the very best, to the question. Of course, the tion of reproduction. Of course, the range of such a combination is limited to the local station, but, as has been pinted out before, the true results are always forthcoming from the local staion and static and fading are factors unknown to those content to devote their attention to entertainment pronearer home. However, elaborate the point, were the writer purchasing equipment to listen to the local station, he would certainly use a crystal set with a single valve amplifier and then a speaker, which approximates £12 in price and happens to be a particular fancy. Notice the apparent out-of-balance of prices. The speaker is more expensive than the receiver and batteries, etc., added tomether, but the results more than warrant the expenditure. Far too often is reception ruined by

A set quoted thereby, and results may be termed clock that has never been purchased, or ost of accessories "tiuny" in every sense of the word. else it happens to be the right colour else it happens to be the right colour to match the drawing-room carpet!

It is most important also to understand that the speaker must suit the last valve in the radio set in order to give the desired results. For instance, the reproducer previously described as worth £70, contains a valve as well as the reproducer and these two are matched in design, thus giving the desired results. The manufacturers refuse to sell the reproducer without the valve because it would be used incorrectly in many cases. There are many speakers in use to-day capable of giving wonderfully fine results, but which are giving very inferior service because the giving very inferior service because the dealer who sold the equipment, or the purchaser who bought the units at different shops and then connected them together, failed to realise the importance of this matching process.

There is nothing mysterious about matching the valve and the speaker, because the dealer who sells the speaker will be able to give advice regarding type of valve recommended b makers of the speaker. If the speaker is a general purpose one it will work well when driven by a general purpose valve, but will give superior results in 99 cases out of 100 when the valve is of a "power" type. The very best results are forthcoming from types of speakers whose electrical characteristics demand power valves with high voltages on the valve connected to them, and by high voltages is meant between 150 and 200 volts.

The prospective purchaser is therefore exhorted to be guided mainly by his own ears in choosing his speaker and to judge the speakers when connected to his own type of receiver operated under conditions as nearly identical as possible to those under which the equipment will operate when in his own possession. The choice of speakers is largely a matter of individual opinion, but a word of warning is necessary, and that is that it is quite impossible to listen to a speaker working in one shop or show-room and then to compare it mentally with another speaker in another show-room unless, of course, the perform ance of the one to the other shows a very decided difference. Just as it was shown to be a mental and physical impossibility to compare reis the only way to decide, but here again, as with receivers, it is necessary to confine attention to those dealers and distributors who handle lines which can be reckoned as standard and who are prepared to stand behind their products with spare parts in stock and who will guarantee service and satisfaction.

SPARK TO VALVE

WAHINE AND MAORI.

The Union Steam Ship Company's Wellington-Lyttelton "ferry" steamers Wahine and Maori are now no longer a cause of interference with broadcast listening, having been equipped with valve morse-transmitters which are being used in place of the crashing, interfering spark transmitters. The new transmitters are proving a complete success from an operator's as well as affording relief to broadcast listeners. These vessels use a considerable amount of morse for passengers' messages while on their 175-mile run messages while on their 175-mile run between Wellington and Lyttelton, and in the past have spoilt many a broad-cast item for listeners in their homes ashore. This is now a thing of the past so far as these two steamers are concerned.

IN THE UNITED STATES.

The work of equipping and re-equip-ping American vessels in the change from spark to valve transmitters has been going on steadily during the past two years. Already several hundred ships are equipped with valve transmitting apparatus, or will be very shortly. Spark signals are becoming a rarity, except for the occasional small foreign ship which comes into an American port and proceeds to squat on the 450-metre or 600-metre channels in unloading its traffic amid a world of broadcast entertainment, and also a few coastal stations still operating with spark transmitters.

The difference between spark and valve transmission is that the former spreads over a wide band of wave-lengths interfering with all broadcasting more or less, according to the proximity of the spark transmitter, while the valve transmitter can be tuned as sharply as a broadcasting station, thus climinating interference.

Printed and published for the New Zealand Radio Publishing Company, at costly manufacture. The record and pick-up arrangements, as well as the appearance of the machine, may be all that can be desired, but, seeing that the record and batteries, etc., as a matter of the same aerial and valve and battery power, so it is with speakers. Naturally, it is not possible to always get such a shape that it will stand on the speakers together for comparison purposes, so that a mental comparison NOVEMBER 18, 1927.