

Investigation Into Fading--Thrilling Travel Tale--Valuable Time Chart--Afternoon Sessions Welcomed.

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Thrilling Travel Tale From 1YA.

Great Performance Of Two New Zealand Lady Motorists

There is nothing better than a travel tale well told. One of the finest items put on the air from Auckland of late was Gladys Sandford's story of the adventures of herself and her lady companion in criss-crossing Australia in their record endurance motoring trip. With her woman's eye for effective detail she tells the story brilliantly. Who will forget that touch of the isolated girls in their early twenties who had never seen a white baby and inquired mysteriously "Do you believe in love at first sight?"

When I left New Zealand to undertake a reliability run around Australia, like many others, I had absolutely no idea of the size or conditions of the country I was about to traverse. The ordinary school map showed almost half of the continent marked "desert" and I naturally expected a sea of sand right across the west, but once away from populated areas we found entirely different conditions from what we had expected. An hour before starting out I saw a map showing the relative sizes of Australia and New Zealand, and I must admit that I was not only surprised but startled. In fact, I even doubted my ability to successfully complete so great a distance, but with an inward quaking feeling I told my companion, Miss Christie, who became known as the "Sergeant-Major," that we could only do our best. We felt very self-conscious of our shirts and breeches during the farewell given us at the Obelisk in Sydney, and were glad when we were finally allowed to pack ourselves into our already very much loaded car and start off.

We were about to tackle the whole of Australia, yet had to have an escort to show us out of Sydney on to the highway. Our equipment consisted of a good supply of tinned foods and flour, frying-pan, billy and gridiron, blankets and mattress, canvas water-bags, a tomahawk, fencing wire and a wire strainer, a set of bog extractors, a Red Cross outfit, a revolver, and four suitcases containing our personal luggage. The only spares carried were 2 spark plugs, a coil, and a soldering outfit.

We travelled through the Princes Highway and the Cann River route. The country was very dry, scarcely a vestige of feed, and the sheep and cattle terribly thin. We made Melbourne in 2½ days, camping by the roadside at night, and as we were driving a closed car, were able to make up the interior into a double bed, and with the aid of a good electric lamp, could always enjoy a pleasant hour reading before settling down. At the outskirts of one town we saw a notice printed in large letters in a triangle, "So This is Camperdown." A few yards ahead a second sign read, "Drive Slow and See Our Town; Drive Fast and See Our Jail." We did not hurry through that town.

THE FIRST CASUAL AUSSIE.

The Coorong desert, 90 miles long, between Melbourne and Adelaide, is not nearly as bad as it sounds. The track was mostly good, with a few sand-drifts, which fortunately had not banked up too high to cause any worry. We nearly brought our trip to a sudden end at Wellington. We were on the look out for gates which were marked on the map, and we thought we must have passed them open in the darkness. Suddenly open gates loomed ahead and I slowed down from 45 m.p.h. to about 35, then brought

the car to a standstill with all brakes applied hard. The ferry gates had been left open and the Murray River flowed quietly by, just 10ft. from where I had pulled up. When the ferry arrived after much tooting of the horn I said to the ferryman, "You left the gates open and there was nearly a casualty," he answered quite unconcernedly "You wouldn't have been the first odes!"

Adelaide was made that night, completing a run of 402 miles for the day, the total run from Sydney to Adelaide of 1328 miles being completed in four days. We spent two days in Adelaide replenishing our supplies, and were then cheered on our way by a large crowd who had collected around us. At Port Augusta we had to cross by ferry, and again met with adventure. The ferryman had omitted to make fast the punt,

we must be somewhere near Penang by the mileage shown on the speedometer, and at 11 p.m. I decided it was time to make camp. So we pulled up, unpacked the car, made up the bed, undressed, and turned in. We were awakened in the morning by the whistle of a train, and looked out to find ourselves camped at the entrance to the main street of Penang. Having no blinds, we had to dress under the blankets, and I can assure you it is not an easy matter in confined quarters. This was the last place where food could be bought for 600 miles to Norseman. We had been assured that we could rely on absolutely fine weather, as at the time of the year rain seldom fell. We camped that night outside Nullabor station, and woke in the morning to find heavy rain. There were no trees for miles, only dead salt bush, which was by

road was so heavy we were never higher than second gear. The track was mostly under water, and we had to be very careful to try and avoid wombat holes and rabbit warrens. By the time we reached Mandrabilla Station the weather had grown steadily worse, and we sheltered here for five days. Then on, 70 miles to the next station, the road in a very bad state, and a further 280 miles to Balladonia Station, with absolutely no homes in between these mileages. Turning this next stretch we fell in and out of bogs continually. The track led through low salt bush country, with occasional patches of mulga and mallee trees. The surface was heavy clay, and in hollows and dips we often found stretches of water two feet deep, from 30 to 50ft. wide to be traversed. Between Balladonia and Norseman, 150 miles, there is one station, and here we crossed Fraser's Range. The rain had caused many wash-outs, and the going was extremely rough right through a further 120 miles to Coolgardie, where we joined up with the Trans-Continental Railway, about 310 miles further on to Perth, mostly bad going on account of mud. Twelve miles out of Perth we found a big welcome, and a procession of cars waiting to escort us in.

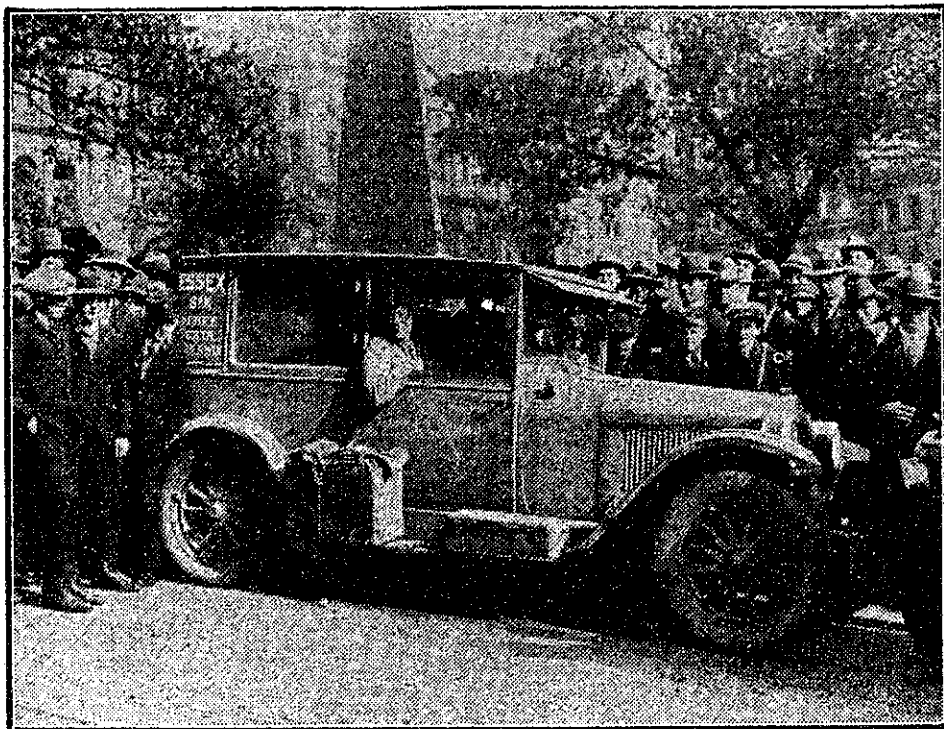
When he left Sydney someone in the crowd shouted out that he would bet me £5 we would be in at least five garages before reaching Perth. We completed our whole tour of 11,058 miles, and only received service from the agents in Melbourne, Adelaide, Perth, and Darwin, but never had to call into a garage.

BACK FOR THE NORTH.

We rested in Perth for over a week, and then were reluctantly compelled to change our plans from driving up the north-west coast to Darwin on account of floods, and retraced our way back to Adelaide. Here we picked up special equipment for the northern trip. Four long lengths of coconut matting were strung in two rolls across the bonnet. A five-wire grass seed catcher was fitted to the radiator, and, remembering how many broken springs I had seen across the west, I had a spare back and spare front spring clamped on under the chassis. The only other spare part carried was a set of clutch plates. We put in bigger food supplies here, also an extra five-gallon camel water canteen, and a 22 short Winchester rifle. Up to this time I had only carried one spare tire, and decided two would be better. Until now the only tire trouble experienced was a pinched tube on the return journey, and on the whole trip we had six punctures.

I was constantly advised to carry the revolver at the hip, and to endeavour to make stations whenever possible at night time, when north of Alice Springs, which shows how little is known of Australia by a big proportion of the population there. We were never once troubled by natives, and

(Continued on page 16).



Mrs. Gladys Sandford leaving Sydney on her record-breaking journey.

and, after getting all but the rear wheels aboard, the tide carried the punt out, and only by reversing suddenly and running off were we able to avoid disaster. As it was, the distributor points were all wet, and it took over an hour to dry them out completely.

CAMPED IN THE MAIN STREET.

Once over the other side, we both felt we had really commenced the great adventure, but we found sheep stations at intervals varying from 80 to 130 miles apart, and a well defined track to travel on. Still no sign of the great desert, and we passed on through Murat Bay, picking up petrol and oil supplies. Our next step was Penang, and thereby hangs a tale. Travelling on in the dark, we knew

this time very wet, so we decided to lie in bed and wait until we could make a fire and cook breakfast. However, about 9 o'clock the manager of the station came out and took us in to the homestead, where we had a great feast. He told us it was the first heavy shower they had had for four years, and the country certainly showed it.

SKIDDING 130 MILES.

After lunch we continued on skidded 130 miles to Rucla, where petrol supplies waited us for the next 645 miles to Coolgardie. We stayed that night at the telegraph station, and started out next morning in drizzling rain. A mile out we fitted chains, the rain came on very heavily, and for 65 miles the

Why The Geneva Naval Conference Failed

America's Scheme Incompatible With British Security

Here in a nutshell is given, following on last week's preliminary explanation, the reason why the Geneva Naval Conference failed. After the conference, it will be remembered, the cables reported that the American Press was busy blaming Britain for the failure. This explanation shows that the responsibility on the other hand rests primarily with America—her attitude being dictated by her own needs, regardless of Britain's.

By omitting essential phrases of the Earl of Balfour's statement, the American Press sought to convey a wrong impression: this calling forth from Lord Balfour the most stinging rebuke and correction of recent times.

The first meeting of the Conference took place at Geneva on June 20. Omitting details and stating the matter as simply as possible, the scheme put forward by the British Empire delegation proposed:—

Firstly: An extension of the accepted life of the various classes of ships of war—in the case of capital ships from 20 to 25 years—thus obviating the replacement of existing ships for a long period than had been accepted by the Washington Treaty, and saving a very large amount of money.

Secondly: A reduction in the size and in the armament of future battleships from the 35,000 tons specified by the Washington Treaty to 30,000 tons, and from 16in. guns to 13.5in. guns.

Thirdly, and this is where disagreement occurred, it should be noted carefully: Cruisers to be divided into two classes, the first (as provided by the Washington Treaty) with a maximum of 10,000 tons and 8in. guns, and the second with a maximum of 7,000 tons and 6in. guns. The proposal was that a 5-5-3 ratio should be agreed upon for the larger type of cruisers, while no limitation should be imposed on the smaller type of cruisers.

Fourthly: Certain limitations in the size, number and armament of destroyers and submarines.

On the question of submarines it was made plain that the British Empire had in no way altered her view that the use of submarines in warfare should be discontinued, but in view of the fact that many nations regarded these ships as a necessary means of defence, the proposals put forward were the utmost that was considered practicable.

THE CRUISER PROBLEM.

Technical committees were set up to consider details and it soon became clear that the question of cruisers was to be the chief difficulty. A degree of understanding was arrived at in connection with destroyers and submarines, and the British delegation agreed to the suggestion of America and Japan to postpone consideration of the proposals regarding capital ships until it had been possible to arrive at an agreement on the other points. On the question of cruisers, however, the British and American viewpoints were so definitely contradictory that it was not possible to make headway. The British attitude on the question was that the requirements of the British Empire, so far as cruisers were concerned, were very much greater than in the case of any other nation. The Empire consists of territories in all quarters of the globe, each one of which depends for its existence on sea communications, and in the interests of security it is essential that a large number of small cruisers should be available for police purposes. The larger cruisers are designed as an adjunct to a battle fleet, while the smaller cruisers are of little use in that connection. Of the larger type cruisers Britain was quite prepared to accept a limitation in number on the 5-5-3 ratio already accepted in regard to capital ships, but the safety

of her communications required a large number of small cruisers.

BRITAIN'S TRADE ARTERIES.

On this subject Lord Jellicoe pointed out that Great Britain's main lines of communication measured 80,000 miles, on which were an average of 9,500,000 tons of merchant shipping. The minimum requirements of the Empire were 70 cruisers, of which at least 45 were required for direct trade protection. Making necessary allowances for refitting and refuelling, this would provide one cruiser to every 2500 miles. Britain's cruiser strength at the outbreak of war was 114 ships, and even this number was insufficient to prevent immense loss from enemy raiders. Any reduction below 70 would imperil the safety of the Empire.

To illustrate the difference between the position of the British Empire in this connection and that of the United States of America, Sir Austen Chamberlain, in the British House of Commons, quoted a statement made by the chairman of the American Committee on Naval Appropriation. This authoritative American said "Our country could be cut off from the rest of the world, but there would be food for our people, fuel and oil for our use, and materials of all kinds. The lines of the sea might be closed to us for weeks or years, should the necessity arise. But the United States, within her own territories could sustain her people without suffering, and produce materials to meet whatever emergency naval necessities might require."

ONLY SEVEN WEEKS' FOOD.

Contrasting this position with that of Great Britain, Lord Balfour at the Washington Conference in 1922 had spoken as follows:—"The United States stands solid and self-sufficient. All its essential lines of communication are completely protected from any conceivable hostile attack. The configuration of your country is such that you are wholly immune from the particular position to which, from the nature of the case, the British Empire is subjected. Suppose for example, that your Western States were suddenly removed 10,000 miles across the sea. Suppose that the very heart of your Empire was a small and crowded island, depending upon overseas trade, not merely for its luxuries, but for the raw materials on whose manufacture its superabundant population live, and for the food upon which they subsist. Suppose it was a familiar thought that there was never a moment of the year when, within the limits of your State, there was more than seven weeks' food for its population, and that that food could only be replenished by overseas communication. If you will draw this picture, and if you will realise all that it implies, you will understand why it is that no citizen of the British Empire, whether he be drawn from the far dominions of the Pacific or lives in the small island in the North Sea, can ever forget that it is by sea communication that he lives, and that without sea communication he and the Empire to



The Earl of Balfour.

which he belongs would perish together."

And finally on this subject listen to Lord Birkenhead's remarks at a dinner at the end of July last to a body of American editors visiting England:

"This country has only sufficient food for seven weeks. No other country has ever been in such a position. I dare not think what would happen to these islands if we could not protect our great sea routes. I care not for those fighting vessels—I am talking only of that class of cruiser which attends to the vital arteries of the nation. That is what concerns me and my colleagues. That is the case which is deeply felt by those who are trusted by the British people."

NO QUESTION OF SUPERIORITY.

It was made perfectly plain by Great Britain that she aimed in no way at

IMPERIAL TALKS

THE SINGAPORE BASE

NEXT WEEK FROM 2YA.

"We don't mind listening, but we can't give the time to hunting up and classifying the odds and ends on these topics in the newspapers. These talks are just what we want. Give us more." This was the view expressed on many sides to the editor announcer and others in connection with the series of talks arranged for from 2YA on Imperial affairs.

The talk of naval affairs was concluded on Friday evening last and will appropriately be followed by an explanation of "The Singapore Base." This is of vital importance to New Zealand, and the lecture will be of outstanding interest.

naval superiority over the United States—she was quite prepared to accept an equality with America in all classes of ships, and she had no objection to the proportion proposed to be allotted to Japan. The plain fact was that she required 70 cruisers, and that her very existence would be imperilled unless 70 cruisers were available. She had no objection to the United States also having 70 similar cruisers, but she could agree to no plan that would reduce her own number.

America also was quite satisfied with an equality in cruisers with Great Britain, but notwithstanding the geographical position of the British Empire she would not be satisfied with less than equality. But the American suggestion was that the equality should be in total tonnage, and this is where the difficulty arose that ultimately led to the breaking up of the Conference. America desired to be free to put all her tonnage into the larger type of cruisers.

THE PROBLEM OF AMERICA'S PROPOSAL.

Let us examine the difficulties raised from the British point of view by the American proposal. Though America and Britain would have the same total tonnage of cruisers, the American ships might be all 10,000 ton ships with 8in. guns, while a considerable proportion of the British ships would be 7500 tons with 6in. guns. The result would be that America would have a large number of 10,000 ton 8in. gun ships, while Britain would have a comparatively small number of these ships and a large number of smaller 6in. gun ships.

Now the first-class of cruiser is infinitely more powerful than the second-class.

You might note very carefully the enormous advantage that is possessed by a ship with heavier guns, especially if she has a slightly greater speed than an opponent. The ship with larger guns can hit her opponent when the latter's guns are outranged; owing to her slower speed the small gun ship can get no nearer, so as to make her guns effective, and—more important still—she can get no farther, and as a result can be destroyed without any possibility of damage to the large gun ship.

Naval experts have laid it down that the 10,000ton 8in. cruiser is, at least, two and a half times as powerful as the 7500-ton 6-in. gun cruiser, and consequently the American battle fleet would be immensely more powerful than the British battle fleet, Great Britain being left with a large number of ships which for battle purposes would be negligible.

WHY AMERICA WANTED BIG CRUISERS.

The reasons for America's preference for the larger type of cruiser may be stated as follows:—

In the first place, her naval bases are more scattered than those of Great Britain. A larger type of cruiser was required in order to carry sufficient

fuel to provide an adequate cruising range.

Secondly, America, with her different geographical situation, did not require a large number of small cruisers. For fleet purposes these ships are, of course, not the equal of the 10,000-ton 8-in. gun ships allowed by the Washington Treaty, and America did not feel inclined to spend large sums of money in building a class of ship which she did not require, merely in order to obtain an equality with Great Britain in these ships.

Thirdly, she called attention to the fact that Great Britain, with her very large numbers of merchant ships, could, by placing 8-in. guns on these ships, provide a numerous fleet, which would be carrying an armament of the same size as that proposed for the small cruisers suggested by Great Britain. This argument was not regarded by the British delegation as a valid one. It was scouted by Lord Jellicoe as a "landsmen's idea." Lord Jellicoe added: "An armed merchantman of large tonnage, equipped with guns mounted in awkward parts of the ship, and manned by a reserve crew, would be no match for the smallest and most insignificant cruiser. It would present a large target, of an egg-shell character, with a mass of top hamper and highly vulnerable machinery. Any well-organised and properly constructed cruiser would be ready to take on an unlimited number of such ships."

And there, put as shortly as possible, you have the rock upon which the conference split. Japan presented no obstacle, and, though America was reluctant to agree on a high total cruiser tonnage, and was not agreeable to anything less than equality, even in cruisers, and notwithstanding the special position of the British Empire, the two nations are quite willing to accept an equality in cruisers. But the types of ships required by Great Britain and America differed in essential particulars, and it was not possible to reconcile the varying points of view, based, as they were, upon actual differences in the geographical structure of their territories.

The one encouraging factor in the failure of the conference is the note of friendly regret on which it ended, and the possibility foreshadowed of further negotiations between the three Governments.

This lecture might well be concluded with a quotation from the final statement at the conference made by the chief British delegate:

"Our proposals for reductions in size, tonnage, and calibre of guns, and for the extension of the life of capital ships, would save over £50,000,000 to the British Empire during the period of replacement, and a proportionately large saving for other countries. Our cruiser proposals would save £1,000,000 on every cruiser to be constructed in future."

N.Z.'S CHAMPION LISTENER

59 STATIONS WITH FIVE VALVES

MEET MR. CLAUDE P. GREY

(By "Switch.")

Who is New Zealand's champion broadcast listener?

Permit me, kindly, to nominate Mr. Claude P. Grey, of Shannon, about 50 miles north of Wellington. If anyone has a colt to beat him, trot him out. I mean a champion 5-valve-set broadcast listener.

Remember, please, Mr. Grey is practically a novice, and what he doesn't know about radio would fill a public library. Yet, this young gentleman has some 50 scalps of broadcast stations hanging on his belt. Here is a chap who just reaches out and gets what you want, if the station happens to be on the air at the moment.

Now, take this from me, this is the dinkum stuff, and I promise any gentleman who desires to investigate this claim to drop in on Mr. Grey any evening, and he'll be convinced in the flicker of a dial. And, mind you, you will find Mr. Grey with his loudspeaker at work any old morning till 1 o'clock, 2 o'clock, and (whisper) he's been scooping in a "beyond-the-beyond" stranger lately at 3 a.m. The newcomer, I'm game to wager my pet 200s, is one of those new Indian "Big Bertha" outfits. Of course, Mr. Grey doesn't count this among his scalps until he gets the call, or has honest-to-goodness knowledge what station it actually is. He never guesses, and doesn't believe that eating raw steak will make him hear more stations.

A WONDERFUL LIST.

Just ponder over this list of stations definitely heard by Mr. Grey per loudspeaker:—

Philippine Islands.—KZKZ, and KZRM. Total 2.

Japan.—No call (318 metres) — No call (335 metres), JOCK, JOAK, JO BK. Total 5.

United States.—KFXD, KFOR, KF SD, KSL, KNX, KFVD, KFRC, KFW B, KDKA, KFAB, WBBM, KEF, KF WI, KOA, KMTR, KCC, WGY, WLW, KPO, KFI. Total 20.

Australia.—4QG, 2MK, 2UW, 2KY, 2UB, 2GB, 2BL, 2FC, 2LO, 3AR, 3DB, 3BY, 3SW, 3DA, 5CL, 5KA, 5DN, 7ZL, 7RS, 7HL. Total 20.

New Zealand.—1YA, 1ZB, 1ZQ, 2ZF, 2AX, 2YK, 2YA, 3YA, 4YA, 4AC, 4AK, 4ZB. Total 12. Grand aggregate, 59 stations.

Yes, they are a magnificent muster, and I truly envy that modest young fellow up in Shannon. He admits he doesn't know anything about circuits, and I know he couldn't tell you from memory what type of valves he's using. Claude (I beg his pardon) I mean Mr. Grey, just went along and bought an imported receiving set and got the dealer to show him how to shuffle and cut the dials of his "snake-box." So, gentle reader, it is not necessary to be a radio expert to scoop in the long-distance stations if you have a good set, and perseverance—and a good position.

RECEIVING SET AND AERIAL.

Mr. Grey's set is a five-valve Yank with just two dials and 4.5 volt valves of the right make. It's a simple-control arrangement so that your mother-in-law could operate it. My gosh, fellows, he's got a loudspeaker, too, that absolutely entrances listeners.

Here comes the cream of the thing—Claude's (Beg Pardon—well, he calls me Bill and I call him Claude)—Mr. Grey's aerial system. Length of aerial, 105ft. on top, or including lead-in a total of 135ft. Oh boys, it's the goods. Wait a moment and I'll tell you about it. The further mast is 45ft. in height

(sure it's a danger to the seagulls) and the nearer mast stands 27ft. Just a nice slope down towards his set so the radio waves can sit right down and slide into the Grey chateau. Here's another starter—(Don't know where he got this idea from); he's got a hollow copper ball (lifted from a cistern) inserted in his aerial at the lead-in end so that the radio waves have to skate over, under or around this ball before they can get down and tickle his valves. He's got the copper ball polished and then varnished to protect it from being corroded by the weather. No, no, no—it's no use you asking me "what for." There it is, this copper ball, and it doesn't harm the dear little radio waves. Anyway, there it is, and anyone who wants to remove it runs the risk of waking up the next week in the blissful quietness of a casualty ward with a nice kind nurse to put a thermometer in his thirsty mouth. For Mr. Grey knows plenty about upper-cuts, under-cuts, right swings, straight lefts, etc. Go and ask him, yourself, about that copper ball, but I'll wager you he couldn't explain the radio-electrical effect of the thing.

A SPLENDID EARTH.

Naturally, he's got an "earth" and it's a good'un, too. In fact there are two: He's soldered the earth connection of his set to the end of a 3ft. cable which is spread out as a sort of earth mat and buried two feet below the surface. A foot further on he's driven a hollow pipe 6ft. into the North Island, and the earth connection of the set is also soldered to this pipe. In dry weather Claude (beg pardon), Mr. Grey pours champagne or water (I forget which) into this pipe, and there you have it, an "earth" the Duke of York would be proud to own.

ABSORPTION AROUND WELLINGTON.

Let's be serious now. This fine record of Mr. Grey's I'm going to nail to the mast, and if anyone can pull it down let him write me particulars. We poor ordinary plain listeners in Wel-

lington can't hope to beat this, and I'll tell you just why. There's a something in the bowl-like hills surrounding 2YA-ville which reaches out and licks up the long-distance stuff that comes squirting through the ether. "Absorption" the experts dub it. Whatever it is it's rough on the long-distance stuff. Not that it can grab all the Australian waves, but it catches the stragglers, and any hardened old Wellington broadcast listener who goes up country a few miles will get the surprise of his life the way those radio waves from beyond the heaving ocean smack up the loudspeaker. I know, 'cause I've tried it out. Ask Billing, Megan, Ralph, Wilberfoss, G. Robertson, Wyles, and other members of the radio hierarchy and they'll tell you the same thing from personal experience.

A WONDER STATION

830 MILES BY CRYSTAL

From time to time radio authorities have contended that the broadcast stations of the future are to be of power gigantic, almost beyond comparison with existing super-stations. News now comes to hand of a wonder station which is operating in Germany, with an output of 24,000 watts and a crystal range of 830 miles.

This giant station is located on a wooded height between the rivers Wupper and Ruhr, in Germany's greatest industrial district, the Rhineland, six miles north of Elberfeld, and a little more south of Essen. Its studios are at Elberfeld, Düsseldorf, Köln (Cologne), Dortmund, and Münster; though it may be connected by land-line with any other German broadcast station. Its input is 60 kw.; output, 24 kw.; wave-length 408.8 metres (840 kc.).

A Powerful Transmitter.

The transmitter operates in three stages; the first a 400-watt valve with

two 50-watt modulators; the second has two 1½-kw. valves; and the third employs three 20-kw. valves, the various types used being illustrated above. On the plates of the intermediate valves, 4000 volts is used, and on the final amplifiers 10,000.

Six huge rectifier valves are used to convert the 5000-volt A. C. received over long-distance power lines; this current supplies the valves, except for the filaments of the smaller ones, for which a D. C. generator is used.

The Apparatus House.

The apparatus is housed in a single building, 75 x 140 feet. The transmitter room, 32 x 45 feet, is divided by a 14-panel iron switchboard. All the operating levers are grounded for the protection of the staff.

A special refrigeration plant is included to cool the plates of the valves; it consumes hourly about 1300 gallons of water, which is first put through a softening process, in order that scale may not be deposited in the jackets around the valve plates.

A Lofty Aerial.

A T-aerial, of five 70-metre (230-foot) wires, is suspended between two 328-foot steel towers, 820 feet apart. These are not guyed in any way, but set in concrete foundations, with porcelain insulation about their lowest members. Condensers shunted by variometers are used to tune this aerial, which was the subject of much experiment.

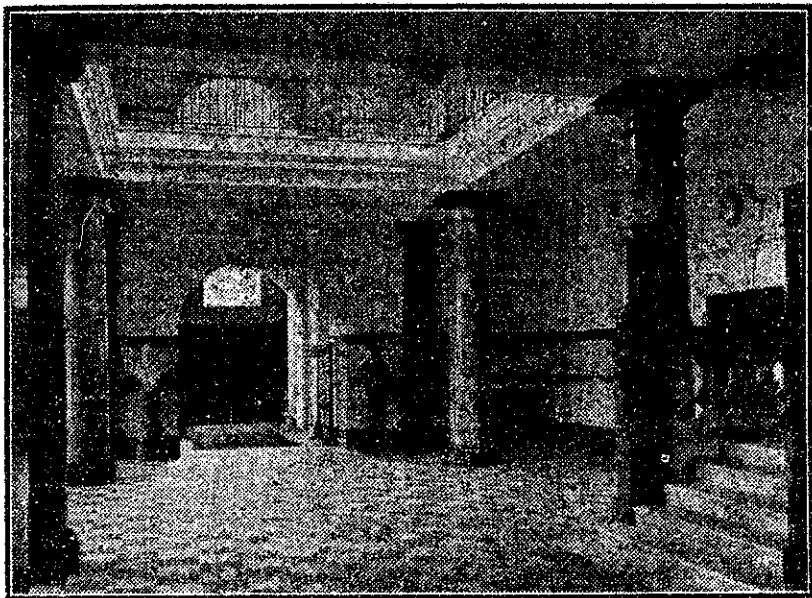
Eight Miles of Earth Wire.

The ground is a radial net of copper wire, buried about three feet deep, and joined by an outer circuit. Eight miles of wire are thus used; and excellent reception of this station (830 miles on a crystal set) is attributed to this elaborate system.

Powerful as Langenberg is, a "dead" area for its reception has been found south of Cologne; and a relay station is proposed for the benefit of the residents of this district.

How Members of Parliament do their Work

In this series of talks Mr. C. E. Wheeler is giving listeners a very entertaining and illuminating glimpse of the life of Members of Parliament. He has shown that there is no room for oratory in Parliamentary life; what cuts more ice is simple, solid sense, soundly said! And there's a great deal more to Parliament than the talking! There's the detailed committee work—the hours of routine—and the constant attention to constituents' needs, to which there is no end. All members have their little list of wants, and woe betide them if their "average" be small!



THE HANDSOME MARBLE LOBBY OF PARLIAMENT BUILDINGS.

—Photo., Publicity Department.

In his first "talk," Mr. Wheeler indulged in a gentle jibe at the unresponsive nature of his unseen audience, this being a reflection of the effect upon himself of talking to an inanimate microphone, whose most marked characteristic is a vast capacity for listening—and saying nothing. But Mr. Wheeler has found that the listeners are not unresponsive. So many good, solid folk sought him out to tell him how they had "listened" and enjoyed his talk that he now desires to apologise. He has learnt that the listeners have a "come-back," although, of course, it takes longer to get there!

At any ordinary meeting, a resolution is carried, and usually the unfortunate Secretary is left to attend to the matter. Resolutions can be passed very easily under such circumstances. But in Parliament things have to be more carefully done, because all the machinery of the State is there to carry out the decision. It might involve an obligation on every person in the community—the Statute is passed, and what it directs must be done.

So it is necessary that Parliament should not act in haste, and let New Zealanders repent at leisure. Though any member of the House may introduce a Bill, that privilege carries no guarantee that the Bill will be adopted—on the contrary, unless the Government is responsible for a measure it rarely has a chance of success. Daylight saving has been the subject of a private member's Bill for nineteen sessions, but it has not yet passed.

If the Government decides that legislation is desirable on a particular subject, the Minister who originates the idea has to submit his project to all his colleagues at a meeting of Cabinet, because the Government as a whole is responsible for policy, and any default by one Minister may prejudice them all. Policy having been determined by Cabinet—and in this discussion, in actual practice, the Prime Minister has an absolutely commanding voice—the proposals are drafted into legal shape by skilled lawyers who have made a life-long study of the form of statutes. Now the Bill begins to take shape, and printed drafts, marked in a very large type "Confidential," are circulated to all Ministers so that they may become fully advised of its contents before the measure is finally approved by Cabinet.

THE LITTLE BILL IS BORN.

Eventually the time arrives for the introduction of the Bill, a formal process. The title only is known at this stage to the members outside Cabinet, but immediately following the introduction, a date having been fixed for second reading, the Government circulates copies, and there is usually a large supply available so that members may send the proposed measure to any of their constituents who may be interested.

The Bill explains its main purpose in a preamble, and then follow the definitions, because it is important that there shall be no two opinions about the meaning of outstanding terms or titles. The operative clauses are carefully numbered, with an additional numbering on the margin, so that any line in the type of the Bill may be picked up at a glance when amendments are to be inserted.

IT IS READ A SECOND TIME.

The second reading is an important stage. Parliament now has an opportunity of debating the principles involved. Each member may speak for 30 minutes, and if the Bill survives their criticism it goes to the committee of the whole House, when Mr. Speaker leaves control to the Chairman of Committees, and greater latitude of debate is secured by permitting each member to speak on the same point four times, each opportunity extending ten minutes.

Such an arrangement gives almost unlimited chance for discussion, and if there is strong opposition the measure may never get through, because the amendments and the ten-minute speeches multiply. Committee stage is the happy time for the "stone waller." The Government may have a large majority, but it cannot use its power of numbers until the House is ready to vote—and the minority, while quite powerless in the division lobbies, may manage to keep up such a volume of talk that at last the Government recognises the hopelessness of getting on with the business unless the objectionable point is dropped for something less contentious.

SEDDON'S SIMPLE STONEWALL.

"Stonewalling" is a term which Mr. Speaker will not permit in debate, but the practice he cannot stop, and it constitutes the most formidable weapon of a parliamentary minority. Old hands quickly recognise a stonewall speech—the orator filling in the time saying nothing in particular, though Mr. Speaker is keenly listening to prevent

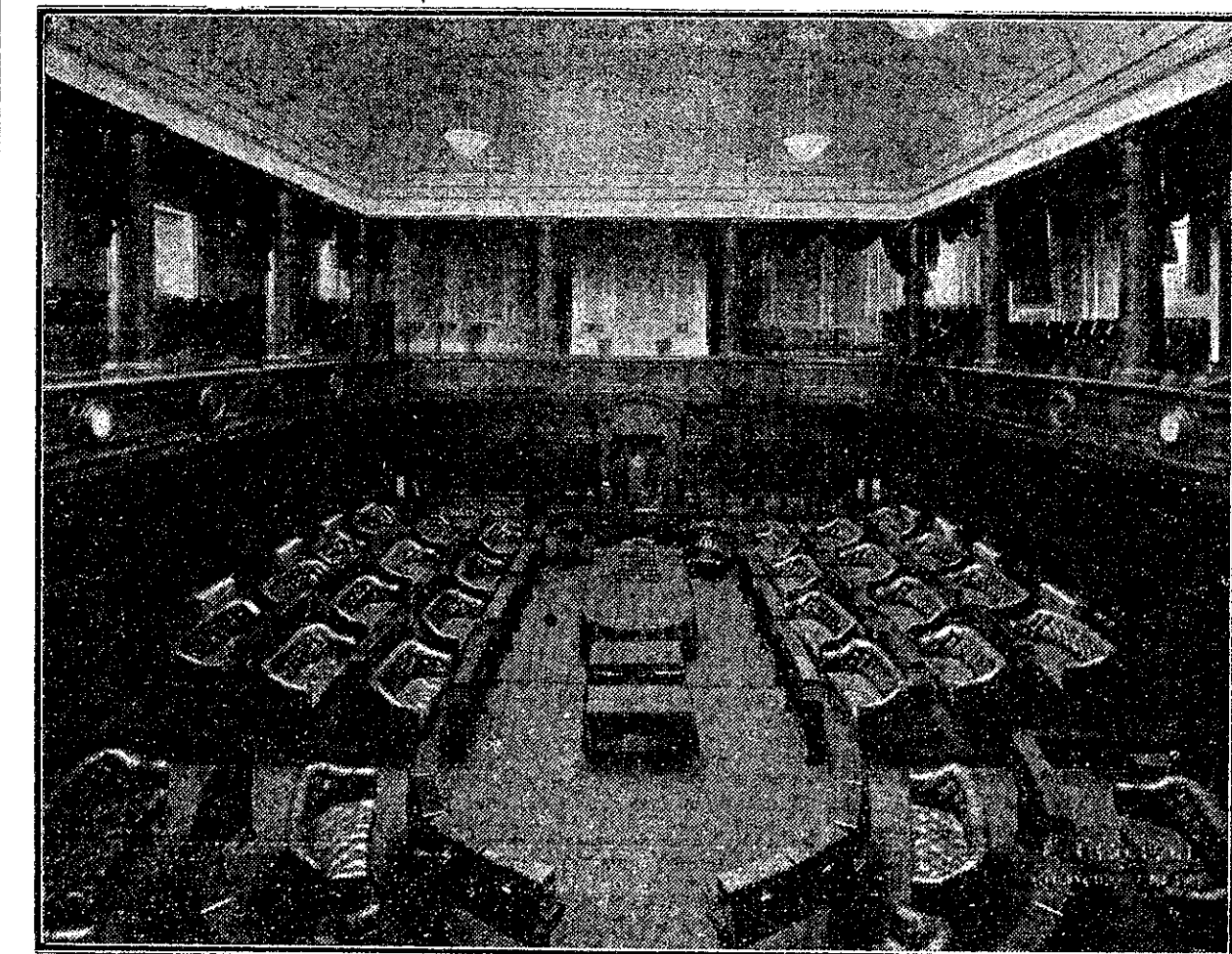
the introduction of irrelevant matter. But it is hard to trip up such experienced talkers as members of Parliament. They keep up the flood of talk by very amusing but strictly legitimate expedients. The late Mr. Seddon when in Opposition provided himself with an almost unlimited text when he endeavoured to show how one measure, if passed, would prejudice his own constituents. He took up the Westland electoral roll, told the House how the Bill would affect the man whose name appeared on top, and proceeded to deal with every individual alphabetically, and at great length. He got as far as the "Ls" before the joke was called off.

If the talk does thin out on a particular motion, and the stonewallers require more material, they have merely to move another amendment, when the ten-minute speeches (four each) commence again.

THE ART OF DIVIDING.

Another effective time-wasting method is the moving of a series of amendments, on all of which the House must divide. The Chairman puts the question, declares: "The Ayes have it," the stonewallers shout "The noes have it," and then all through the ramifications of the big Parliamentary building, the division bells ring, warning members, wherever they may be, that within two minutes the doors of the Legislative Chamber will be locked, and if they wish to vote they must be inside. The time limit for this sprint into the Cham-

ber is marked by an old-fashioned sand glass.



The Chamber of the House of Representatives where our legislation is made. The Speaker's chair is seen in the centre under the Press gallery which is directly overhead. The public and other galleries are on either side. Only very distinguished guests are allowed on to the floor of the House.

ber is marked by an old-fashioned sand glass.

COMING OUT OF COMMITTEE.

A Bill having emerged from Committee, this fact is reported to Mr. Speaker in the House, and the measure is set down for third reading on a subsequent day. This process over, it has to be dispatched with the due formality of a message delivered to the Speaker of the Legislative Council, requesting its concurrence with the measure. All the processes are then repeated in the calm unhurried atmosphere of our colonial House of Lords, which will form the subject of a future talk.

Our Bill passes the Council, and it is then presented, specially printed on parchment, to His Excellency the Governor-General, whose endorsement is given on behalf of His Majesty. In 99 cases out of a hundred this is regarded as purely formal, but if legislation is passed in New Zealand affecting issues of more than domestic concern, such as navigation laws, it is sometimes necessary to secure the consent of His Majesty, which in effect means the reservation of the Bill for the approval of the Imperial Government.

THE OTHER WORK OF MEMBERS.

I will now go back over the track, because our survey of a Bill has re-

permitted to appear, and the proceedings become longer still.

PETITIONS AND APPEALS.

Parliament is the final court of appeal for the people, and these select committees are thus of great importance. Statutes are sometimes passed which operate unfairly. The injustice might be admitted by the Courts, but the Judges have to follow the law as it stands. They have no alternative, and even the Court of Appeal can only interpret the law and give a decision accordingly. However, if the decision involves an injustice, the injured person can appeal to Parliament by way of a petition, and if he makes out a good case to a select committee, Parliament will legislate and put the defective Statute right.

Last session select committees dealt with nearly 300 petitions, and made 331 reports to Parliament.

THEY ALL HAVE THEIR LITTLE LIST.

Now it will be realised that a member's time is not by any means taken up in making speeches in Parliament. He has work of at least equal importance on select committees, and there is still another big task for him. He is a kind of general agent for his constituents. One might wish to be made a J.P. He asks the member to manage it. Another wants a job in the Public Service. The member cannot help him

this talk on Parliament at Work be extended by five minutes."

Very likely, someone who is impatiently waiting for musical items would prefer immediate suspension. In ordinary practice he would move an amendment to this effect, but in committee of Parliament the amendment would have to take the following form:—"That all the words after 'That' be eliminated with the object of inserting other words."

An amendment of this kind, if carried, leaves the field completely open. Any other words may be inserted. It is on record that a member who persistently forced a Bill before the House to deal with the complicated subject of matrimonial relations, got into Committee with his little Bill, which had only one operative clause, and he incautiously agreed to amend it, believing that someone intended to then move the insertion of a modified form of words meaning the same as the original intention, but expressing it more clearly. Alas, the objectors took charge at this stage, and the operative clause having been reduced to the single word "That," they successfully objected to the inclusion of any other words, so the Bill went back from committee with its full title, one clause containing one word "That," and the imprint of the Government Printer.

APOLOGY TO LISTENERS.

In the opening talk, when discussing the unresponsive nature of the parliamentary audience, and its deadening effect on the speaker, I suggested that my wireless audience was similarly dead and difficult to address.

I am going to recall everything critical about the listener-in. The number of those who took the trouble to find me out and say pleasant things about the little lecturette was surprising. It encourages me to do my best to interpret to a wide—and now I can say, an appreciative, audience—the real spirit of our most important national institution.

U.S.A. REGULATIONS

REDUCED POWER ORDERED

The reallocation of the broadcast stations of the United States, just completed by the Radio Commission (says the New York "Radio News"), leaves few of them on their old frequencies, and the official announcement is that the arrangement is only tentative. There are too many stations in the waveband, in the present state of the radio art. The power of most of the larger stations has been notably reduced; the average for the whole seven hundred stations is now about 645 watts; but twenty-seven stations have half the power and the three largest have about as much as the three hundred smallest, combined. The majority range between 500 and 100 watts.

Stations Share Hours.

There are now but two high-power stations on each of four frequencies; but as high as seventeen on one of the longer wave-lengths, 223.7 metres, NAA, the Government station, is alone on a wave otherwise reserved for Canadian use. To make even this arrangement tolerable, over two hundred stations have been required to share hours with others nearby; in New York five are "sleeping in one bed." The trouble is, of course, as one distinguished radio authority puts it, that a station's interference range is enormously larger than its service area. While there has been general acceptance of the commission's decisions, because of the realisation that its measures are intended for the general good, there has been much protesting by smaller stations assigned to the lower wavelengths in the crowded New York area; and WMSG has commenced legal proceedings, with a view to testing the constitutionality of the radio act.

San Salvador, Central America, has a broadcast station, AQM, operating on 482 metres. To encourage listening, the Government has reduced the tax on receivers, and made more favourable regulations.

He must refer him to the Public Service Commissioner. Nearly everybody seems to need a State Advances loan, and the local member has to do his best to facilitate the matter. An Auckland district member recently produced an address book with hundreds of names in it.

"Your political supporters," I suggested.

"Well, I hope so," he replied, "but every name represents an applicant for a State loan, and there are eight hundred on my list. I spend one third of my time dealing with this business."

The representative of an adjoining electorate has 320 applicants on his list of loans.

A BILL ABOUT "THAT."

The form of amendment in Parliamentary practice is so different from that adopted at ordinary meetings that it is worth describing. Assume that my unseen audience was sufficiently well grouped to express its opinion on what they are hearing to-night. Some enthusiast might kindly move: "That

her is marked by an old-fashioned sand glass.

Marking up the division lists occupies at least another three minutes, so that a division takes up an appreciable amount of time. A famous stonewall organised by the late Mr. Massey in December, 1909, was based on the time-wasting opportunities of divisions. He moved the reduction of a £400 vote sovereign by sovereign—each £1 reduction meaning a division. It would have taken at least a fortnight to work off all the possible divisions—to say nothing of the talk in between—so after four days of continuous sittings, with only short intervals for meals, an exhausted Government Party gave in, and compromised.

A Standing Order which directs that no new business can be introduced into Parliament after 12.30 a.m. is sometimes utilised by stonewallers to prevent progress on a measure which would otherwise be reached before the end of the sitting. If it is second on the list, they discuss with great care the Bill No. 1 on the Order Paper, lose all interest in the matter on the stroke of 12.30 a.m., and smilingly agree to an

lated solely to proceedings before Parliament assembled. Few Bills reach the committee stage in the Legislature without having first been carefully considered by a select committee of members. There are twenty-five select committees of the House of Representatives, each dealing with important subjects as the titles of some of them indicate. The committees include Lands, Industries and Commerce, Petitions, Agricultural and Pastoral, Finance, Labour, and Local Bills. The really important constructive work in amending Bills is done by these select committees. They meet in the mornings (Parliament sits at 2.30 in the afternoon), and they expect to hear from the Minister in charge of the Bill an explanation of every clause. Departmental heads give evidence, and witnesses may be summoned from sections of the community interested. Any person who may be prejudiced by a proposed measure has the opportunity of explaining his grievance to the appropriate Select Committee, and when the subject of a Bill concerns Labour conditions or land tenure, the hearings are usually lengthy. Counsel are sometimes

THE NEW ZEALAND Radio Record

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A. J. HEIGHWAY,
Managing Editor,
"The N.Z. Radio Record,"

P.O. Box 1032,
WELLINGTON.

WELLINGTON, AUGUST 26, 1927.

THE PROBLEM OF FADING

In another column we outline an investigation into the problem of fading, in which we ask the co-operation of listeners. We think this will be of service to broadcasting. The problem at present is a baffling one. The tendency of listeners is to attribute the fault to the station. A special article issued by the British Broadcasting Corporation, which we published several weeks back, stated that fading was not attributable to the station, but to the course taken by the waves after leaving the station. It is also thought that the quality and nature of the land masses between the recipient and the station may have some effect, while the disturbance created by inexpert listeners may also be a factor. Whatever the causes be, however, we think an investigation along the lines we propose will be of value at least from a practical, if not from a scientific point of view. The returns made will be duly analysed, and a special map prepared showing the areas subject to fading, and so far as possible the intensity of it. As matters are now, some report fading and some report no fading. If it be found that the fault, generally speaking, is at the reception end, good will be done in directing the attention of listeners to the need for proper care and skill in reception. If, on the other hand, the uniformity of fading reports, indicate the cause to be in the station, a foundation will be laid for further investigation, which will be of value.

THE OSCILLATING FIEND.

Several items in this issue emphasise the duty of all listeners to their neighbours. A driver is not allowed on the public roads in charge of a motor vehicle without having demonstrated his capacity to at least not be a definite danger and nuisance to others. In wireless reception no standard of expertness is required, nor perhaps is desirable, before the issue of a license, but this does not remove the obligation of common decency on the part of owners of valve sets to avoid giving annoyance to neighbouring listeners by inexpert swinging of the dials. There is recorded an instance where, in father's absence, the children searched the ether for harmony—and created the most shrieking discords in neighbouring houses. Further, the testimony of a very expert listener and radio enthusiast is available from Auckland to the effect that never yet has he been able to enjoy 2YA because of the shrieking and howling of others. This suggests that there is need for a definite campaign for increased efficiency on the part of listeners. The results of greater all-round individual efficiency would not only be greater pleasure to the person concerned, but to the neighbours as well. The lectures that are being given over the air from the various stations on radio features are therefore all to the good, and may be expected to gradually achieve their object of raising the standard of reception skill throughout the community.

POLITICS AND BROADCASTING.

We cannot congratulate the Labour Party on the showing made by its members in their criticism of the Government in relation to its loan of £15,000 for the purpose of erecting 2YA. There is a type of mind which seems to delight in suggesting unclean motives and underhand methods—and it is a fair enough inference that those who are so ready to impute ulterior motives and discreditable action are the most likely to indulge in them should opportunity offer. The Postmaster-General deservedly showed heat in repudiating the inane suggestion that the Government had been bribed to grant this loan by "services" rendered in other directions. The suggestion carries no credit to those making it. The facts are plain enough. They have already been given in our columns. To meet the Government's wishes in making 2YA a super-power station able to cover the Dominion in daylight, and the South Pacific at night, the Broadcasting Company, after itself finding £15,000 more than its original commitment of £20,000, secured from the Government a short-dated loan of £15,000. The security given was a first security on the assets, plant and equipment of 2YA, other than the land, and as such is satisfactory to the Government. This arrangement permitted the plans to be carried forward quickly, and as the Prime Minister states, gave results cheaper than if the Government had itself undertaken the whole cost. But the Labour Party, for party purposes, seeks to suggest some hidden ulterior motive. Their story is not even consistent. In one breath they refer to the Broadcasting Company as "a wealthy corporation"; the next moment it is suggested that the finances are such that the risk is a bad one! With such a carping and inconsistent opposition, what a delightful medley would result were some political factions and factors to haggle over the details of programmes, etc. The only safe rule is to completely eschew politics. The "fly in the ointment" from the Labour point of view seems to be that the Leader of the Opposition, although invited to attend the opening of 2YA, was not invited to speak; so he stayed away. Hence the uproar. It rather sounds like a small boy throwing bricks because he wasn't at the party. The Opposition assumption to rank on a parity with Ministers of the Crown is nothing but an assumption, and as such may be taken at its due weight.

LOAN FOR 2YA GOVERNMENT'S ACTION FULL SECURITY TAKEN.

During the debate on the Budget the Labour members of the House of Representatives have made several attacks on the Government in connection with the agreement with the Radio Broadcasting Company, and the security given to the Government for the loan advanced by it to the company. It was stated that the charges registered against the company were firstly a mortgage of £5000 to the Bank of New Zealand, and secondly, a debenture of £15,000 to the Crown. This would make it appear that the Crown's security was subject to the Bank's first mortgage.

This, however, is not quite correct, as the Prime Minister, the Hon. J. G. Coates, explained. It appears that by an instrument dated July 1 last the bank released its charge over the Wellington assets of the Broadcasting Company, for the purpose of giving priority to the debentures issued in favour of the Crown. The Crown therefore has a first charge on all plant, apparatus and assets in connection with the station other than land and a charge on the land subject to the mortgage of £5000 in favour of the bank. The assets are valued approximately at £27,000. It would appear, therefore, that the Crown's interest is fully protected.

The Government, said Mr. Coates, had thus got the station cheaper than if they had been responsible for the whole station and there was also this to be said, that none could forecast what would happen in these days in connection with wireless. It was possible that in a few years the whole thing might be turned upside down.

It was deemed advisable, however, to have a high power station erected in the capital—a station that could be heard in daylight throughout New Zealand, and the Pacific. The value of such a station would be great, especially in case of emergency.

Labour Innuendoes.

On another day various Labour members laid themselves out to bait the Postmaster-General on the same topic. Mr. Nosworthy replied, with force and vigour.

Mr. J. A. Lee (Auckland East) asked regarding the advance of £15,000 to the company for the erection of the Wellington station. The item indicated, he said, that a wealthy body had secured the ear of the Government to a very substantial tune. Did Mr. Goodfellow or Mr. Harris suggest to the Government that, as they had been of service in helping to sabotage dairy control, and that they had helped it in other directions, they should receive some reward such as this loan?

Mr. W. A. Veitch (Wanganui) claimed that, although the Minister had denied that the amount was secured on a second mortgage, to all intents and purposes it was. The gentleman behind the company had a way of getting all he wanted from the Government. The company was presided over by Mr. William Goodfellow, who also presided over the New Zealand Dairy Company, which had 2000 shares in the Radio Company, and which had also received important concessions from the Government. He was afraid there might have been other transactions which had not come to light bearing on that question.

Renewal of Licenses.

Mr. E. J. Howard (Christchurch South) said that it was ridiculous that a radio license could not be renewed a day before the date of expiry. It was mere "leg-pulling" to say that the Wellington broadcasting station was the finest and best outside of Rugby. Ninety per cent. of Wellington listeners-in had had their sets put out of action by 2YA when it was working. The station would be out of date very soon, and it would be useless in time of trouble. Speaking with considerable heat, he asserted that the Postmaster-General, who admitted that he knew nothing of radio, was merely a rubber stamp, and had muddled matters in regard to radio in the same way as he had muddled everything else. The listeners-in were not getting a fair deal from the Department.

The Minister: That is all the thanks the Government gets for what it has done.

Mr. A. M. Samuel (Ohiemuri) urged a revision of the fees, so that a nominal charge would be made for cheap sets, such as were used by children or persons who could not afford higher-priced sets.

Minister's Reply.

The Postmaster-General (Hon. W. Nosworthy) replied that arrangements could probably be made to enable licenses to be taken out before the due date to avoid congestion. He took no exception to the request for information concerning the radio company's loan. He combated the suggestion that the Government had lent the company £15,000 on a second mortgage, and gave the facts as at the opening of this article.

Speaking with warmth, he said it was no use members blaming the Government, or saying they had indulged in political manipulation with regard to the company, which had taken the matter up when nobody else would touch broadcasting. Some members opposite wished to force the Government into absolute control of the broadcasting, and that was one of the principal objects of the criticism that day.

There had been nothing but fault-finding in regard to every offer the Government had made. He did not believe that members who were criticising had any time for broadcasting.

COMBINED INVESTIGATION OF FADING PROBLEM

AN APPEAL TO "RECORD" READERS

In consultation with the Broadcasting Company we have decided to invite our readers to join us in an investigation into the problem of fading. It is amazing to note, from hundreds of letters in which enthusiastic writers mention points in relation to reception, how conflicting is the experience in regard to this trouble. Here is a writer from Stratford who says of 2YA: "it is the nearest thing to a perfect station received here, with practically no fading." On the other hand many Auckland areas report decided fading. A writer at Port Ahuriri says: "2YA (Wellington) is being received here anything but in a satisfactory way—inclined to be distorted, and fading rapidly at all times. On Saturday the 18th inst., 3YA, Christchurch, relayed a portion of 2YA's programme. Several times 2YA faded completely out, and on changing quickly to 3YA I found it coming through splendidly—no sign of fading at all."

From the South Island also, there are divers reports. From Southland some receptions are reported good and some bad. From Dunedin a writer says: "Fading is noticeable some evenings, but reception at Taieri is stronger than from Dunedin."

Obviously where there is an effect there is a cause. That cause is either fundamentally at the transmitting station, at the receiving end, or in between, either in land or atmospheric influences.

It occurs to us that a useful service might be rendered by the simultaneous taking of records at diverse points of the reception of a particular station at particular times. We propose, therefore, to select ahead, one particular evening's transmission from 2YA, and request as many of our readers as feel inclined to undertake the service, to record the results if possible for the full evening from 8 o'clock to 10 o'clock. To help their record a time chart will be published in the "Record" beforehand, giving space, minute by minute, for the full two hours with columns for the record of fading, either slight or intense. With this chart before them, listeners can, with a pencil, mark the exact moment at which fading begins, and its intensity and duration. Analysis of these reports subsequently will be of extreme interest. If, for instance, 100 per cent. of records from all over New Zealand show that at 8.19 fading began and continued for two minutes, then obviously it is a fair inference that the fault was a general one and presumably occurred at the station. If, again, at a certain time all North Island reported fading and all South Island was clear it would suggest some other cause such as atmospherics. The same analysis would be possible district by district. To summarise the results we would endeavour to compile a map of the whole Dominion, and shading in the area affected by fading with an indication of its intensity, and permanent or intermittent nature. The analysis of the reports sent in would be entrusted to our technical contributor "Megohm," who is specially qualified for such an investigation.

One point we would make on this investigation is that everyone can help, even owners of crystal and one and two valve sets. We want, if possible, the full two-hour's record of the one chosen station—2YA—no variation from station to station because that introduces new directions and intervening conditions. Records are wanted, too, from all distances—a few miles away up to the extreme points of the country.

The time charts and other organising work involved are now in hand and will be published in due course. A special evening will be chosen for the test and if possible a programme arranged to be of the most comprehensive nature to test the transmission.

In their reports listeners will be asked to indicate their local circumstances—such as distance from other valve sets; and, in view of the possibility of interference from other sets, reports from isolated listeners will be particularly valuable.

When the strike took place in the Old Country the only thing left to let the British people know what was going on was the broadcasting, as everything else was swept away. By that means the people were kept informed of what was doing. Members could accuse Ministers from himself downwards and upwards of political underhand methods, even to accusations of bribery practically. The member for Auckland East had asked who came to him (Mr. Nosworthy), and what offers were made. Such insinuations were almost an insult, and if certain members had any respect for themselves they would admit that their action was not calculated to make things better, when the Government were honestly trying to save the people from heavier expenditure by forcing everything into the hands of the Government.

Politics "On the Air."

Labour members also raised the matter of the refusal to put "over the air" a speech containing political matter by an official of a farmers' union organisation while speeches of the Prime Minister and the Postmaster-General were broadcast at the opening of 2YA.

The Postmaster-General (Hon. W. Nosworthy) replied that if he liked to go to the opening of a radio station at Auckland, or Wellington, and say a few words, he had a perfect right to do so. Otherwise he did not know where they were going to draw the line. He was not dying for the lime-light, but would sooner be at work. However, the Prime Minister and himself did go, and he believed the Leader of the Opposition was also asked to attend.

A Labour member: He was asked to be present, but not to speak.

The Minister said he had nothing to do with it, but would have been only too pleased to hear the hon. gentleman speak. Regarding the broadcasting of speeches of members of the Farmers' Union, it was considered that political topics should not be broadcast, and neither he nor the Prime Minister had any desire to touch on politics.

SOS

INFORMATION WANTED.

We have received the following subscriptions, and desire the names and addresses of the senders—

Postal notes for 7s. 6d.—5s. one, stamped Morrinsville, 2s. 6d. one, stamped Marokora.

Postal notes for 7s. 6d.—both stamped Morrinsville.

(What's the matter with Morrinsville?)

Khabarovsk, Siberia, has now a 20,000-watt short-wave transmitter of American make, designed for not only telegraph work between 20 and 100 meters, but also for broadcasts on short waves.

SO CLEVER!

THE DEAR CHILDREN

IRATE LISTENER INVESTIGATES.

A correspondent writes from Auckland province and quaintly tells how he traced a howler to his lair. There is a lot of truth in what he says, too.

"I think there is a bigger problem than fading facing you, and that is howling valves. To-night they are spoiling the concert. I have had my set just on 12 months, and I notice the howling valves are getting more and more month after month. I think the trouble is mostly that when a man buys a set he is taught how to tune it, but he does not teach his wife or family, and when he goes out for the evening the set is left to the family. They try how clever they are in getting one station after another. And it does not matter how they get it as long as they think they have it.

"I was so annoyed last evening at this noise that I closed my set and went out. I heard a set screaming from a house, so I made it my business to call on the people and told them that a few other people had sets as well as they. The woman said daddy had gone out and the dear children were getting so clever. They could get China, Germany, Heaven, and a lot more places! So that is what you are up against."

DRAT THOSE BOYS!

UNAPPRECIATED BACKGROUND.

"Why don't you stop that boy from making that noise?" came a voice on the telephone to 3YA one day last week when the races were being broadcast. "There's no one here making any noise," replied the station. "Yes, there is," persisted the lady at the telephone, who declared that the boy was interfering with her hearing the descriptions of the races. "Oh, you'd better ring up the racecourse and stop the paper boys from calling out," said the office of 3YA.

RAIN NOT BROADCAST!

AN ENVIOUS RUN-HOLDER.

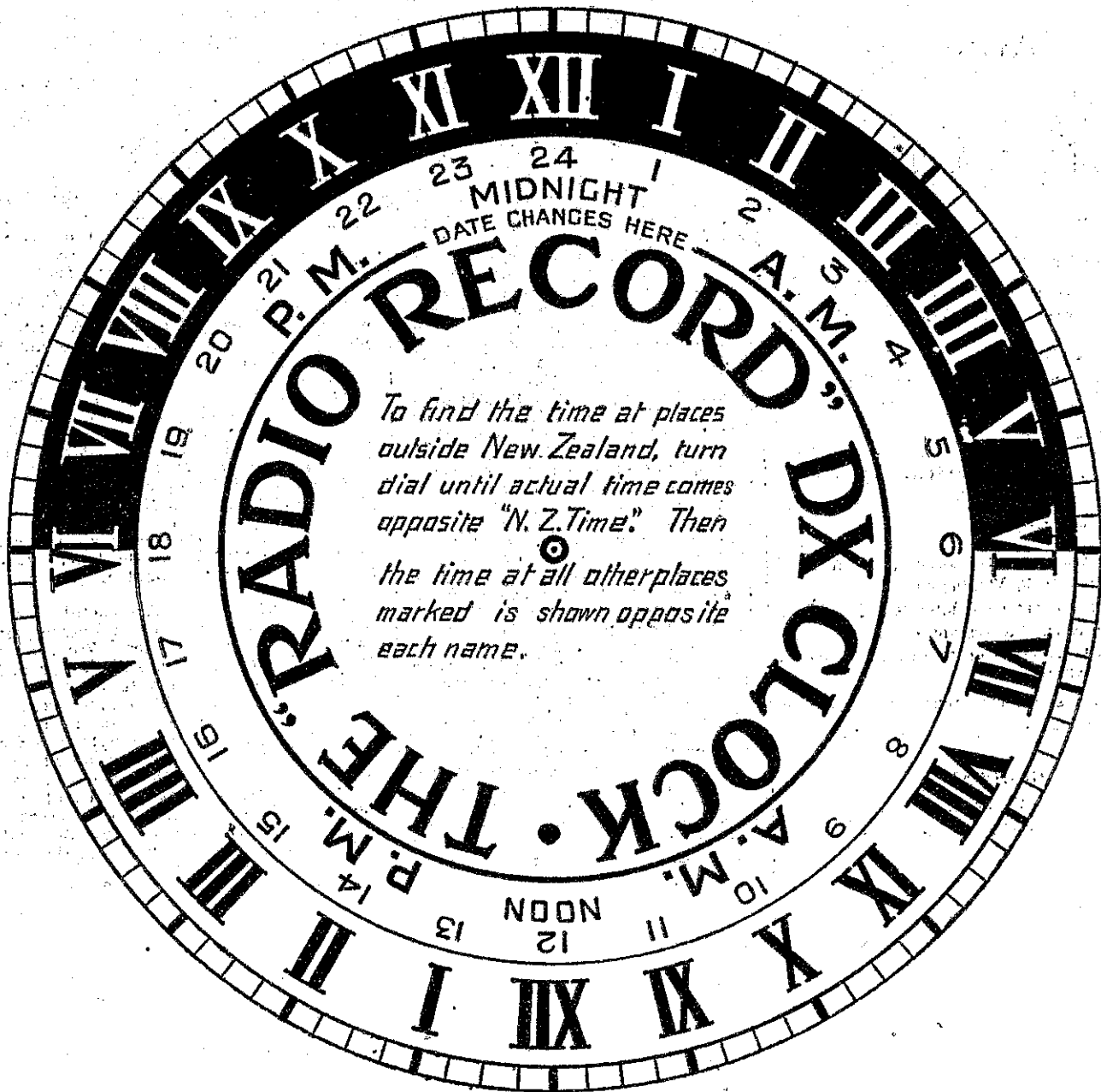
A correspondent on a New South Wales out-back station, where a train passes once a week (for his letter paper states: "Mail leaves on arrival of train on Saturday") interpolates the following in a letter to the Broadcasting Company—

"Last week we heard the announcer say that you experienced good rain, necessitating the postponement of many sporting fixtures. It made us very gloomy, as no rain has fallen here for months, and we are feeding the sheep with corn and scrub."

THE RADIO RECORD

TIME CHART

A necessity for all DX enthusiasts is a reliable time chart so that at any given moment they can assess the time overseas of the station they are desirous of picking up. This is particularly the case now that such great advances are being made in short wave work. Next week Mr. Gerald Marcuse, the well-known London amateur, is to begin his short-wave broadcasts for Antipodean reception. Last week we published a short-wave adapter, which is attracting much attention. Commercial sets, equipped for short-wave reception, are also available, so that one need not be a constructional enthusiast to enjoy short-wave thrills. To utilise this time chart carefully cut away the outlines and mount each part separately on cardboard, preferably fairly stiff board. Then, with a drawing pin or a more permanent mounting fasten the smaller section on to the larger, so that it can be freely rotated. A little ingenuity will enable a very neat and creditable article to be produced which, hung by the receiving set, will prove of permanent value to all enthusiasts. The instructions on the chart are clear. To find overseas times rotate the dial until the actual time here comes opposite "N. Z. Time," then the time at all other places is as shown opposite their names. These times have been carefully checked; in the event of daylight-saving operations, allowance must be made.

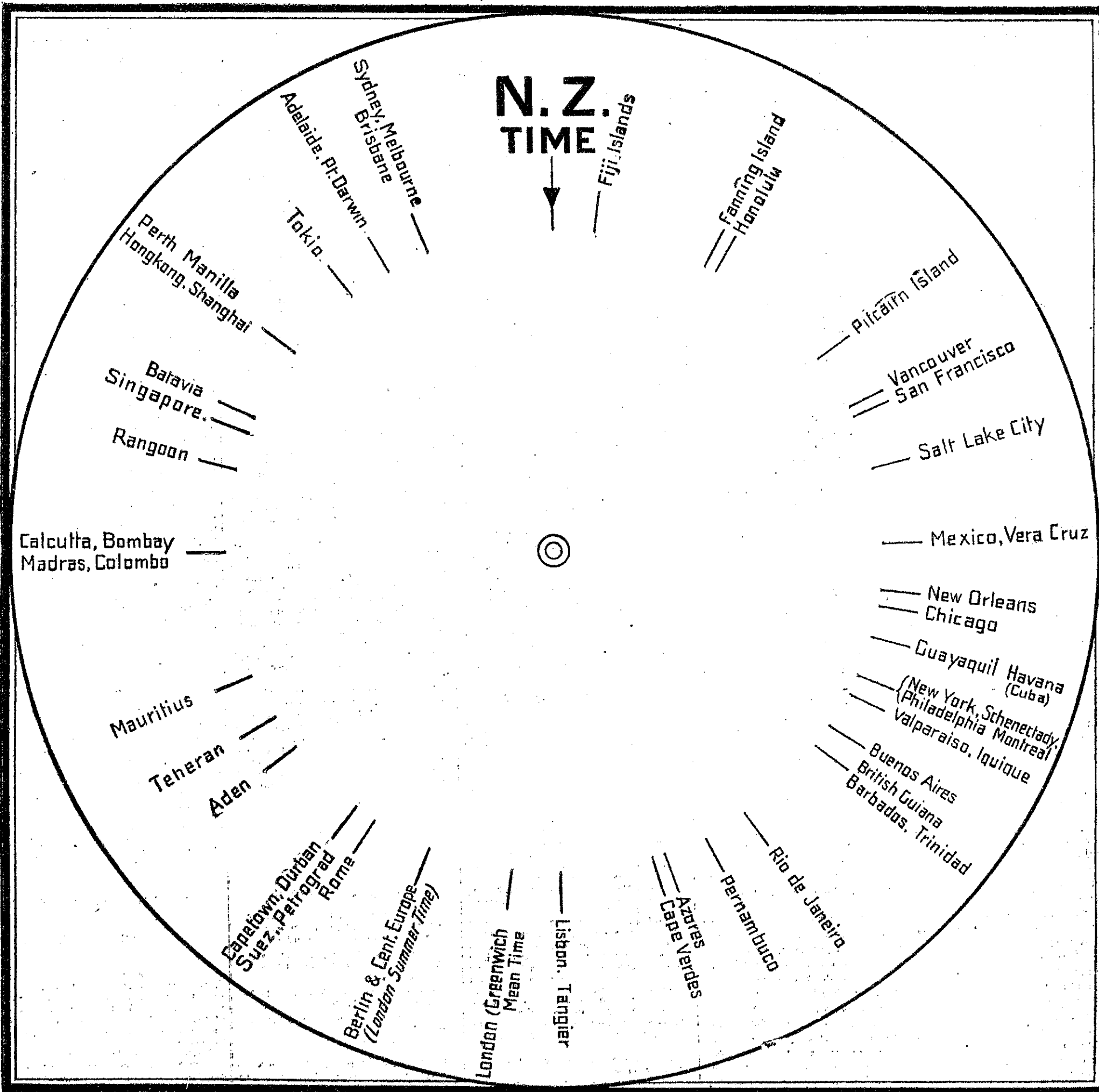


IN THE ARCTIC

A COMING FEATURE.

A coming feature: lecturette from 2YA will be: several talks on his Arctic experiences by Lieut. Gordon Burt.

Lieut. Gordon Burt, who was a member of the British Arctic Expedition, 1925, commanded by Captain Worsley, in an adventure full of thrilling incidents, with tremendous icebergs and polar bears! Mr. Burt left New Zealand in 1922 for his professional education in England, spending some months with the Metropolitan Vickers Engineering Company, and the Vulcan Motor and Engineering Company, and finishing up at Liverpool University, from which he joined the expedition in 1925. The official story is published in "Under Sail in the Frozen North," by Commander R. W. Worsley, R.N.R., D.S.O., O.B.E., etc. His story will be of exceptional interest.



From the Woman's Point of View.

By VERITY.

SESSIONS FOR LADIES

COOKING BY GAS

The art of cooking by gas and the management of the gas cooker was explained on the air last week by Miss Marian Christian, of the Wellington Gas Company. "The new style of gas cooker," said Miss Christian, "with its high efficiency burner and its well-packed oven, enables all classes of cooking to be carried out to perfection both cheaply and quickly, provided the gas is used with care. The greatest heat in a gas oven is at the top, the middle being the coolest. The solid shelf is the browner or deflector, and this is nearly always kept at the top of the oven. The only time it is advisable to move it is when meat and pastry or meat and a cake are being cooked together. The oven should be heated, with the gas turned on full for 10-15 minutes before commencing to cook; the heat should then be regulated to suit the food. For scones and pastry lower light slightly, for sponges and small cakes turn down to half. For large cakes turn gas to a bead. Joints should be put in a hot oven for the first 15 minutes, then lower to a fairly large bead. Scone trays and baking tins should always be smaller than the grid itself, to enable the heat to get up round the trays and brown the top. A thorough knowledge of the right temperature is necessary for success, and

rice, 1 egg, ½ gill milk, rind and piece of lemon, few cherries.

Method.—Grease and decorate mould with cherries. Put crumbs and ground rice into a basin, add suet, baking powder, lemon, and marmalade. Mix with beaten egg and milk, put into mould and steam for 2 hours. Serve with marmalade sauce.

COOKING BY ELECTRICITY

Mrs. Florence Sinclair briefly outlined the advantages of the electric cooker. This was by way of introduction and will be followed by suggested menus with recipes and instructions and advice on cooking, which should be of great help to us. Mrs. Sinclair will answer with pleasure any queries from listeners-in, in connection with little difficulties and disappointments in dealing with electric ranges, and also any special requests for recipes, etc. Send in your queries to "Verity," P.O. Box 1033, Wellington, and they will be dealt with as soon as possible.

"The chief advantages of the electric cooker," said Mrs. Sinclair, "are economy, convenience, and cleanliness. Economy is effected by the heat is under absolute control, there is no waste, and the oven is so well insulated that the heat is retained for a long time after the current is switched off, and cooking continues by stored heat—after the old hay-box principle. It is a proved fact that in cooking meat by electricity there is less weight lost than by any other method, and the flavour is greatly improved.

The convenience of cooking by electricity must appeal to all, as the heat is available at any hour of day or night, and the time for the oven to reach the required temperature can be gauged, so that work can be arranged beforehand. The heat being always uniform, the most perfect results are obtained. Another great factor is that the heat is confined to the stove, so that both the cook and the kitchen are kept cool, and the work is done in comfort with a minimum of fatigue and a maximum of pleasure and satisfactory results.

Cleanliness is a most important thing in the preparation of food, and nothing lends itself so well to the achievement of perfect cleanliness as the electrical range. All surfaces, other than the actual elements, are enamelled, therefore rustless. Particularly in the oven is cleanliness necessary. Every internal fitting, including the side racks in which the food trays slide are removable, leaving a smooth enamelled surface without corners or projections, which is easily kept clean.

Can I use an electric range? is a question that many will ask themselves. Does it require special knowledge or expert training? The answer is "no." If you can cook by coal, oil or gas, then you can cook by electricity with much less trouble, greater comfort and convenience.

The most important point to remember is, to do as much cooking as possible with the stored heat in the oven—that is, the heat that is retained after the current has been cut off—in fact 60 per cent. of your baking should be done by this means.

Points to Remember.

Food requiring the greatest heat should be prepared and cooked first. Pre-heat the oven to between 450 and 500 degrees—which is very hot—put in pastry, scones, etc., turn oven switches to medium and leave for five minutes, then switch off both elements and finish on stored heat.

While these are cooking prepare something that requires a medium oven, such as sponge sandwich, shortbread or bismuits. These should be put in immediately the first tray is removed without using any more current. By the time these are finished your oven is the right temperature for a roast of meat, milk pudding, egg custard, or stewed fruit, etc. This is the meaning of cooking by stored heat. Should you then require the oven hot again for more cakes, turn the switches to high for a few minutes and the required temperature will soon be reached. The oven thermometer indicates the heat without having to open the oven door, and there are three heats—high, medium and low—controlled by the element switches. The heat is distributed by an upper and lower element and is therefore perfectly even. Each stove is fitted with two or more top plates for boiling. Place a saucepan on one of these with the element turned to high; immediately it boils, switch off and the vegetables will cook, by stored heat. If any thing boils over there is a drip

country woman knows none of these. She is spared the jostling of the crowd, but she loses the chance of hearing of this and that. Institute meetings provide just the opportunity and stimulus she requires.

Women's institutes develop a sense of citizenship by basing citizenship on home life. Their great aim is to improve the conditions of country life and to provide opportunities for mutual help and entertainment.

Their activities are many and varied. Members learn to make gloves, baskets, mats, toys, etc. Lectures are given on subjects of interest; demonstrations, competitions, games, discussions, musical items, all go to form their programmes. In some cases in England village industries have been well established, but in the first instance members work, not to make money, but with the object of beautifying and improving their homes.

The proof that the movement meets a real need lies in its growth—for instance, the first institute in England was started in September, 1915, and there are now no less than 3850 in existence. Country women know what they want and what they do not want, and these numbers speak for themselves. We feel sure that the movement will grow in New Zealand, and will be a real help to our women. Any member of the radio family may get further information of women's institutes by writing to Mrs. Dorman at her home in Henderson.



Mrs. Florence Sinclair.

—Photo., S. P. Andrew.

tray which can easily be removed and washed.

To prepare breakfast if toast is required, switch the upper oven element to high. When red hot, place the bread under. During this process, the porridge is boiling on one of the top plates and bacon and eggs frying on the other. After the toast is removed from the oven there is sufficient stored heat to warm the plates.

"What would happen if the power went off in the middle of cooking dinner?" is a question often asked. The reply is "forget all about it and go on as usual, but do not open the door to see how the meal is progressing." The oven will have ample stored heat to continue the cooking until the current comes through again.

A few moments expended each day for fifteen minutes once a week will suffice to keep your electric range in spotless condition. It can be washed with ordinary soap and water; if very greasy a little sand soap can be used.

WOMEN'S INSTITUTES

A very interesting and instructive talk on women's institutes was given recently by Mrs. E. D. Dorman from IYA. The movement is a comparatively new one in New Zealand, the first institute being formed in Hawke's Bay in 1921, but the idea originated in Ontario, Canada, as far back as 1897, for the purpose of educating and brightening the lives of lonely country women.

What is a women's institute? It is an association or gathering of country women of all classes, who meet together at least once a month to discuss



Mrs. E. D. Dorman.

matters of interest to them all. It is non-party political, undenominational, and democratic—not merely a social club, but part of a great whole, which extends almost all over the British Empire.

The aim of the institute is one of mutual service and public duty for all women, whether rich or poor—all come together with the one idea of helping each other. All have the same rights and responsibilities.

"If you know a good thing, pass it on," is their slogan.

Through the institutes every country woman can emerge from provincialism into the broader outlook of national welfare, and her ambitions and needs have at last found both power and opportunity of utterance. City dwellers have a thousand opportunities of picking up scraps of information, but the

country woman knows none of these. She is spared the jostling of the crowd, but she loses the chance of hearing of this and that. Institute meetings provide just the opportunity and stimulus she requires.

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FASHION'S FANCIES

Madame Fleck gave an interesting little introductory chat last week on the trend of fashions, and outlined the new styles, materials to be worn, etc., describing some of the latest models.

Madame Fleck indicated that she will, among other things, speak on how to dress correctly and becomingly on a limited purse. She pointed out that very elegant clothes were



Madame Fleck.

—Photo., S. P. Andrew.

suitable only for very elegant occasions, and that it is just as easy to dress well as otherwise. This should be especially helpful to those of us whose opportunities for keeping up with ever-changing fashions are limited.

GUIDE TO SPRING SHOPPING

"It is a duty as well as a pleasure for a woman to get new clothes for spring," said Miss Britten, in a talk on Spring fashions from 2YA last week. "Of course, I do not recommend reckless expenditure—indeed, such wanton conduct is sure to bring just retribution. Every woman must cut her coat according to her cloth.

"But don't be downhearted if you can't splash. Have you ever noticed how often the woman with the small dress allowance outshines her friends who are better off? It is greatly a matter of careful buying. My advice is, don't be in a hurry. Make it your business to know what is fashionable. Don't choose anything too startlingly 'different' if you cannot afford a good variety of clothes. Don't slavishly follow any style which does not become you. Thank goodness, there is a sufficient choice of colours and variation of silhouette to enable every woman to look well.

Distinctive Hats.

"Milliners have evidently decided not to be outdone by dress designers this season, for if our frocks are now individualistic in style, our hats are every bit as distinctive. It is useless to lay down the law on the subject of the large and the small hat. Certainly this season the very large and the very small are both ultra fashionable, but in between these two extremes there are many other styles from which to choose. Since individuality in dress is now so important, individuality in millinery is equally necessary, and the woman who finds that neither a large nor a small hat suits her had much better choose a style that does and stick to it.

"The wide picture hat is certainly very popular this season, and in the newest models the brims droop down softly over the face. Brims are rather important. Sometimes, for instance, a hat will have a very wide brim in the front, but will be cut right away

at the back; other brims are folded at one side to give a fan effect; and some hats either have their brims much wider at the sides than in the front, or else they have no brim, to speak of at the back and front, but quite a wide one at the sides. The very small hats, of course, are almost brimless, but they are usually softened by feather mounts, which are placed over either ear and lie against the cheek in most attractive fashion.

"Crowns are usually folded or pleated in some way, to lend them individuality. The high crown of last season is no longer very popular; the new crowns are decidedly lower, and some of the latest picture hats have quite tiny crowns, which are in most effective contrast to the width of the brim.

"Even during the summer, hats are made of felt, although a special lightweight summer felt is used for warm weather wear. The finest crinoline straw is used to make picture hats, and others are carried out in Tuscan straw or in the new Visca straw, which is equally fine and pliable. Bangkok straw is always fashionable, and Bangkok hats are just as popular this season as ever they were.

"Amongst the prettiest hats I have seen lately was a model of rose pink lace which had a brim of rose pink tulle and the lace of the crown down over the brim, and was cut out above the tulle in points. Another hat of green lace was trimmed simply with a narrow band of velvet in exactly the same shade of green sewn round the crown. Black hats continue to be popular, and sometimes, for these, two materials are used. I saw one hat which had a folded crown of black satin and a plain brim of black straw, but this brim was softened by a covering of fine lace. Another hat, an English model, was made of black tulle and lace, with two large La Toscana roses at side back.

"There are smart tailored hats of felt and straw mixtures for wear with tailored suits. Viscas and lizard felts trimmed with gros grain are good for general wear.

"The new picture hats are more elaborately trimmed. I have seen several models which have had very large, vividly coloured orchid flowers placed right on the top of the crown in front, but this is an eccentric fashion and I hardly think it will be a popular one.

"Many of the spring models are showing in Bolero effect, and while I think of it I must pass on to you a new idea for turning an afternoon frock into an evening frock and vice versa. The secret is a detachable bolero with long sleeves. The example I saw has a square neck and fastens at left with four buttons. This can be worn when an afternoon frock is required and dispensed with for evening wear. The sleeveless frock underneath has a long straight bodice and skirt with inverted front pleats. The hip line is low and a narrow belt above it ties in a bow in front. Of course, such a garment must be planned with discretion. Moire silk with a satin back is good, as the bolero and skirt can be made up with one face, while the bodice shows the reverse. The use of a reversible fabric saves ever so much 'matchine'—for black frocks especially—and is always successful.

"Outstanding features for this season are the pleated and tiered skirt. Tiers are especially prominent in frocks of chiffon and georgette, giving a picturesque effect, without exaggeration. The hip length coat in single and double-breasted effect is going to be worn a good deal with cheviot tweed or self skirt to tone. Spring coats have smart straight or belted lines. All ladies with slight flares will be glad to know that the tumber suit is still fashionable, and the new styles are prettier than ever.

"Two piece summer suits in crepe de chine are very pretty and will no doubt be much worn as the weather gets warmer. Sleeveless cardigans and coats, in plain shades, or with the new horizontal stripes, are useful for sports.

Laces and Trimmings.

"Lizard skin designs are smart in fabrics, and, of course, reptile and calf skin effects are going to be popular for all accessories such as shoes, bags, belts, trimmings, hat bands and vestees. If you are lucky enough to have lengths of lace put away—especially black, white or beige lace—now is the time to look it out and use it. The all-lace dress will be much worn, also a half and half scheme with chiffon or georgette is a very marked note in the spring mode. Coat dresses of lace will be worn over slips in contrasting shades—say blue over pink banded with silver or gold. Lace and georgette ensembles featuring the long cloak are delightful for smart receptions, race wear and so on. The long-sleeved dinner gown is made attractive by sheer lace or half lace and half chiffon sleeves.

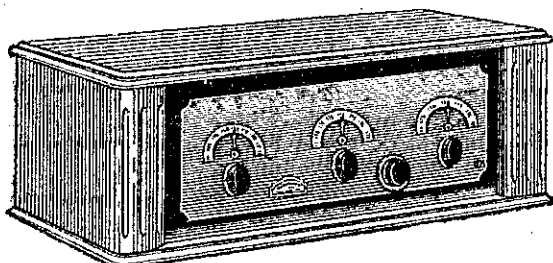
"Tucks are in great vogue, whether in small pin tucks, neck to hem panel formation, sunburst groups, or diagonal lines.

"Fringe is a strong feature and is used by leading designers in spiral effect. Buckles are distinctly chic. A metal buckle may be the sole trimming of a felt or straw hat. A pearl buckle may fasten one's belt. Rhinestone buckles are used as shoulder ornaments on evening gowns and buckles appear also on accessories.

"Bows are also smart and are seen everywhere.

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The Chit-Chat Club

Being a Record of Some of the Dissertations of Members of the X Club on Wireless Matters of Moment in New Zealand.

(Set Down by "Telanother").

"Personally," said Hargost, known to his X club cronies as "Blinks," "I think that the softest job in the world is a lawyer's. They stand up in Court and put the sob stuff across to the jury for an hour or two, and when the 'not guilty' verdict is brought in you find you're out of the frying pan and into the fire, with a bill of costs that would stagger a Rockefeller."

"Ha ha," said Winton Thribs, who enjoyed nothing better than the chance to have a sly dig at Blinks, "now we're going to get a glimpse into Hargost's horrible past. So lawyers are your bugbear, Blinks. For myself I reckon the Government servants have the softest thing. A sure job all the time, little work, and superannuation."

"Stuff and nonsense, sir," said the oldest member, who, deep in the recesses of the most comfortable arm chair in the "wireless bug's" corner, was alternately dozing and waking up to take part in the conversation. The fact that on the previous evening he had attended a veterans' smoke concert, and indulged rather freely in the '80 port, made his contributions to the conversation a little more acid than usual.

"You don't know what you are talking about. I was in a Government office myself once, and never worked harder in all my life. The softest job in the world is that of a parson. Preach once a week, and then as often as not crib someone else's sermon. Well paid, well fed. What more do you want, I'd like to know."

"But think of the visiting they have to do," said Blinks with a twinkle in his eye.

"Yes," added the oldest member sarcastically, "just think of it. Poor fellows. Must have three or four lots of afternoon tea every day. They do have a hard life."

"Well," said Brenton, "for myself I would choose any occupation except that of a minister. I reckon it's a dog's life. You work against the disdain of youth, the complacency of middle age, and the acerbity of the elderly ungodly. No good to me. Lots of the chaps at the war reckoned they would have done anything to get the padre's job but I wouldn't have swapped jobs with him."

"Me either," said Larton. "I was listening-in to Dunedin a while ago and heard a talk by the Rev. W. E. Scott, one of the chaplains to the forces. He called it 'The Padre's Cushy Job,' and he gave you a jolly good idea of what it was like, for the parson."

"We'd better hear the yarn," said Blinks, "if it's only for the benefit of the oldest sinner here."

"It made my mind go right back to the fateful declaration," said Larton, "for the padre told his story so clearly and so modestly that you got a jolly good picture of the life all through. He said that he didn't want his lecture to be regarded as 'swank' for he would not have parted with his experiences for all the tea in China, though he classed himself with the Aussie soldier who said that he had the wind up only once. On being asked when that was he replied 'all the time.' The padre was appointed to the engineers and as soon as he arrived in London he received orders to go over to France. He joined up with the N.Z. Division just at the time when the last great push commenced. Someone told him that he had got a 'cushy job' but he said that apart altogether from the war, it was the most difficult charge he ever had."

"The boys didn't want any parsons poking their blue noses into their fun," said the oldest member vehemently.

"Didn't they?" replied Brenton. "We just jolly well did need the padres, but they had a dog's life until all the boys were satisfied that they were real sports. Some of the finest chaps I ever met were the padres out in France."

"That's exactly what the Rev. Scott said," continued Larton. "He got to the lines after the deuce of a job and was greeted by a subaltern who told him that 'we want no blank padres here.' He found that the padre worked under difficulties and had to grasp every opportunity that came his way. In this way he was able to gradually break down resentment and change it to friendship. He had worked everywhere. Helping at the dressing stations, organising

games, and refereeing at football matches. One of his most interesting experiences was on Oct. 12, 1918, in a little village of Briastro. The padre and a dozen men had gone up to the village to bury one of their comrades who had been killed by an aeroplane the previous day. Fritz was shelling the road, and by the time they got to the village shells were falling all round them. For two hours they had to take refuge in a cellar and watch houses all round them being demolished by shell fire, and catching alight. Strangely enough, although none of them expected to get out alive, he said that that was one of the occasions when none of them seemed seriously perturbed. So you see," concluded Larton, "the padre's job wasn't as cushy as you might think."

"A conscientious and enthusiastic padre has my sympathy," said Blinks, "whether it be at the front or at home here. Fancy having to try and make the oldest member here mend his ways."

"If you have as few sins on your conscience when you get to my age," said the oldest member threateningly, "you'll..."

"Be wearing wings and flying to the drunken beanos of the old veterans," added Winton Thribs.

At this stage, since things seemed likely to become a little heated, Thribs generously suggested that the others should join him in a toast, so glasses were replenished and the health of the oldest member was drunk. Appeased to some extent, he once again sat back in his chair, and conversation drifted along.

"You can't beat a good lecture on literature or art," said Drexter, who



REV. W. P. RANKIN.

The Rev. W. P. Rankin acted as "Uncle Bill" for some time at IYA. He is a well-known baritone and in addition is a keen bowler.

rather prided himself on being something of a philosopher. "There's a chap up in Auckland, a Mr. W. P. Rankin, who has given several lectures, some of which are jolly good."

"I heard one of them," said Harrison, "and thought it was very poor. I gave his experience as a singer and lecturer to unknown listeners-in. It was a pretty dull eight minutes."

"Yes, I didn't like that one myself," said Drexter, "but it may be that the subject was given him, and the broadcasting people wanted listeners-in to realise some of the difficulties facing the artists who performed."

"What was it all about?" said Blinks.

"It gave a description of the feelings of the lecturer who talks over the wireless for the first time. Some of the allegedly humorous stories in it were a bit weak, although, as I say, it was a difficult subject. If he chose it himself he was giving himself a pretty hard job. His second address, which I liked very much, was called 'The Second Mile.'"

"What a mad title," said Harrison. "Yes, it may sound funny," said Drexter judiciously, "but it was an excellent lecture, with just a shade too much moralising."

"What is the second mile anyway?" asked the oldest member.

"The distance you've never travelled," said Blinks facetiously.

"In my young day we thought nothing of walking twenty miles to

see a girl, sir. None of your motor cars then. Two miles. Pshaw! A mere nothing. Just shows what modern men are when a chap thinks it great for a fellow to do two miles."

"Yes, but this second mile is difficult, chosen from a quotation: 'The ferret,' said Drexter. 'The subject great rewards are given to those who travel the undemanding second mile.'"

"That's absolutely true," said Winton Thribs, with the air of conscious virtue of the successful man. "But to it should be added 'but some get great rewards because they trod the undemanding second mile for them,'" said Blinks, with emphasis, for it was well known that Winton Thribs had merely stepped into the shoes of his father who had built up a lucrative concern.

"Well anyway," continued Drexter, "the speaker said that it was the undemanding second mile that really tested our character. The willingness to do more than we were compelled to do was a revelation of the finest character."

"There aren't many young men doing the second mile then," growled the oldest member. "In my young day I would be working till six and seven o'clock every evening, and not sitting by a club fire."

"Well, perhaps you're right for once," agreed Blinks. "We are a bit soft. It's only too true that there are too few doing the second mile. We see it every day. Along at the office I know there are some of the fellows loafing on the job, and whether it is in the office, out on the farm, or amongst the ordinary labourers, there are far too many loafing on the job. I honestly believe that the fellow who will do the second mile regularly, will get ahead. I like the expression."

"Yes, Mr. Rankin said that only too often you heard people saying that they weren't going to do more than they were compelled to do, and those same people wondered why the rewards of life did not come to them. 'The man who watches the clock will never be a proprietor,' he said, and we all know that's true. He said that there's too much sloppy selfishness, and that unionism has done much to kill a man's ambition."

"Of course it has," agreed the oldest member. "They're all ruled by the rate of the slowest, and the result is that you pay through the nose for any job."

"You're coming on," said Blinks. "That's the second thing you've said to-night with which I agree. There's too much slowing up to the pace of the poorest man. And then fellows whine about not being able to get a place in the sun."

"Yes," said Drexter. "The lecturer pointed out that the rewards of life all go to the 'second milers'! It's the law of sacrifice that tests us, all the way through life."

"That stuff's a bit heavy for me," said Harrison. "I like the lighter things."

"More in keeping with your head, I suppose," said Blinks. "What do you listen-in to then?"

"Well, I've heard every one of those lectures Mr. Geo. Campbell has given from IYA, about the motor car. Having a car myself..."

"Good Lord," ejaculated Blinks. "You don't mean to say that you call that wheezing old 1910 Lizzie a car. It groans like the ghost of a murdered innocent, and has one and a half bung lungs."

"It's not a 1910 model," said Harrison indignantly, "and I'd have you know that it's still in perfect order. And why? Because I've always taken care of it, and followed out the advice which Mr. Campbell is giving, and which is invaluable to the budding young motorist like Larton here."

"Don't talk about cars to me," said Larton vehemently.

"Ha, ha," said Blinks. "What's happened to the beautiful Doshter of which we heard so much a few weeks ago?"

"The damned engine seized," said Larton. "When I got it they told me to give it a drop of oil every few days, and I did so, oiling it with the little can. It appears that when they spoke of a drop, they meant about a pint, and the blessed engine ran out of oil and seized. I wish to blazes I'd never seen the car."

"What a funny thing," said Harrison. "Mr. Campbell told a story of a chap whose engine had seized in exactly the same way. He said the trouble is that sellers now-a-days take it for granted that the buyer knows all about oiling a car, and don't explain the process, carefully as they used to do."

"Mr. Campbell has been giving some very good hints on 'safety first,' and said that every motorist had a duty in seeing that his car was safe to drive. He said that the trouble was that even the careful driver took risks in racing the car to the next stop, hurrying home, and trying to pass everything on the road. It was really a miracle that every motorist didn't have an accident at some time or other, but he, shouldn't tempt Providence too much. The motorist had to remember that the foot brake and the hand brake were all that he had between him and

eternity—and also, perhaps between him and gaol."

"Most of the fault for accidents is with the pedestrians," said Larton. "They should be fined for getting in the way."

"The French system would be the thing for you, then," said Blinks, "for the chap who is knocked down by a car there, is taken before the Court for obstructing the traffic."

"Mr. Campbell admitted that there was carelessness on both sides," continued Harrison, "but said that there was more on the part of the motorist than on the part of the pedestrians. In his second lecture he gave a few tips to the pedestrians, and they were sound. He told them that if they wanted to survive, they must quicken their step, as they were living in a fast age. The 'jay walker' owed his life mainly to the good driving of the motorist, and he considered that it should be a criminal offence to cross a busy intersection at an angle."



Mr. George Campbell, IYA's Motoring and Racing Expert.

"So it should," said Larton. "The day before by car went bung, I very nearly knocked down a man at the corner of Manners Street and Willis Street. The idiot waited sideways across the road and I had to pull up in about four feet. Of course there was a policeman on point duty there, and he would have seen that it was the chap's own fault, but that isn't much consolation when you are confronting the widow."

"He considers the tendency in the future will be for greater speed, so the jay walkers had better look out. One of his own experiences with a bird of this species was most amusing. He was making down the street in his car when he saw a jay walker crossing, and looking in the opposite direction. He could see that the 'jay' didn't see him coming, so he pulled up. The 'jay' walked right in

to the car and got such a shock that he wanted to fight the driver. Mr. Campbell told him that he did it merely to teach him a lesson, so the chap shut up. It reminded him of a cross-eyed cyclist who was going along the road and hit a pedestrian. The cyclist asked him why the devil he didn't look where he was going, and the pedestrian came back with: 'Why the devil don't you go the way you're looking?'

"In his third lecture he gave some good tips regarding the way to look after a car, and said that it is a day well spent when the car owner goes right over the car, tightens up every bolt, and oils and greases every place he can find. He said that the common belief that the earlier cars had better material in them is only partly correct, and that the reason for cars wearing out more quickly now is that they don't receive the same attention.

The steering gear wants careful oiling, and wheels need to be kept in alignment.

"The soundest advice of all that he gave, to my mind, and I could not help hoping that Larton was with me to hear it, was to keep out of the busy thoroughfares when you are only a beginner. No beginner has a right to get mixed up in heavy traffic, more especially at night, and when it is raining."

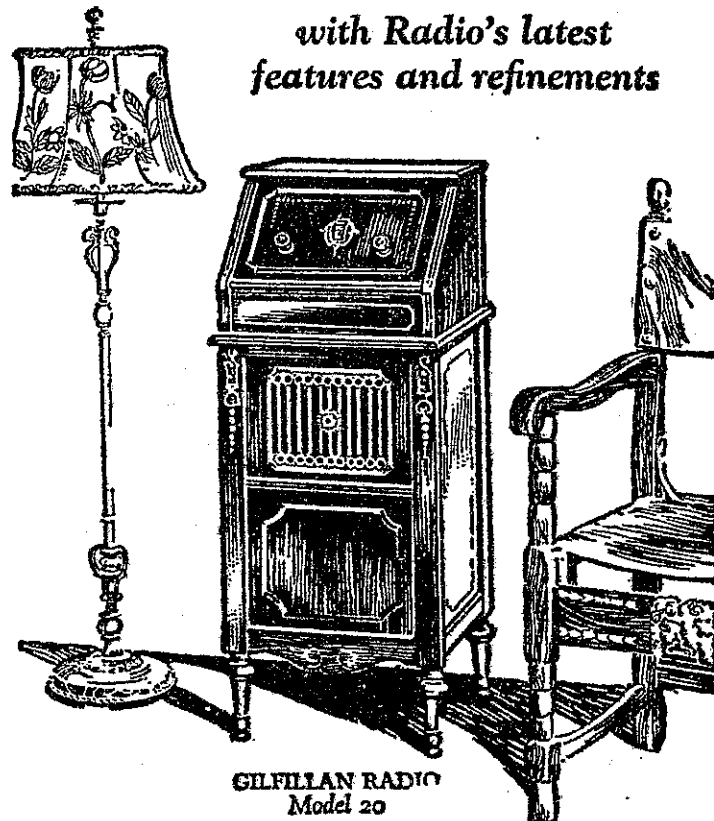
So when your jolly old contraption gets out of the undertaker's hands, Larton, I'd advise you to park it outside the city precincts and go for little runs in the country by yourself. And don't forget the oil. The car will not run without oil, would be a good line for the modern child's copy book..."

"Oh, shut up. You needn't rub it in," said Larton. "Motoring's a beastly occupation, and every motorist's a fool. What with traffic cops, pedestrians, and by-laws to dodge, the chap that can get through a year of it with a sound skin, deserves a V.C."

"Contraptions of the devil. That's what they are," said the oldest member, and with that he strolled out of the room, and being thoroughly illogical, called a taxi and went home.

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Full Programmes for Next

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THE WEEK AT 1YA

THE GHOST WALK.

Sounds eerie, doesn't it? It will be one of the closing items, too, at 1YA on Tuesday, August 30, and will be something novel. The concert this night has been arranged by the Lyric Quartet, assisted by Miss Alma McGruer. The "Ghost Walk" will be a concerted number. Listeners will be asked to imagine a lonely house which is reputed to be haunted, and the vocal and speaking matter of the item is intended to express the feelings of the party as they pass from one room to another. The rattle of bones will be heard as a cupboard is opened disclosing the family skeleton, and the crash of breaking glass as the howling wind blows in a window. Special novelty effects will be introduced in order to secure realism.

The programme for the evening will be up to the best standard of the Lyric Quartet. Following on a relay of music from the Majestic Theatre, the quartet will commence with the "Pilgrims' Chorus" from "Tannhauser." This will be the initial rendering of this magnificent item by the party. Concerted items and solos by members of the quartet will follow, and a delightful evening's entertainment is promised. Ably assisting the quartet will be Miss Alma McGruer, who will also be heard in solo items. At 8.50 a concerted number by the quartet and Miss McGruer will be a selection from the opera "Ma Ma Rosette," which should be one of the bright spots on the programme. The party introduced these concerted numbers some time ago, and they are proving so popular that they are now including one or more on each programme. The quartet will conclude an excellent programme with "The Long Day Closes."

LORD BYRON.

The lectures by Mr. Stanley Bull, of the London Authors' Society, will be continued at 1YA on Monday, at 7.30 p.m. These lectures are much enjoyed. The talk this week will be on Lord Byron.

GREAT MUSICIANS.

Afternoon talks have been arranged for 1YA, and the first will be given on Wednesday at 3.30, by Mr. Eric Bell, the studio pianist. He will take as his subject Dame Melba.

PHYSICAL CULTURE.

Mr. Norman Kerr will continue his interesting lectures on "Physical Culture" at 1YA, at 7.30 on Wednesday.

WEDNESDAY'S CONCERT.

Miss Ida Holmes, soprano, is the first artiste on the evening programme at 1YA on Wednesday, and should be heard to advantage in Korsakoff's popular "Hindoo Song." Miss Holmes, who is always popular with listeners, was to have left for Sydney at the beginning of this month. All will be glad to hear that she has decided to remain in New Zealand. Mr. Martin Richardson, soloist with the Boys' Grammar School Orchestra, will play Kreisler's "Liebeslied" and a selection from Verdi's "La Traviata." Mr. R. Eskrigge, baritone, will sing amongst other numbers "Ave Maria," by Kahn. Mr. Eskrigge acted as soloist for the Athenian Club at their last gathering. Miss Birrell and Mr. Elliott have selected for their duet a popular number from Gilbert and Sullivan's "Iolanthe."

CLICK-CLACK ORCHESTRA.

Mr. R. Thompson (baritone), Mr. Peter Dawson (elocutionist), and Ingall's Hawaiians will contribute the first half of the programme on Thursday evening. The Hawaiians, originally a trio, have increased their membership to five. Listeners will no doubt look forward to the increased combination. Mr. Peter Dawson is rendering a Shakespearean number, "King Henry the Fifth before Agincourt."

From 9.0 to 10.0 Mr. Walter Smith's Click-Clack Orchestra will provide the programme. This orchestra is one of the leading jazz bands in the city, and it is noted for its vocal harmony, having as it has three excellent Maori melodists. Mr. Walter Smith, the leader, writes all the music for the orchestra, and is also a Maori composer of note, being well known locally for his compositions "Beneath the Maori Moon" and "Beautiful Isle of the Sea."

TOM THUMB TO TOUR.

At 6.30 p.m. on Friday, Tom Thumb will be taken for a trip round Auckland, and the children will be asked to come in imagination. The blowing of motor-car horns, steamer whistles and the noises of the street will all be introduced, and last, but not least, Tom Thumb will still have some laughs left in his magic box.

FRIDAY'S CONCERT AT 1YA.

Mr. George Campbell will continue his motoring talks at 7.30, and Court's concert will run from 8.0 till 8.30.

Miss Ina Thomson, contralto, who is one of the leading vocalists in the city, will be heard for the first time at 1YA. Miss Thomson was to have been heard with the Aeolian Orchestra on August 11, but owing to her indisposition, Miss Thomson regretted that she was unable to appear, and Mrs. Cyril Towsey kindly substituted.

Station 1YA Auckland

(WAVE-LENGTH, 333 METRES.)

SUNDAY, AUGUST 28.

6.55 p.m.: Relay of church service from St. David's Presbyterian Church. Preacher, Rev. D. C. Herron; organist, Mr. E. C. Craston; choirmaster, Mr. G. F. Baker.

8.30: Relay of Municipal Band from Town Hall.

9.30: Close down.

MONDAY, AUGUST 29.

SILENT.

TUESDAY, AUGUST 30.

3 p.m. to 4.30: Afternoon session.

6.30: Children's session—Aunt Betty.

7.15: News and information session.

7.30 to 7.45: Talk by Mr. S. Bull on "Lord Byron."

8.0: Chimes.

8.1: Relay of overture from Majestic Theatre. Mr. J. Whitford-Waugh, conductor.

8.15: Quartet—Lyric Quartet, "Pilgrims' Chorus" (Wagner).

8.21: Tenor—Mr. H. Richards, "Devout Lover" (White).

8.26: Bass—Mr. E. Thomas, "Song of the Bow" (Aylward).

8.31: Soprano—Miss A. McGruer, "Annie Laurie."

8.35: Quartet—Lyric Quartet, "Lovely Night."

8.40: Humour—Alan McElwain, some humour.

8.46: Tenor—Arthur Ripley, "Jest wearyin' for you" (Jacobs-Bond).

8.50: Concerted—Miss A. McGruer and Lyric Quartet, "Home."

8.55: Duet—Miss Alma McGruer and Mr. A. Ripley, "Supposin' Now" from the opera "Ma, Ma, Rosette."

9.2: Weather report.

9.3: Relay from Majestic Theatre.

9.20: Humour—Mr. A. McElwain, more humour.

9.26: Quartet—Lyric Quartet, "Catastrophes."

9.31: Soprano—Miss A. McGruer, "In My Garden."

9.36: Tenor—Herbert Richards, "Serenade."

9.41: Bass—Ernest Thomas, "Tally Ho."

9.46: Concerted—Miss Alma McGruer and Lyric Quartet, "The Ghost Walk."

9.51: Duet—Messrs. Richards and Thomas, "The Two Beggars" (Wilson).

9.56: Quartet—Lyric Quartet, "The Long Day Closes."

10.0: Close down.

WEDNESDAY, AUGUST 31.

3.30 p.m.: Lecture by Mr. Eric Bell on "Great Musicians."

7.15: News and information session.

7.30 to 7.45: Talk on "Physical Culture," by Mr. Norman Kerr.

8.0: Chimes.

8.1: Relay of overture from Prince Edward Theatre. Mr. Geo. Poore, conductor.

8.15: Soprano—Miss I. Holmes, (a) "Hindoo Song" (Korsakoff), (b) "Charm of Spring" (Clark).

8.23: Tenor—Mr. N. F. Elliott, "A Spirit Flower" (Tipton).

8.28: Violin—Mr. M. Richardson, "Liebeslied" (Kreisler).

8.32: Mezzo—Miss B. Birrell, "It Was a Dream" (Cowen).

8.37: Baritone—Mr. R. Eskrigge, (a) "Ave Maria" (Kahn), (b) "Requiem."

8.46: Contralto—Mrs. B. Jellard, (a) "My Prayer" (Squire), (b) "Melisande in the Wood" (Goetz).

8.55: Duet—Miss Birrell and Mr. Elliott, "None Shall Part Us" from "Iolanthe" (Gilbert and Sullivan).

9.0: Weather report.

9.1: Relay from Prince Edward Theatre.

9.20: Soprano—Ida Holmes, "Lo, Here the Gentle Lark" (Bishop).

9.26: Tenor—Mr. N. F. Elliott, "The Romany Lass" (Adams).

9.31: Violin—M. Richardson, "La Traviata" (Verdi).

9.35: Mezzo—Miss B. Birrell, "The Scottish Blue Bells" (Barker).

9.40: Baritone—Mr. Eskrigge, "Inter Nos."

9.46: Contralto—Mrs. B. Jellard, "The Irish Emigrant" (Barker).

9.51: Violin—M. Richardson, "Londonderry Air" (arr. Kreisler).

9.55: Duet—Miss Birrell and Mr. Elliott, "I'll Sing to You" (Thompson).

10.0: Close down.

THURSDAY, SEPTEMBER 1.

3 to 4.30 p.m.: Afternoon concert.

7.15: News and information session.

8.0: Chimes.

8.1: Relay of overture from Rialto Theatre. Mr. Henry C. Engel, conductor.

8.16: Baritone—Mr. R. Thompson, (a) "The Garden of Years" (Wood), (b) "Rose of My Heart" (Lohr).

8.24: Instrumental—Ingall's Hawaiian Quintet, Hawaiian airs.

8.34: Elocution—Mr. P. Dawson, "King Henry the Fifth before Agincourt" (Shakespeare).

8.40: Baritone—Mr. R. Thompson, (a) "Mother o' Mine" (Tours), (b) "Absent" (Metcalf).

8.47: Elocution—Mr. P. Dawson, selected.

8.52: Instrumental—Ingall's Hawaiian Quintet, popular numbers.

9.4: Weather report.

9.5: Orchestra—Walter Smith's Radio Orchestra, latest hits, popular vocal and dance numbers.

10.0: Close down.

FRIDAY, SEPTEMBER 2.

3 to 4.30 p.m.: Afternoon concert.

6.30: Children's session—Tom Thumb.

7.15: News and information session.

7.30 to 7.45: Talk on "Motoring," by Mr. Geo. Campbell.

8.0: Chimes.

8.1: Relay of concert from Messrs. John Court's, Ltd.

8.30: Violin—Mr. P. Bretnall, (a) "The Keel Row" (Farmer), (b) Swiss air to "Gentle Zittella" (Farmer).

8.36: Contralto—Miss I. Thomson, "Sapphische Ode" (Brahms).

8.42: Tenor—Mr. T. Wallace, (a) "Dear Heart" (Mattei), (b) "Ecstasy" (Barnes).

8.50: Cornet—Mr. E. Tregilgas, "Neath Astral Skies" (Code).

8.56: Mezzo—Miss D. Strange.

9.0: Weather report.

9.1: Relay from Prince Edward Theatre. Mr. Geo. Poore, conductor.

9.15: Soprano—Miss E. Strange.

9.19: Violin—Mr. P. Bretnall, "Madrigal" (Drdla).

9.23: Contralto—Miss Ina Thomson, (a) "Ships that Pass in the Night" (Stephenson), (b) "Dreaming of Home" (Besley).

9.31: Baritone—Mr. Bree, "The Prologue" from "Pagliacci" (Leoncavallo).

9.37: Duet—Misses Strange, two selected items.

9.43: Cornet—Mr. Tregilgas, (a) "Polka de Concert" (Smith), (b) "Thora" (Adams).

9.50: Tenor—Mr. T. Wallace, "Carmencita" (Lane).

9.54: Baritone—Mr. J. Bree, (a) "When My Ships Come Sailing Home" (Dose), (b) "Alone" (Lohr).

10.0: Close down.

SATURDAY, SEPTEMBER 3.

3 to 4.30 p.m.: Football relay, Auckland v. Wanganui.

7.15 to 7.45: News and sports results.

8.0: Chimes.

8.1: Relay of overture from Strand Theatre. Eve Bentley, conductor.

8.16: Baritone—Mr. F. Baker, (a) "The Blue Dragoons" (Weatherley), (b) "A Sailor's Song" (Lohr).

8.24: Mezzo—Mrs. W. J. Gatenby, "Nymphs and Fawns" (Bemberg).

8.28: Flute—Mr. Brendon Clarke, (a) "Midnight Bells," (b) selected.

8.36: Tenor—Mr. Geo. Barnes, "Maire, My Girl" (Aitken).

8.40: Baritone—Mr. F. Baker, "Mandalay" (Willeby).

8.44: Flute—Mr. B. Clarke, selected.

8.48: Mezzo—Mrs. Gatenby, (a) "Vainka's Song" (Von Stutzman), (b) "Damon" (Strange).

8.54: Tenor—Mr. G. Barnes, (a) "Somewhere a Voice is Calling" (Tate), (b) "What a Wonderful World It Would Be" (Lohr).

9.0: Weather report and sports results.

9.5: Relay of dance music from Click-Clack Cabaret, by Click-Clack Orchestra, under Mr. Walter Smith.

11.0: Close down.

SUNDAY, SEPTEMBER 4.

6.55: Relay of church service from St. Andrew's Presbyterian Church. Preacher, Rev. Lamb-Harvey. Organist, Dr. McDougall.

8.30: Selected items from studio.

9.30: Close down.

Station 2YA Wellington

(WAVE-LENGTH 420 METRES.)

SUNDAY, AUGUST 28.

6.55 p.m.: Relay of evening service of the Taranaki Street Methodist Church. Preacher, Rev. Clarence Eaton; deputy-organist and choirmaster, Mr. Eric Froggatt.

8.15: Relay of band concert of the Wellington Municipal Tramways Band, from His Majesty's Theatre.

MONDAY, AUGUST 29.

3 p.m.: Afternoon session.

3.30 p.m.: Madame Fleck, Kirkcaldie and Stains, on "Fashions."

3.40-5 p.m.: Resumption of afternoon concert.

6.30 p.m.: Children's session, Aunt Jo.

7.0: News session and market reports.

7.34: Lecture on "Radio," by Mr. Preston Billing.

7.49: Close down.

8.0: Chimes of the General Post Office clock.

8.1: Instrumental—"Characteristic Waltz, No. 4" (Coleridge-Taylor), Studio Orchestra.

8.7: Studio concert of selections from grand opera, presented by the pupils of Signor Cesaroni.

Chorus—"Hymn to God" (chorus for baritone and basses, from "L'Africana"), (Meyerbeer), male members of company.

8.12: Contralto solo, "Mon coeur s'ouvre a toi," "Samson et Delilah" (Saint-Saens), Miss Eileen Higgins.

8.17: Bass solo—"La Ebreca" (Halevy), Mr. E. D. McLellan.

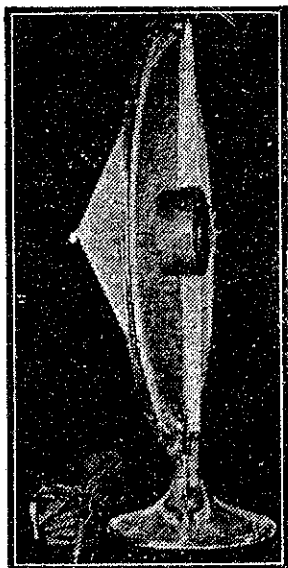
8.22: Soprano solo—"Through the Streets" ("La Boheme"), (Puccini), Miss D. Carmen.

8.27: Contralto solo—"Largo" from "Xerxes" (Handel), Miss Nita Frame.

8.32: Tenor solo—"La Fleur" from "Carmen" (Bizet), Mr. R. Porteus.

8.37: Vocal duet—"Eria Buffone" from "Don Juan" (Mozart), Messrs. G. Gray and E. D. McLellan.

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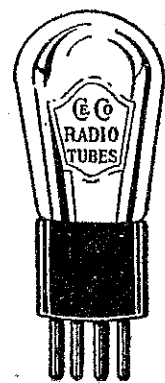
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Week - All Stations - to Sept. 4

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- 8.42: Soprano solo—"Gentle Flowers" from "Faust" (Gounod), Miss E. T. Standen.
8.47: Contralto solo—"Voi che Sapete" from "Figaro" (Mozart), Miss Eileen Higgins.
8.52: Instrumental—"Pleading" (Hadyen-Wood), Studio Orchestra.
8.58: Lecturette—"The Carillon," Dr. E. Marsden.
9.12: Instrumental—"Sextette" from "Lucia di Lammermoor" (Donizetti), Studio Orchestra.
9.18: Bass solo—"Il Lacerato Spirito" from "Simon Boccanegra" (Verdi), Mr. E. D. McLellan.
9.23: Soprano solo—"Love and Music" from "La Tosca" (Puccini), Miss D. Carmen.
9.28: Contralto solo, "Re del Abisso" from "Ballo Maschera" (Verdi), Miss N. Frame.
9.33: Soprano solo, "Elizabeth's Prayer" from "Tannhauser" (Wagner), Miss E. T. Standen.
9.38: Baritone solo—"Viem la mia Vendetta" from "Lucrezia Borgia" (Donizetti), Mr. G. Gray.
9.43: Tenor solo—"La Donna e Mobile" from "Rigoletto" (Verdi), Mr. R. Porteous.
9.48: Operatic scene—Third act from the opera "La Forza Del Destino" (Verdi), Mr. E. D. McLellan, Miss E. T. Standen, and chorus.
9.54: Instrumental—"Minuet" (Borowski), Studio Orchestra.

TUESDAY, AUGUST 30.

- 3 p.m.: Afternoon session.
3.30 p.m.: Lecturette on electric cooking, Mrs. F. Sinclair (S. Brown and Co.).
3.40-5 p.m.: Resumption of afternoon concert.
7.0: News session and market reports.
7.30: Close down.
8.0: Chimes of the Wellington General Post Office clock.
8.1: Instrumental—"Sous La Femille" (Thorne), Studio Orchestra.
8.7: Soprano solo—Selected, Mrs. W. H. Hindle.
8.11: Piano solo—"Gracienne Fantastique" (Paderewski), Miss Vera Boesley.
8.15: Contralto solo—"Break, Break, Break!" (Carey), Miss Constance Guy.
8.19: Violin solo—"Polish Dance" (Schorwenka), Miss Rita Reece.
8.23: Tenor solo—"Who is Sylvia?" (Schubert), Mr. S. Duncan.
8.27: Elocution—"The Highwayman" (Noyes), Mr. Barton Ginger.
8.32: Instrumental—"Love in Arcady" (Haydn-Wood), Studio Orchestra.
8.37: Baritone solo—"Far Across the Desert Sand" (Woodforde-Finden), Mr. Wilfred Scott.
8.41: Lecturette—"Music and Dancing," Mr. Douglas Taylor.
8.56: Soprano solo—Selected, Mrs. W. H. Hindle.
9.0: Relay of Savage Club Orchestra.
9.20: Contralto solo—"Castilian Lament" (Del Riego), Miss Constance Guy.
9.24: Elocution—"It" (Kipling), "The Three Trees" (anon.), Mr. Barton Ginger.
9.29: Piano solo, "Valse Caprice" (Leschetizky), Miss V. Boesley.
9.33: Tenor solo—"Fly Away, Nightingale" (Rubinstein), Mr. S. Duncan.
9.37: Instrumental—"By the Tamerisk" (Coates), Studio Orchestra.
9.43: Baritone solo—"Lady Mine" (Lohr), Mr. Wilfred Scott.
9.47: Violin solo—"Minuet" (Paderewski), Miss R. Reece.
9.52: Instrumental—"Redzi" (Caludi), Studio Orchestra.

WEDNESDAY, AUGUST 31.

SILENT.

THURSDAY, SEPTEMBER 1.

- 3 p.m.: Afternoon session.
3.30 p.m.: Madame Britten (D.I.C.) on "Fashions."
3.40-5 p.m.: Resumption of afternoon concert.
7.0: News session and market reports.
7.34: Lecturette on "Esperanto" by Mr. W. King, D.B.E.A.
8.0: Chimes of the General Post Office clock.
8.1: Relay of Paramount Theatre Orchestra.
8.8: Selection—"Our Conquering Army," Salvation Army Citadel Band.
8.13: Baritone solo, "Abide With Me" (Liddell), Captain N. Sanson.
8.17: Band, "Gems from the Great Masters" (arranged by R. McAnally), the Salvation Army Citadel Band.
8.32: Vocal quartet—"Lornci," Bijou Quartet.
8.37: Band selection—"American Melodies," No. 1 (arranged Broughton), the Salvation Army Citadel Band.
8.44: Baritone solo—"O Star of Eve" (Wagner), Captain N. Sanson.
8.49: Band—"Beethoven" (arranged Hawkes), the Salvation Army Citadel Band.
8.57: Vocal quartet—"That Worthy Name," Bijou Quartet.
9.2: Lecturette on "Some Aspects of the Colonisation of N.Z.," Mr. D. S. Smith.
9.12: Soprano solo—"Still as the Night" (Bohm), Miss Leane Pattison.
9.16: Selection—"Gems from Hadyen's Creations" (arranged Hawkes), the Salvation Army Citadel Band.
9.26: Baritone solo—"Salaam" (Lang), Mr. G. Tinney.
9.30: March—"Herald of Praise" (arranged Dickens), Salvation Army Citadel Band.
9.36: Contralto solo—"Melisande in the Wood" (Goetz), Miss Dora Abbott.
9.40: Tenor solo—"Doreen" (Allon), Mr. J. H. Meek.
9.44: Selection—"My Fortress" (arranged Van der Kam), Salvation Army Citadel Band.
9.54: Soprano solo—"Down the Vale" (Moir), Miss Leane Pattison.
9.58: Baritone solo—"Sincerity" (Clarke), Mr. G. Tinney.
10.2: Band—(a) "Mount of Olives" (Beethoven), (arr. Coles), (b) Beethoven's "Hallelujah Chorus," Salvation Army Citadel Band.
10.12: Tenor solo—"To a Miniature" (Brahe), Mr. J. H. Meek.
10.15: Contralto solo—"My Dear Soul" (Sanderson), Miss Dora Abbott.
10.19: March—"Flag of Freedom" (arr. Coles), Salvation Army Citadel Band.

FRIDAY, SEPTEMBER 2.

- 3 p.m.: Afternoon session.
3.30 p.m.: Lecturette on gas cooking, Miss Marion Christian (Wellington Gas Co.).
3.40-5 p.m.: Resumption of afternoon concert.
7.0: News session and market reports.
7.34: Lecturette on "Rugby Football," by Mr. T. A. Fletcher.
8.0: Chimes of the Wellington General Post Office clock.
8.1: Instrumental—"Floraion d'Amour" (Dyck), Studio Orchestra.
8.7: Studio concert by the Radio Four.

- Chorus—"Anonymous Nonsense," the Radio Four.
Piano novelty—"Kitten on the Keys" (Confrey), Mr. J. K. Skeddon.
Concerted number—"Lullaby Land" (Prival), the Radio Four.
Cello solo—"Salut d'Amour" (Elgar), Mr. R. Walpole.
Vocal quartet—"Oh, Who Will o'er the Downs" (De Persall), the Radio Four.
Bass-baritone—"When the Sergeant-Major's on Parade" (Longstaffe), Mr. C. Proctor.
Piano solo—"Rustle of Spring" (Sinding), Mr. J. F. Skeddon.
Tenor solo—"Call Me Back" (Denza), Mr. S. Hall.
Cello duet—"O Lovely Night" (Ronald), Messrs. C. Proctor and R. Walpole.
Humorous recitation—"I'm Courting" (Tom Foy), Mr. R. Walpole.
Instrumental—"Sadness" (Bucalossi), Studio Orchestra.
Piano solo—"Meadow Lark" (Florito and Kergel), Mr. J. F. Skeddon.
Vocal quartet—"Sweet and Low" (Barnby), the Radio Four.
Cello solo—"Memory" (Squire), Mr. R. Walpole.
Vocal duet—"The Moon has Raised her Lamp" (Benedict), Messrs. R. Walpole and C. Proctor.
Humorous song—"The Bassoon" (Ashlyn), Mr. C. Proctor.
Tenor solo—Selected, Mr. S. Hall.
Cello duet—"Berceuse de Jocelyn" (Godard), Messrs. R. Walpole and C. Proctor.
Baritone solo—"At Grendon Fair" (Marie), Mr. C. Proctor.
Monologue—"Bananas" (Haynes), Mr. R. Walpole.
Concerted number—selected, the Radio Four.
9.5: Lecturette—"The Singapore Base," Editor-Announcer.
9.15: Soprano solo—"A May Morning" (Denza), Mrs. Elsie Davis.
9.19: Bass solo—"The Curfew" (Gould), Mr. W. Boardman.
9.23: Instrumental—"Edelweiss Gavotte" (Tourbie), Studio Orchestra.
9.29: Song at piano—"Bye, Bye, Blackbird" (Henderson), Mr. Billy Hart.
9.34: Tenor solo—"I'll Sing Thee Songs of Araby" (Clay), Mr. J. R. Quedest.
9.38: Contralto solo—"The Stars that Light My Garden" (Russell), Miss Dora Eriksen.
9.42: Soprano solo—"The Sweetest Flower that Blows" (Hawley), Mrs. Elsie Davis.
9.46: Bass solo—"Big Ben" (Pontet), Mr. W. Boardman.
9.50: Tenor solo—"Beloved, It Is Morn" (Aylward), Mr. J. R. Quedest.
9.54: Contralto solo—"Good Morrow Gossip Joan" (traditional), Miss Dora Eriksen.

SATURDAY, SEPTEMBER 3.

- 3 p.m.: Relay, Otago v. Wellington, football match.
7 p.m.: News session, market reports, and sporting results.
7.30: Close down.
8.0: Chimes of the Wellington General Post Office clock.
8.1: Instrumental—"Snowflakes" (Fanchetti), Studio Orchestra.
8.7: Baritone solo—"Sea Fever" (Ireland), Mr. E. Haldane.
8.11: Elocution—"A Thanksgiving Speech" (Marie-Irish), Mr. Len Power.
8.15: Boy soprano—"The Swallow" (Cowen), Master Guy Bliss.
8.19: Siffleur—"The Glow Worm" (Lincke), Mr. E. Feecey.
8.22: Band—"Medley of Popular Airs," Island Bay Boomerang Mouth-organ band.
8.26: Banjo-mandolin duet—"The Sunflower Dance" (Neat), Messrs. L. Mills and C. Forgie.
8.30: Baritone—"The Jolly Tinker" (Newton), Mr. E. Haldane.
8.34: Instrumental—"La Belle Pierrette" (Foulds), Studio Orchestra.
8.39: Boy soprano—"A Song of Hope" (Hadyen-Wood), Master Guy Bliss.
8.43: Siffleur—"Wabash Home" (Meinken), Mr. E. Feecey.
8.46: Band—"Medley of Popular Airs," Island Bay Boomerang Mouth-organ Band.
8.50: Banjo and mandolin duet—"The Mill Dam Gallop" (Bab), Messrs. Mills and Forgie.
8.54: Elocution—"Her Glove" (Spurr), Mr. Len Power.
9.0: Lecturette on "Dancing," by Madame Edith Baird.
9.10: Instrumental—"Children's Ball" (Souza), Studio Orchestra.
9.15: Relay of Charles Dalton's Columbian Solo Six Dance Orchestra from the Columbian Cabaret, Kilmirrie.
3 p.m.: Relay of lecture on "Christian Science" from De Luxe Theatre.
6.55: Relay of church service from St. Andrew's Presbyterian Church. Preacher, Rev. R. Howie.
2.15: Relay of band concert from the Grand Opera House by the Port Nicholson Band. Conductor, Mr. J. J. Drew.

Station 3YA, Christchurch

(WAVE-LENGTH, 306 METRES.)

SUNDAY, AUGUST 28.

- 6.30 p.m.: Relay of evening service from Edgeware Road Methodist Church. Special church anniversary services. Preacher, Rev. W. Greenslade; organist, Miss Stella Osborne; conductor, Mr. Cecil James.
Hymn study—"Thee Will I Love," by the choir.
Anthem—Selected.
Bass solo—Mr. E. J. Johnston, selected.
The following musical programme will be given after the church service:—

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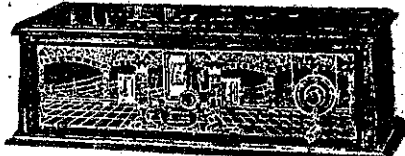
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1YA FEATURES

(Continued from page 8).

An instrumentalist new to 1YA is Mr. E. Tregilgas, cornet soloist, who will be heard in three numbers, chief of which is Code's "Neath Austral Skies." Mr. Tregilgas has recently been appointed conductor of the Auckland Artillery Band.

Mr. J. Bree, baritone, who sang during August, has proved a great success, and is to sing Leoncavallo's "Prologue from 'Pagliacci.'" Mr. Bree possesses a voice of sound quality, and his appearance during the preceding month has resulted in many requests for his re-engagement. Mr. Bree recently acted as soloist for the Royal Auckland Choir.

Mr. Paul Bretnall, a very capable violinist, well-known to 1YA patrons, will reappear after having been on the sick list for some time.

SATURDAY AT 1YA.

Mr. Fred Baker, baritone, will be heard again in well-known baritone numbers, including "A Sailor's Song," by Herman Lohr and "Mandalay," Mr. Brendon Clarke, a flautist who has been heard only once previously, will contribute the flute arrangement of Kreisler's violin solo "Midnight Bells." Mr. George Barnes, who is a tenor of marked ability, will render three items of a popular nature. A relay of dance music from the Click-Clack Cabaret will conclude the programme.

ST. ANDREW'S, AUCKLAND.

The special monthly musical service from St. Andrew's Church will be relayed by 1YA on Sunday. The St. Andrew's Quartet, consisting of Miss Phyllis Gribben and Miss Adelaide Taylor, and Messrs. College and Peter, will render vocal numbers during the service. The Rev. Lamb-Harvey is the preacher, and Dr. McDougall is the hon. organist.

2YA FEATURES

SUNDAY IN WELLINGTON.

The service conducted by the Rev. Clarence Eaton, at Taranaki Street Methodist Church, will be broadcast by 2YA on Sunday, August 28. Following on this service a concert by the Wellington Municipal Tramways Band will be relayed from His Majesty's Theatre. The entertainments provided by the band are consistently excellent.

GRAND OPERA AT 2YA.

GREAT CONCERT ON MONDAY.

When it is stated that the pupils of Signor Lucien Cesaroni are to provide a studio concert of selections from grand opera, it may be accepted that something out of the ordinary will be broadcast for the delectation of listeners. There is no better known bass singer and music teacher in New Zealand than Signor Cesaroni, who is descended from a musical family, and who has profited by his training under the best masters in Europe. His pupils therefore have the best of recommendations.

The concert will open with a chorus by the baritones and basses of the company, who will sing the "Hymn to God" from "L'Africana." Solos will be sung by Miss Eileen Higgins (contralto), Miss D. Karmen (soprano), Miss Nita Frame (contralto), Messrs. E. D. McLellan (bass), R. Porteous (tenor), and G. Grey (baritone).

The solos to be sung will be well known, being taken from "Samson and Delilah," "La Boheme," "Xerxes,"

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Programmes Continued

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Anthem by the choir, "The Lost Chord" (Sullivan). Soloist, Miss H. Smith.
Contralto solo—Miss W. Sproston, "Shepherd of the Fold" (Barnard).
Trio—Misses L. F. and E. James and Mr. R. E. James, "Abide With Me."
Anthem by the choir—(a) "Lead, Kindly Light" (Evans); hymn study, (b) "Dear Lord and Father of Mankind."
Duet—Misses R. and A. Lucas, "Twilight."
Tenor solo—Mr. C. James, "Supplication" (Keck).
Ladies' choir, three-part chorus—"Lighten Our Darkness" (Nicholl).
Soprano solo—Miss R. Lucas, selected.
Quartet—Misses R. Lucas and W. Sproston and Messrs. James and Johnston, "Shepherd of Souls" ("Sign of the Cross").
Baritone solo—Mr. C. L. Richards, selected.

MONDAY, AUGUST 29.

3 p.m.: Afternoon session.
6.0: Children's session, by Uncle Sam.
7.15: News and reports.
8.0: Chimes. Studio concert by Christchurch Municipal Band, under direction of Mr. A. J. Schuck, assisted by vocal soloists.
8.1: March—Band, "Ravenswood" (Rimmer-Haige's Journal).
8.6: Soprano solo—Miss Sylvia Angus, "Be Still, Blackbird" (Sanderson).
8.10: Mezzo-soprano solos—Mrs. Rita Buxton, (a) "Because" (d'Hardelot), (b) "Until" (Sanderson).
8.15: Selection—Band, "Verdi" (Verdi-Wright and Round).
8.23: Humorous sketch—Mr. J. J. Flewellen, "How to Live to Be 200" (Leacock).
8.27: Soprano solos—Miss Olga Wellard-King, (a) "The Ashgrove" (Oxenford), (b) "Wise Folly" (Ronald).
8.33: Overture—Band, "Tasma" (Lyons-Journal).
8.41: Mezzo-soprano solos—Miss Jessie Rosewarne, (a) "I Love the Moon" (Rubens), (b) "Achal by the Sea" (Lawrence).
8.47: Hymn—Band, "Pierce Raged the Tempest" (Dykes-Paling).
8.52: Soprano solo—Miss Sylvia Angus, "Since First I Saw Your Face" (Purcell).
8.56: Tenor solo—Mr. E. A. Dowell, "There's a Land" (Allitsen).
9.0: Interval.
9.5: Dance—Band, "Moon Madrigal" (Willeby).
9.9: Mezzo-soprano solo—Mrs. Rita Buxton, "Drink to Me Only With Thine Eyes."
9.13: Humorous sketch—Mr. J. J. Flewellen, "Bobbed and Shingled" (Austrian "Life").
9.17: March—Band, "Cheerful Chums" (Brown).
9.21: Soprano solo—Miss Olga Wellard-King, "Down in the Forest" (Ronald).
9.25: Selection—Band, "Melodious Gems."
9.31: Mezzo-soprano solo—Miss Jessie Rosewarne, "June Music" (Trent).
9.37: Waltz—Band, "Victory" (Baynes-Boosey).
9.41: Humorous sketch—Mr. J. J. Flewellen, "The Woman in the Call Box" (Austrian "Life").
9.45: Jazz—Band, selected.
9.50: Tenor solo—Mr. E. A. Dowell, "Somewhere in the World" (Ayer).
9.54: March—Band, "Twentieth Century" (Ord Hume-Smith and Co.).
10.0: Close down.

TUESDAY, AUGUST 30.

SILENT.

WEDNESDAY, AUGUST 31.

3 p.m.: Afternoon session.
6.0: Children's session, by Uncle Jack.
7.15: Addington stock reports.
7.30: News and reports.
8.0: Chimes.
8.1: Relay of orchestral selections from Strand Picture Theatre Orchestra, under direction of Mr. Harry Ellwood.
8.15: Bass solo—Mr. J. Filer, "The Song of Hybrias, the Cretan" (Elliott).
8.19: Soprano solos—Miss Violet Collins, (a) "Solweig's Song" ("Peer Gynt") (Greig), (b) "The First Spring Day" (Drummond).
8.25: Tenor solos—Mr. Ernest Rogers, (a) "Maire, My Girl" (Aitken), (b) "Macushla" (MacMurrrough).
8.32: Sketch—Mr. Sydney Comfort, "Farmyard Mimicry" (M.S.).
8.36: Violin solos—Mr. Alec Law, (a) "Le Cygne" (Saint-Saens), (b) "The Perfect Melody" (O'Hara).
8.43: Soprano solos—Mrs. J. Filer, (a) "A Year Ago" (Davies), (b) "When the Great Red Dawn is Shining" (Sharpe).
8.50: Bass solo—Mr. J. Filer, "Shipmates o' Mine" (Sanderson).
8.54: Soprano solo—Miss Violet Collins, "Flower Song" ("Faust"), (Gounod).
8.58: Tenor solo—Mr. Ernest Rogers, "Eileen Mavourneen" ("Lily of Killarney"), (Benedict).
9.2: Humorous items—Mr. Sydney Comfort, (a) "The Parson" (M.S.), (b) "My Beastly Eye-glass."
9.15: Tenor and bass duet—Messrs. E. Rogers and J. Filer, "Melodrama" (Adlam).
9.20: Relay of items from concert at Jellicoe Hall, under auspices of the Christchurch Practical Psychology Club.
10.0: Close down.

THURSDAY, SEPTEMBER 1.

3 p.m.: Afternoon concert session.
4.0: Talk, arranged by Home Economics Association, "Some Aspects of Spending," by Mrs. J. Johnson.

2YA FEATURES (Continued)

"Carmen," "Don Juan," "Faust," "Figaro," "Simon Boccanegra," "La Tosca," "Ballo Maschera," "Tannhauser," "Lucrezia Borgia," and "Rigoletto." Mr. E. D. McLellan and Miss E. T. Standen and chorus will also be responsible for an operatic scene, the third act from Verdi's opera "La Forza del Destino."

Selections will also be played by the Studio Orchestra, the items being "Characteristic Waltz, No. 4" (Coleridge



SIGNOR CESARONI,

whose pupils give an operatic concert from 2YA on Monday.

Taylor, "Pleading" (Haydn Wood), "Sextette" from "Lucia di Lammermoor," and Borowski's "Minuet." "The Carillon" will be the subject of a short lecture by Dr. B. Marsden. The same evening, at 7.31, another lecture will be given, Mr. Preston Billing speaking on "Radio."

GREAT MUSICAL EVENING.

A fine musical programme has been arranged for 2YA on Tuesday. The singers comprise some well-known and talented artists. Mrs. W. H. Hindle, soprano, is scheduled for two songs. Miss Constance Guy (contralto) will sing "Break, Break, Break," and the "Castilian Lament." Two male voices, Mr. S. Duncan (tenor) and Mr. Wilfred Scott (baritone), will also be heard. A talented violinist, Miss Rita Reece, is to play the "Polish Dance" and Paderewski's "Minuet." Miss Vera Boesley, pianiste, is to treat listeners to a choice interpretation of Paderewski's "Cracovienne Fantastique" and the "Valse Caprice." The studio orchestra will also contribute, and will add materially to making the evening a great musical success.

Mr. Douglas Taylor, supervisor of music for the Education Department, will continue his delightful series of talks on music. The subject this week will be "Music and Dancing."

Elocutionary items, which are sure to be much enjoyed, will be given by Mr. Barton Ginger, prize-winner at many a competition, and a well-known entertainer. He will recite "The Highwayman," "If," and "The Three Trees."

BAND NIGHT AT 2YA.

The Salvation Army Citadel Silver Band, one of the finest organisations in New Zealand, will, assisted by vocal artists, supply the programme at 2YA on Thursday. The band has a long repertoire to draw from and the selections for this evening comprise—"Our Conquering Army," "Gems From Great Masters," "American Melodies," "Beethoven," "Gems from Haydn's Creations," "Herald of Praise," "My Fortress," "Mount of Olives," "Hallelujah Chorus," and "Flag of Freedom."

The vocalists include Captain N. Sansom, who will sing "Abide With Me," and "O Star of Eve." Mr. G. Tinney, also a baritone, will sing "Salam" and "Sincerity." Two fine singers in Miss Venore Pattison (soprano) and Miss Dora Abbott, have chosen songs in which they should be heard at their best. Mr. J. H. Meele, a popular tenor, is to sing "Doreen" and "To a Miniature," and the Bijou Quartet is to render "Lorne" and "That Worthy Name."

At 9.2 a lecture on "Some aspects of the colonisation of New Zealand" is to commence, the speaker being Mr. D. S. Smith.

BIG NIGHT ON FRIDAY.

A diversified programme has been prepared for Friday, and a delightful entertainment is promised. The first half of the programme will be devoted to the Radio Four, a quartet who, either singly or together, in a variety of ways, will delight listeners. Tuning in with "Anonymous Nonsense" by the Four, one can see from the items what the nature of the entertainment will be. There are—"Kitten on the Keys" (piano novelty), "Lullaby Land" (chorus), "Salut d'Amour" (cello), "Oh, Who Will O'er the Downs" (quartet), "When the Sergeant-Major's on Parade" (bass-baritone), "O Lovely Night" (duet), "I'm Courting" (humorous), "The Bassoon" (humorous song), etc., etc. The personnel of the Radio Four is: Messrs. R. Walpole, C. Proctor, J. F. Skeddon, and S. Hall.

The second portion of the programme will also be most enjoyable. Mr. Billy Hart will be at the piano and will sing and play. Other artists are: Mrs. Elsie Davis, Miss Dora Erikson, Mr. Wm. Boardman, and Mr. John R. Ques-

7.15: News and reports.

8.0: Chimes. Relay of orchestral selections from Crystal Palace Picture Theatre Orchestra, under direction of Mr. A. J. Bunney.
8.13: Tenor solo—Mr. H. Blakeley, "Mary" (Richardson).
8.17: Flute solo—Mr. Ronald Boulton, "Mazurka" (Percival).
8.20: Mezzo-contralto solo, Mrs. Harold Prescott, "A Pearl for Every Tear" (Liddle).
8.24: Bass solo—Mr. W. J. Richards, "The King's Minstrel" (Pinsuti).
8.28: Flute and clarinet—Messrs. Ronald and Linton Boulton, "Lo! Here the Gentle Lark" (Sir Henry Bishop).
8.32: Tenor solo—Mr. H. Blakeley, "Good Company" (Phillips).
8.36: Violin solo—Miss Joan Carter, "Konzertino" (Sitt).
8.40: Mezzo-contralto solo—Mrs. Harold Prescott, "The Way Home" (Liddle).
8.44: Clarinet solo—Mr. Linton Boulton, "Angels' Serenade" (Braga).
8.48: Tenor solo—Mr. H. Blakeley, "The Secret" (Scott).
8.52: Flute and clarinet—Messrs. Ronald and Linton Boulton, "Faded Flowers" (Dorn).
8.56: Bass solo—Mr. W. J. Richards, (a) "Sombre Woods" (Lully), (b) "I am Fate" (Hamblin).
Interval.
9.7: Mezzo-contralto solo—Mrs. Harold Prescott, "Violets" (Mallinson).
9.12: Violin solo—Miss Joan Carter, "Dragon Flies" (Zsott).
9.15: Musical lecture, by Mr. T. Vernon Griffiths, M.A., Mus.Bach. (Cantab.), "M.T.C.L., 'The Music of Laughter.'"
10.0: Close down.

FRIDAY, SEPTEMBER 2.

3 p.m.: Studio concert.
3.30: Talk by Rev. D. Gardner Miller, "The Literature of Russia."
7.15: News and reports.
7.30: Talk by Mr. J. K. Moloney on "Rugby Football."
8.0: Relay of orchestral selections from Everybody's Picture Theatre Orchestra, under direction of Mr. W. J. Bellingham, F.S.M.
Musical programme by Mrs. J. E. Russell's Ladies' Glee Club, supported by assisting artists:
8.15: Part-song—Glee Club, "The Bird at Sea" (Smart).
8.19: Tenor solo—Mr. Russell Summer, "Mignon! Here is April" (Del Riego).
8.23: Soprano solos—Mrs. H. Bowker, (a) "Happy Song" (Del Riego), (b) "Give Me a Youth" (Drummond).
8.29: Part-song—Glee Club, "Orpheus and His Lute" (German).
8.48: Bass solo—Mr. W. Ingle, "The Norseman's Song" (Allitsen).
8.52: Violin solo—Mrs. Kenneth Ballantyne, "Menuet" (Porpora-Kreisler).
9.3: Part-song—Glee Club, "Stars of the Summer Night" (West).
9.9: Contralto solo—Mrs. E. W. Pidgeon, "Five Little Piccaninies" (Anthony).
9.12: Piano solo—Mrs. J. E. Russell, "Toccato" (Massenet).
9.16: Part-song—Glee Club, "The Spider and the Fly" (Ives).
9.20: Cello solo—Mrs. John Guthrie, "Reverie" (Drinkler).
9.24: Tenor solo—Mr. Russell Summer, "Caro mio ben" (Giordani).
9.27: Part-song—Glee Club, "Epilogue" from "A Spring Morning" (Horrocks).
9.31: Duet for two violins and piano—Mrs. K. Ballantyne, first violin, Mrs. A. C. Moysey, second violin, and Mrs. J. E. Russell, piano, "Suite" (Moskowsky).
9.36: Bass solo—Mr. W. Ingle, "Bois Epais" (Lully).
9.40: Part-song—Glee Club, "Bright is the Morn" from "Lohengrin" (Wagner).
9.44: Cello solo—Mrs. John Guthrie, "Minuetto" (Popper).
9.48: Part-song—Glee Club, "How Beautiful is Night" (Hamblett).
9.52: Piano solos—Mrs. J. E. Russell, (a) "Rigandon" (Niemann), (b) "The Cat After the Mouse" (Henriques).
9.58: Part songs—Glee Club, (a) "Rest" (Spohr), (b) "To Stay at Home is Best" (Tours).
10.4: Tenor solo—Mr. Russell Summer, "An Evening Song" (Blumenthal).
Close down.

SATURDAY, SEPTEMBER 3.

6.0: Children's session, by Uncle Jack.
7.15: News and reports.
7.30: Sporting results, etc.
8.0: Chimes. Relay of orchestral selections from Grand Picture Theatre Orchestra, under direction of Mrs. Black.
Radio revue, by the Joyous Trio.
8.15: Trio—Joyous Trio, "Popular Medley" (M.S.).
8.19: Piano duets—Misses Dorothy Johnston and Muriel Johns, (a) "For My Sweetheart" (Donaldson), (b) "Mamma's Gone Young" (Lee).
8.25: Vocal solo—The Happiness Boy, "Katinka" (Tobias).
8.29: Ukulele trio—Honolulu Trio, "Medley" (M.S.).
8.33: Vocal solo—Miss Muriel Johns, "Love Came Calling" (with violin obbligato), Zamenick.
8.37: Musical sketch—Happiness Boy, "Mountains of Mourne" (M.S.).
8.41: Violin solo—Miss Thelma Cusack, "Madrigal" (Simonetti).
8.46: Vocal duet—Miss M. Johns and Mr. J. B. Johns, "Garden of Your Heart" (Dorel).
8.50: Comedy sketch—Miss M. Johns and the Happiness Boy, selected (M.S.).
8.57: Piano duets—Misses Dorothy Johnston and Muriel Johns, (a) "Blue Skies" (Berlin), (b) "My Pal Harry" (Rose).
9.3: Violin solo—Miss Thelma Cusack, "Canzonetta" (d'Ambrosia).
9.10: Finale—Joyous Trio, "Shepherd of the Hills" (Nicholls).
9.15: Relay of dance music from Caledonian Hall, by arrangement with Mr. Reg. Stillwell.
10.0: Close down.

SUNDAY, SEPTEMBER 4.

5.45 p.m.: Children's song service, from 3YA studio.
6.30 p.m.: Relay of evening service from Durham Street Methodist Church. Preacher, Rev. W. A. Hay; choirmaster and organist, Mr. Ernest Firth, F.R.C.O. The service will include special solos and choral numbers.
8 to 9 p.m.: Musical programme.

Station 4YA, Dunedin

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SUNDAY, AUGUST 28.

6.30 p.m.: Relay of services from First Church of Otago. Preacher, Dr. E. N. Merrington; organist, Dr. V. E. Galway.
8.0: Vocal recital from the studio by Madame Marjorie Cadman, assisted by Mr. A. R. Howie (violin). Accompanist, Mr. Chas. A. Martin.
8.0: Vocal solos, (a) "Ave Maria" (Kahn), (b) "My Task" (Ashford), (c) "O Divine Redeemer" (Gounod).
8.11: Violin solos, (a) "Londonderry Air" (b) "Gavotte" (Bach).
8.18: Vocal solos, (a) "If Thou Wert Blind" (Johnston), (b) "Blow, Blow, Thou Winter Wind" (Quilter), (c) "O Mistress Mine" (Quilter).
8.29: Violin solos, (a) "Andante" from "Concerto in E Minor" (Mendelssohn), (b) "Mazurka in a Minor" (Chopin).
8.42: Vocal solos, (a) "Memory" (Goring-Thomas), (b) "Heart's Awakening," (c) "Softly Awakes my Heart" from "Samson and Delilah" (Saint-Saens).
9.0: Close down.

TUESDAY, AUGUST 30.

3 to 4.30 p.m.: Afternoon concert.
3.1: His Master's Voice recital.
3.15: Address by Miss M. Puechegud on "Interior Decoration: Homes from the Inside."
3.30: Studio music.
3.45: Social notes.
3.50: Studio music.
4.0: Book talk, by Mr. H. Greenwood, Librarian, Dunedin Athenaeum.
4.15: His Master's Voice recital.
4.30: Close down.
7 to 7.30: Children's session—Aunt Diana.
7.30 to 7.45: News service.
7.45: Humorous address by Pastor More.
8 to 10: Chimes.
Special charity concert by the Anglican Musical Society, under the direction of Mr. Axel Newton, from the studio.
8.1: Chorus, "Carnival" (Rossini), the club.
8.6: Bass solos, (a) "Song of the North Wind" (Head), (b) "Glory of the Sea" (Sanderson), Mr. E. G. Bond.
8.13: Clarinet solo, "Cavalleria Rusticana," Rev. G. E. Moreton.
8.16: Quartet, "Phro Phundo Basso" (Bliss), Misses Goldsmid and Dale, Messrs. Braithwaite and Bond.
8.21: Chorus, "Bridal Chorus" (Kjerulf), the club.

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Programmes Continued

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STATION 4YA, DUNEDIN.

- 8.28: Vocal solos, (a) "Someone Brought me Daffodils" (Wood), (b) "Who Knows?" (Ball), Miss M. Dales.
 8.35: Musical sketch, "The Pump" (West). A humorous debate as in the Dunedin City Council. Mayor, Mr. T. N. de Spong; councillors, male members of the club.
 8.52: Chorus, (a) "Londonderry Air," (b) "Hail, Smiling Morn" (Spofforth), the club.
 9.0: Vocal solos, (a) "Good-bye" (Tosti), (b) "Lavender Days" (Teschemaker), Miss Goldsmid.
 9.6: Clarinet, selection from "The Mikado" (Sullivan), Rev. G. E. Moreton.
 9.12: Vocal solos, (a) "Inter Nos" (Macfadyen), (b) "Songs my Mother Taught Me" (Dvorak), Mr. R. Braithwaite.
 9.19: Madrigal, "Brightly Dawns" (Sullivan), the club.
 9.25: Light and shade, Mr. T. N. de Spong.
 9.40: Quartet, "Plantation Songs," Misses Goldsmid and Dales, Messrs. Braithwaite and Bond.
 9.44: Vocal solos, (a) "Sea Fever" (Ireland), (b) "Lorraine" (Sanderson), Mr. M. Cachemalle.
 9.50: Chorus, "Good Night, Beloved" (Pinsuti), the club.
 9.55: Hymn, "Eternal Father, Strong to Save."
 9.59: National Anthem, the club.
 Accompanist, Miss Moana Brunton, A.T.C.L.

WEDNESDAY, AUGUST 31.

SILENT.

THURSDAY, SEPTEMBER 1.

- 7 p.m.: Town Hall chimes.
 7.1: Request gramophone recital.
 8 p.m.: Town Hall chimes.
 Studio concert by the Macandrew Bay Glee Club, under the direction of Mr. H. P. Desmoulins and assisting artists.
 8.1: Orchestral selections, under Mr. Chas. Parnell, from the Empire Theatre.
 8.6: Part-songs—(a) "Hail, Smiling Morn" (Spofforth), (b) "The Silent Tide" (Pinsuti), the Glee Club.
 8.12: Baritone solos—(a) "My Queen" (Blumenthal), (b) "Postillion," Mr. H. P. Desmoulins.
 8.19: Pianoforte solo—Selected, Mrs. H. C. Campbell.
 8.23: Part-songs, (a) "Londonderry Air" (b) "John Peel" (Williams), Glee Club.
 8.29: Soprano solos—(a) "Summer Night" (Goring-Thomas), (b) "When All Was Young" (Gounod), Miss Phyllis West.
 8.36: Euphonium solo—"Lay My Head Beneath a Rose," Mr. T. Howe.
 8.39: Part-songs—(a) "The Snow" (Elgar), (b) "A Summer's Day" (Wheeler), Glee Club.
 8.46: Address—"Carburetion and Carburettor Adjustment," by "Gargoyle."
 8.58: Bass solos—(a) "Onaway, Awake, Beloved" (Cowan), (b) "Youth" (Allitsen), Mr. Laurie North.
 9.4: Pianoforte solo—Selected, Mrs. H. C. Campbell.
 9.9: Part-songs—(a) "Sing a Song of Sixpence" (Barnett), (b) "Stars of the Summer Night" (Hatton), the Glee Club.
 9.15: Mezzo-soprano solos—Selected, Miss Lucy James.
 9.22: Tenor solos—(a) "Evening Song" (Blumenthal), (b) "Mary of Argyle," Mr. A. Moore.
 9.32: Vocal duet—"Sweet and Low" (Brockley), Mr. and Mrs. Desmoulins.
 9.36: Euphonium solo—Selected, Mr. T. Howe.
 9.40: Orchestral selections from the Empire Theatre.
 9.50: Part-songs, (a) "To Blossoms" (Roberts), (b) "Border Ballad" (Maun-der), the Glee Club.
 9.58: National Anthem.
 10.0: Close down.

FRIDAY, SEPTEMBER 2.

- 3 to 4.30 p.m.: Afternoon concert.
 3.0: Town Hall chimes.
 3.1: His Master's Voice recital.
 3.15: Afternoon tea music from the Savoy.
 3.30: Studio music.
 3.45: Social notes.
 4.0: Cookery talk by Miss M. Puechegud.
 4.15: Music from the Savoy.
 4.30: Close down.
 7 to 7.30: Children's session—Aunt Diana.
 7.30 to 7.45: News service and market reports.
 8.0: Chimes.
 8.1: Studio concert.
 8.45: Address under the auspices of the Workers' Educational Association.
 9.0: Dance music by Ern. Beacham and his Orchestra, relayed from the Savoy.
 10.0: Close down.

3YA ATTRACTIONS

CHURCH ANNIVERSARY.

On Sunday, August 28, the Edgeware Road Methodist Church will conduct anniversary services. The Rev. W. Greenslade will be the preacher. Following the evening service a full musical programme will be given till 9 o'clock. Sacred songs will be sung by Miss H. Smith, Miss W. Sproston, Misses R. and A. Lucas, Mr. C. James, Mr. R. E. James, Mr. R. J. Johnston and Mr. C. L. Richards. Solos, a duet, a trio, a quartet and anthems will be sung.

BAND AND VOCAL MUSIC.

PROMISING YOUNG ARTISTS.

Monday evening's entertainment—band and assisting artists—at 3YA is always enjoyable. On this occasion the Christchurch Municipal Band will supply the instrumental music, so that is guarantee of its excellence. Some young artists will make their first appearance in radio, and all are expected to please. Three songs have been chosen by Mrs. Rita Buxton: "Because," "Until," and "Drink to Me Only With Thine Eyes." Miss Sylvia Angus (soprano) will sing "Be Still, Blackbird," and "Since First I Saw Your Face." Miss Olga Wellard-King's items are "The Ashgrove," "Wise Folly," and "Down in the Forest." Miss Jessie Rosewarne (mezzo-soprano) will sing "I Love the Moon," "Achal of the Sea," and "June Music." Mr. E. A. Dowell (tenor) will sing "There's a Land" and "Somewhere in the World." Mr. J. J. Fleweller will give a humorous sketch which should "go over" well.

Among the items to be rendered by the band is a madrigal. "Madrigal" is a general term applied to the typical part-song of the Elizabethan age, a "ballad" being, as a rule, a particularly light-hearted madrigal. Very simple harmonies, great freedom of movement in the voice parts, no accompaniment, and a peculiar fascination about it all—these are some of the chief elements of the old madrigal style.

GOOD TIME FOR KIDDIES.

Next Monday will see Uncle Sam at the microphone at 8 p.m. Uncle Jack's sessions also commence early now. The kiddies are well catered for these days. Soon they will have

an hour a day all to themselves—an hour a day from 1YA, 2YA, and 3YA, with something extra on Sundays as well.

ATTRACTIONS FOR WEDNESDAY.

In Wednesday's programme will be noticed some popular singers—Messrs. J. Filer and R. Rogers, bass and tenor respectively, who will contribute a duet, "Melodrama," as well as solos. Mr. Filer will sing "The Song of Hybrids the Cretan" and "Shipmates of Mine." Mr. Rogers will sing "Maire, My Girl," "Macushla," and "Hileen Mavourneen" (Lily of Killarney).

Mrs. Filer, soprano, will also sing, her items being "A Year Ago" and "When the Great Red Dawn is Shining."

Miss Violet Collins, who has a sweet soprano voice, will be heard in "Sol-veig's Song" from "Peer Gynt," "The First Spring Day," and the "Flower Song" from "Faust."

Mr. Alex. Law, teacher of the violin in Christchurch, will play "La Cygne" and "The Perfect Melody."

Mr. Sydney Comfort promises much amusement with several humorous items, including a sketch in imitation of the farmyard.

At 9.20 on Wednesday, 3YA will connect up with the Jellicoe Hall, where a concert is to be given by the Christchurch Practical Psychology Club. This will be broadcast. Some good items are promised, those to be broadcast including humorous recitations, vocal solos and duets, and a piano solo.

THE SPENDING OF MONEY.

On Thursday afternoon a talk arranged by the Home Economic Association will be given, when Mrs. J. Johnston will speak to ladies on "Some Aspects of Spending."

MR. BLAKELEY AT 3YA.

Good talent has been secured for Thursday's concert at 3YA. Mr. H. Blakeley, the well-known tenor of the Male Voice Choir, and an erstwhile member of the famous Lyric Quartet in Auckland, will sing "Marv," "Good Company," and "The Secret."

Mr. W. J. Richards, one of the best of 3YA's bass singers, is to sing "The King's Minstrel," "Sombre Woods," and "I Am Fate."

Mrs. Harold Prescott is to sing "A Pearl for Every Tear," "The May Home," and "Violets."

2YA's Special Jazz Programme August 27

Special Announcements From The Studio

The programme for the special jazz evening on August 27 from 2YA has been recast in the direction of instituting dancing at an earlier hour and incorporating throughout the evening the originally arranged concert items. There will also be a piece de resistance, as it were, at 9 o'clock in Mr. C. E. Wheeler's explanation of "The Cabinet System" as part of his series on "Parliament at Work." Another feature of note is that the initial work of the Master of Ceremonies will be undertaken from the studio in this form: The Studio Orchestra will play "Yellow Butterflies," after which there will be two waltzes. This rule will be followed throughout and will enable dancers to secure partners in anticipation and so lose none of the evening's enjoyment.

The full programme is as follows:—

SPECIAL DANCE PROGRAMME, 2YA AUGUST 27.

- 8 p.m.: Chimes of the Wellington General Post Office clock.
 8.1: Instrumental—Studio Orchestra, "Yellow Butterflies" (Evans).
 8.6: Allen's Dance Orchestra—Two waltzes, (a) "I Wish You Were Jealous of Me" (Hautrick-Davi and Rowell), (b) "The Girl of Yesterday" (Donaldson-Allen's).
 8.16: Baritone—Mr. A. A. Hollyman "The Great Blue Hills of Silence" (Gillan-Melo Music).
 8.19: Allen's Dance Orchestra—Two fox trots, (a) "Two Little Bluebirds" (Kern-Chappell), (b) "The Song of the Wanderer" (Moret-Allen's).
 8.29: Novelty duo—Mr. Frank Andrews and Mr. Jack Maybury, "Saxophobia" (Wiedoff), by Mr. J. Maybury. Novelty piano solos, "Three O'clock in the Morning," "Lead, Kindly Light," and original numbers by Mr. Frank Andrews at the piano.
 8.49: Allen's Dance Orchestra—Two fox trots, (a) "How Could Red Riding Hood" (Randolph-Davis), (b) "Idolising" (Messenheimer-Allen).
 8.59: Humorous song—Mr. Jack Wilkinson, "A Commercial Man's Wedding" (Weston and Lee (Francis, Day, and Hunter)).
 9.2: Weather report.
 Lecturette—Mr. Chas. Wheeler, "Parliament: The Cabinet System."
 9.12: Allen's Dance Orchestra—Two fox trots, (a) "Meadowlark" (Fiorit-Albert), (b) "Mary Lou" (Hyman-Albert).
 9.22: Humorous Song—Mr. E. Cooze, "I'm Setting the Village on Fire" (Merson-Francis, Day, and Hunter).
 9.25: Allen's Dance Orchestra—Two fox trots, (a) "Oh, If Only I Had You" (John and Friend-Albert), (b) "To-night's My Night With Baby" (Caesar-Albert).
 9.35: Baritone—Mr. Hollyman, "Just a Girl That Men Forget" (Garren).
 9.38: Allen's Dance Orchestra—Two fox trots, (a) "Cock a Doodle" (Johnston-Bibo, Bloedon), (b) "Just a Bird's-eye View" (Donaldson-Allen's).
 9.48: Character sketch—Mr. E. G. Peek, "Our Wedding" (Wood-Reynolds).
 9.51: Allen's Dance Orchestra—Two waltzes, (a) "Along Miami's Shore" (Warren-Foster), (b) "Calling" (Lumsdaine-Albert).
 10.1: Song—Mr. E. Cooze, "The City of Laughter and Tears" (David and Nichols-Lawrence, Wright and Co.).
 10.4: Allen's Dance Orchestra—Two fox trots, (a) "Ain't She Sweet?" (Aget-Davis), (b) "He's the Last Word" (Donaldson-Allen's).
 10.14: Humorous song—Mr. J. Wilkinson, "One of the Boys" (Murphy and Formly-Francis, Day, and Hunter).
 Allen's Dance Orchestra—Two fox trots, (a) "Who" (Kern and Jerome-Chappell), (b) "Black Bottom" (Henderson).
 10.24: Elocution—Mr. E. G. Peek, "Mustn't" (David-Heldmans).
 10.29: Allen's Dance Orchestra—Two fox trots, (a) "Baby Face" (Davis and Askt-Albert), (b) "Hi, Diddle, Diddle" (Coon and Keidel-Allen).
 10.39: Baritone—Mr. Hollyman, "A May Morning" (Weatherby-Chappell).
 10.44: Allen's Dance Orchestra—Two fox trots and a waltz, (a) "Hello, Bluebird" (Friend-Albert), (b) "Me, Too" (Woods-Albert), (c) waltz, "In a Little Spanish Town" (Wayne-Allen's).

2YA FEATURES (Continued)

ted. A number of favourite songs are down against their names.

THE SINGAPORE BASE.

On Friday the series of talks on Imperial affairs by the Editor-Announcer will be continued. The lecturette will commence at 9.5, and the subject will be "The Singapore Base."

TALK ON DANCING.

Madam Edith Baird, who has been appointed by the Wellington Competitions Society to judge the dancing at the festival, is to deliver a lecturette on Saturday night. Madam is the

principal of the Edith Baird School of Dancing. She is a fellow of the Imperial Society of Dance Teachers and a member of the British Association Operatic Dancers.

CHRISTIAN SCIENCE.

A Sunday afternoon lecture on Christian Science, to be given in the De Luxe Theatre at 3 o'clock, is to be relayed by 2YA.

In the evening, St. Andrew's Presbyterian Church service will be broadcast. The Rev. R. Howe will be the preacher. After the church service a concert to be given in the Grand Opera House will be relayed.

MR. FRANK ANDREWS.

This is Mr. Frank Andrews, who is acclaimed by the musical and theatrical critics throughout Australia and New Zealand as one of the world's cleverest comedy pianists. He has already appeared on numerous occasions before the microphone. His versatility at the piano is outstanding, and he is a natural genius in his remarkable command of that instrument. He possesses a superb expression and touch and plays the latest jazz rippling with runs up and down the keyboard in the most entertaining way. The man who does two things at once aptly describes Mr. Andrews, for he plays two tunes at once, sings two songs at once, and dances and plays his own pianoforte accompaniment. His piano chimes and improvisations at the keyboard



—Photo, S. P. Andrew.

are a revelation. He can imitate anything from a fish to a Chinaman playing jazz, and his seven different interpretations of the "Prisoner's Song" is, without a doubt, one of the cleverest things heard from 2YA. Some three years ago he toured on Fullers' circuit. He also presented his act to big success at the Tivoli Theatre, Sydney, and later was a member of Bert La Blanc's Revue. Listeners-in will be interested to know that Mr. Andrews does not know a single note of music, being entirely guided by ear.



THE RADIO FOUR.

Back: Mr. C. E. Proctor. Left to right: Messrs. J. F. Skedden, S. Hall, S. Hall, R. F. Walpole. This is a talented quartet of vocal and instrumental artists, all of whom are well-known in Wellington musical circles. They will broadcast a novel and varied entertainment from 2YA, Wellington, on Friday, September 2. They will be heard in popular and classic songs, duets, and humorous items, many of which will be entirely new to listeners-in. The Radio Four will monopolise the air from 8 to 9 p.m. and will do their own announcing.

Miss Joan Carter, the talented violinist, so well known to 3YA listeners, will play "Konzertino" and "Dragon Flies."

Messrs. Ronald and Linton Boulton, artists on the flute and clarinet respectively, will contribute solos and duets. These two musicians have been welcome additions to 3YA's programmes lately.

MUSIC OF LAUGHTER.

Mr. Vernon Griffiths will give a lecture on "The Music of Laughter" at 3YA on Thursday evening. This should be a treat. Mr. Griffiths's recent lecture on "The Plain Man's Music" was particularly well received, and Thursday's address, with its accompanying music, should meet with the approval of all listeners.

LITERATURE AND RUGBY.

There will be two addresses on Friday—one in the afternoon and one in the evening, with Mrs. Russell herself at the

piano, will contribute to the instrumental portion of the programme. Mrs. Ballantyne and Mrs. Moysey, accompanied by Mrs. Russell, will play a delightful suite by Moskowski.



MRS. J. E. RUSSELL.

It was in 1888 that Mrs. J. E. Russell came to Christchurch and she has been a leading figure in musical circles in the cathedral city ever since. In Wellington, she was one of a large family, every member of which was talented and highly musical. Mrs. Russell was a gifted singer as well as being a pianist and appeared regularly as a soloist on the concert platform. She also played the viola. Now, as a music teacher, she is known for her outstanding ability as an accompanist, and her services are in regular demand. She has been pianiste for the Royal Musical Society for many years and her Glee Club is a well known combination in Christchurch, prominent musicians of the city being members, and its services are always directed to wards charity purposes.

SATURDAY BRIGHTNESS.

Aiming to keep the Saturday evening programmes "always merry and bright," 3YA has engaged the Joyous Trio again—Miss Muriel Johns, Miss Dorothy Johns, and the Happiness Boy—also the Ukulele Trio and Miss Thelma Cusack. The Joyous Trio will "stage" a Radio Revue and a comedy sketch.

4YA, DUNEDIN

"REAL LIFE" AND MUSIC.

The subject of Dr. B. N. Merrington's sermon on Sunday will be "Real Life," when the service from the First Church of Otago will be broadcast by 4YA. Dr. Merrington possesses a particularly fine radio voice, and is assured of a large invisible congregation whenever he is "on the air."

At the conclusion of the church service, Madame Marjorie Cadman, will give a vocal recital at the studio, when she will be ably assisted by Mr. Charles A. Martin at the piano, and Mr. A. R. Howie will contribute some carefully chosen violin works.

Madame Cadman has selected numbers which should appeal to a great many listeners, being all within the understanding of most music lovers, and her rendering of these will be a real treat.

HOMES FROM THE INSIDE.

At 4YA on Tuesday afternoon Miss M. Puechegud will again give a short address on interior decoration, this time taking for her subject "Homes from the Inside," during which she will give sound economical advice on furnishing.

REVIEW OF LATEST BOOKS.

During the afternoon session on Tuesday Mr. H. Greenwood, of the Athenaeum, will review, in his usual pleasant style, the latest books of the week.

Mr. Greenwood has spent many years in library activities, coming from Burnley, England, where he was assistant librarian at the Mechanics' Institution for some time. Later he accepted the position of senior assistant librarian at the Public Library of South Australia at Adelaide. He left that position early last year to take up his present office at the Dunedin Athenaeum, which institution has greatly benefited by his able service.

HIGH-GRADE CONCERT FROM 4YA ON TUESDAY, AUGUST 30

PERFORMANCE BY ANGLICAN MUSICAL CLUB



—Webster, photo.

A HIGH-GRADE CONCERT.

A high-class concert will be heard from 4YA on Tuesday evening, when the Anglican Musical Club, under the direction of Mr. Axel Newton, will

provide the programme. The club, which is one of the newer musical organisations in the southern city, has in a short time reached a very high standard and performs many difficult works in masterly style. The mem-

bers are some of the foremost vocalists in Dunedin, and therefore the choruses, madrigals, etc., may be expected to portray pleasantly much skill.

Vocal soloists include Misses Gold-

smid and Dales, and Messrs. E. G. Bond, R. Braithwaite and M. Cache-maille. The Rev. G. E. Moreton will contribute clarinet solos.

PLENITUDE OF HUMOUR.

A special feature of Tuesday's concert will be a clever humorous sketch entitled "The Pump," which will imitate the proceedings of the Dunedin City Council, the part of the Mayor being taken by Dunedin's leading elocutionist, Mr. T. N. de Spong, and the roles of the councillors being enacted and sung by members of the Anglican Musical Club.

Preceding this concert at 7.45 p.m. Pastor W. D. More will delight listeners with another of his humorous talks.

THURSDAY'S CONCERT.

The programme from 4YA on Thursday night will be most pleasing, having been arranged by Mr. H. P. Desmoulin, a well known Dunedin singer, who is conductor of the Macandrew Bay Glee Club, whose part-singing will be a prominent feature of the evening. The Glee Club is a talented band of vocalists, and its rendering of several well known works will be a treat.

Among the soloists will be: Vocal, Miss Lucy James, Miss Phyllis West, Mr. Laurie North, Mr. and Mrs. H. P. Desmoulin; instrumentalists, Mrs. H. C. Campbell, at the piano, and Mr. T. Howe, with his euphonium.

During the evening "Gargoyles" will again address motorists, his subject this week being "Carburetion and Carburetor adjustments."

INSTRUCTIVE TALKS.

On Friday afternoon Miss M. Puechegud will entertain lady listeners with further cooking recipes and culinary hints.

In the evening the Workers' Educational Association will provide another instructive talk.

Amongst the Listeners

This is the Listener's Corner. It is available for reports of receptions from individuals; the correspondence of Leagues of Listeners and reports of their proceedings; constructive criticism or suggestions for the betterment of radio in general and the consistent improvement of the service that broadcasting can render in our community life. We wish this page to be the meeting-place of listeners and officials for the better understanding of points of view and the problems of others. It is a "Service" page, and we invite you to make use of it. Address all communications: Editor, "Radio Record," P.O. Box 1032, Wellington.

LISTENERS' LEAGUE

The committee of the Canterbury Listeners' League met on Wednesday evening, the president, Mr. K. M. Gresson, presiding.

Considerable discussion took place on a remit sent forward for support from the Auckland Listeners' League which read as follows: "That the executive of the Auckland Listeners' League recommends to the Postmaster-General that, with a view of suppressing the interference with broadcasting reception due to oscillating and radiating receiving sets, the use of a stage of neutralised radio frequency amplification on all regenerative valve receiving sets covering the ordinary broadcasting band of wave-lengths is urgently needed, and should be made compulsory." After a long discussion it was decided to refer the question to the Technical Committee for a report.

The secretary reported that so far he had not received a reply to a letter asking for various information from the Post Office, only an acknowledgment being so far to hand. This letter was sent so as to get some idea as to the duties of the radio inspectors, and with a view of assisting the latter in suppressing oscillating valves, etc.

A letter was received from a Wellington committee setting out rules for a New Zealand Listeners' League, to which it is proposed to affiliate all listeners' leagues in the Dominion, and suggesting a conference of delegates to meet in Wellington at an early date. The meeting decided to leave the matter in abeyance, as attendance of delegates would entail some expense.

Members pointed out that there was no hurry to join up, as so far the matter was only in the proposal stage.

After a sub-committee had been set up to consider a proposal to hold an exhibition the meeting terminated.

HAWKE'S BAY NOTES

A noted improvement has been marked in reception conditions up this way during the past week or two. The New Zealand stations have been on the job "hot and strong, but the 'Aussies' have been better than they are at present. All listeners appreciate the efforts which are being made by the Broadcasting Company to transmit all the main sporting events, and in relaying the races from the Cathedral City. 3YA was in big demand. At the same time, this station still fades badly, or at any rate, if it is not the station, the reception fades very much here, and until this fault is remedied 3YA will not hold first place with local listeners. The Broadcasting Company must realise from the many reports received that this fading is prevalent not only in this district, but all over the Dominion, and a big effort should be made to locate the trouble, for it will be a great pity if such a station as 3YA is not brought up to the highest possible pitch of perfection. No one likes to be written down as a "growler," but in this respect there certainly is room for a growl.

Too Many Songs.

Recently reference was made in these notes to the all-round improvement in

the programmes from all the New Zealand stations, and in the interim the writer has questioned at least half a hundred listeners on the matter of programmes, and it is quite clear that satisfaction is not yet general.

From most quarters the suggestion is offered that all stations concentrate too much on songs. In this direction an alteration would be welcomed. It is, of course, hard to suggest just what should constitute a first-class radio programme, but 90 per cent. of listeners prefer listening to bands, orchestras, or, in fact, any musical number, rather than vocal solos. As far as 2YA is concerned, several listeners queried why the De Luxe Theatre orchestra and the Wurlitzer organ was not put on the air. In any case, the company can rest assured that if more musical numbers and less vocal numbers were included, the programmes would be more enjoyable. It seems that it is the vocal solos which do not find favour, for duets, quartets, etc., are quite popular. This suggestion should be at least worth a try out.—[2YA has relay arrangements with the Paramount orchestra, which is of first-class quality, and is frequently "on the air."]

Radio Society.

At the annual meeting of the Hawke's Bay Radio Society, which was held in Hastings, the Rev. F. A. Bennett was re-elected as president, Messrs. A. C. Duff and J. H. Scott were elected vice-presidents, other offices being filled as follows:—Treasurer, Mr. J. Strickland; secretary, Mr. E. H. Culver; auditor, Mr. R. D. Brown; executive, Messrs. A. S. Tonkin, A. E. O'Meara, E. T. Gifford, F. Mardon, and S. C. Rusbatch.

Short-Wave Craze.

The short-wave craze is taking on up this way, and lots of experimental circuits have been tried, with more or less success. The circuit diagram given in last week's "Radio Record" looks good, and no doubt will be given a good thrashing before September 1.

Power Line Interference.

Local interference from power lines and motors, etc., is becoming a big bug-bear here now, and the Radio Society has appointed a committee to see if the trouble can be eliminated. One of the new vice-presidents of the club is Mr. J. H. Scott, the borough electrical engineer, and he has promised every assistance in this respect, so there is hopes of improvement.

Local Station.

Matters are still moving very quietly in connection with the proposed local station, but in a couple more weeks or so the society should be in a position to know just where it stands. The debentures are now being "sold," and although it is early yet to judge, good results are expected.

The Copyright Issue.

"I wish to congratulate you for producing such a paper for radio fans, also for making use of a copyright. Of course, you are sure to meet some cranks who want everything for nothing. Good luck."—E.C., Ngāio.

SPORTING

NEXT WEEK'S FIXTURES

SATURDAY, SEPTEMBER 3.

Otago v. Wellington, 2YA
Auckland v. Wairarapa, 1YA.

Arrangements are being made to broadcast daily the results of the play in the New Zealand Golf Championships, which are to be played at Hamilton from August 31 to September 10.

THE MAIL BAG

Received Holland's Broadcast.

The new Wellington station comes through pretty well here, although I don't think this is an extra good spot for Wellington, owing, no doubt, to the intervention of the hills. I built a low-way set to listen to PCJJ's special low-wave station the 24-hour concert they were giving. I managed to get them about R4, although tuning was pretty difficult. However, I enjoyed about three-quarters of an hour of their concert with very little static, and practically no fading.—B.E.M., Torā, Martinborough.

2YA on Crystal at 400 Miles.

Referring to your article in last issue on crystal reception, page 14, it may be of interest to mention that I received Wellington last Monday on a standard British-made crystal set (Geco-phone), the piano, violin, and flute being very audible. Once or twice I heard the announcer quite distinctly, but songs and glaucionary numbers were weak. Fading was noticeable. Considering I am about 400 miles from Wellington I think this is particularly good. This is only made possible by Auckland being silent on Mondays. Personally I think a silent day per week is a good thing for that reason; moreover, an interval in all entertainment is quite refreshing. Half the complaints that arise about programmes is due to being purely surfeited with amusement night after night, making listeners become critical. Before radio came, how many people would go to an entertainment more than once or twice a week? If it came to a vote, I would cast in favour of two silent days for 1, 3, and 4YA. Wellington being chiefly for the whole Pacific, one silent day per week. It would then be possible to have programmes of very high quality, and give the staffs more relief from what must be a very monotonous job.—H. G. Cave, Papakatoe.

Palmerston Reception.

I am very pleased with the results of 2YA. There is very little fading, and the variety of entertainment is greatly appreciated. Particularly the Hawaiian music. I believe that steel guitars broadcast clearer than any other instrument.—R. S. Buchanan, Palmerston North.

Spreading "The Gospel."

"The first concert broadcast from 2YA was received to a 'full house,' composed of an audience of approximately thirty friends, who fully appreciated the music and items by spontaneous outbursts of applause. Everybody went home fully satisfied—(here I might say I thought that they would never go, as the questions I had to answer about the 'mysteries' of wireless kept me busy till a very late hour). The reception was perfect, and it was very gratifying to hear everybody voicing their approval as each item was presented."—C.R.A., Wellington.

More Than Satisfied.

"May we thank you for the splendid service you give us for our 30s. license, and congratulate you on your achievement of the last twelve months. We are radio enthusiasts, who are more than satisfied."—C.M.J., Waiotahi.

Daytime Broadcasting.

"I consider the publishing of this paper as being a great help to listeners, and wish you every success. While appreciating the service given by the Broadcasting Company, and understanding some of its difficulties, I would like to point out that dealers at the present time haven't many opportunities for demonstrating in business hours, as there are very few broadcasts during the daytime. I think if dealers could get their sets going in the daytime it would help sales considerably."—W.B.J., Waipawa.

No More Grumbling?

"We are well pleased with the paper. Wellington is very strong here, and Christchurch pretty strong when the weather is suitable. The programmes are very good. I hope there will be no more grumbling—there has been enough, I think—but there are people who will never be satisfied."—E.J.P., Papakura.

Dickens Enjoyed.

"I would like you to know how thoroughly we enjoy the new 2YA station concerts, especially Mr. Clement May's studies of Dickens and Shakespeare. I feel that it would be an asset to us listeners if it were possible to have more of that class of entertainment from our New Zealand stations."—A.D.B., Motueka.

The Style of Announcing.

"I also wish to express my satisfaction with the splendid efforts your company are making in order to supply the very excellent programmes to the New Zealand listeners, and consider that same are quite up to the standard of the average good class concert one would expect to hear in any New Zealand city.

"I note that your announcers have been subjected to criticism from time to time, and some suggestions have been offered that the Australian or American styles should be copied. I certainly consider this would be a great mistake, and must congratulate the company on the splendid and dignified manner the announcers do their work. The cheap, flippant manner of the American and sometimes Australian announcers is not wanted by the better

class of New Zealand listener—it is a pleasure to listen to announcements here, this particularly applying to Auckland and Christchurch. Re stations: The Christchurch station is the best New Zealand station received here, and the programmes presented by this station are often much superior to any of the other Australian stations. Kindly accept my best wishes for the success of your company."—T.H.J., Okato.

Otago Central to 2YA.

M.B. (Harnsclough).—"Just a few words to show my appreciation of 2YA. We set the machine going every night, and I have no trouble. Every item comes clear and distinct. I read in the 'Radio Record' where one listener-in stated that the piano did not come clear. I think it is the fault of the listener-in or his machine. I have a Brownings-Drake five-valve set, and I put the dials right a few moments before time, and the next time I touch them is when you have finished. I have each number of the 'Radio Record,' except number one. I send my thanks to Mr. Billing for his speech on wireless sets, and I am pleased to say that mine is fitted up just as he said it should be. The Rev. Mr. Weeks was listened to with great interest on Sunday night by the party of friends who were present at my house."

Dunedin Gets 2YA on Crystal.

"It may interest you to know that station 2YA is heard here in Dunedin by a number of owners of crystal sets. On Mondays and Saturdays, when station 4YA is silent, I get about two-thirds of the programme, the rest being lost owing to fading. At best it is a little louder than the local station 4ZB, which is two miles from here. I may state that I have a T aerial, 40 feet high, and including lead-in, is 100 feet long. I use Brandes' phones. The set is home-made, wound with No. 12 D.C.C. wire. The crystal is 'Shaw's Hertzite,' and a silver cat-whisker is used."—"Crystal."

Reception Puzzles.

E.G. (Waikato).—"I look forward eagerly to each copy of the 'Record,' not only for particulars of programmes, but for the many excellent articles on various subjects in connection with radio. The map in No. 4 has settled many heated arguments as to distances from the various stations. Very many puzzling experiences arise in connection with reception. For instance, the 3YA relay of 2YA on Saturday night was perfect on four valves, but I had to use, at times, five to get it direct from Wellington. Though only about 67 miles from 1YA, we do not get it good. 2YA and 3YA are our best stations, with preference for 3YA. The football relay yesterday, Wellington v. Southland, was perfect."

F. H. Pearce, Bluff.—"I would welcome some information as to why 2YA is often not received as loud as 1YA, 3YA, 2BL, 2FC, etc., when it is so close to us. I speak for at least five listeners here in Bluff. Also why, since the last change of wave-lengths, 4YA is so bad that one cannot even listen to one item. On the previous wave-length (in the vicinity of 2FC), Dunedin was received fairly well, better than at the original wave."

[We don't know that, at present, your question can really be satisfactorily answered. It has been noticeable that, with the change in wave-length, some localities have not been receiving so well as before. On the other hand, some places report better reception.]

"A Braw Nicht."

"Sandie and I had a braw time last night, listening in to yer wee bit Scotch concert, Ah, mon! it was grand. We are just asking you to give Sandie and I a repeat concert of the same stuff."—Was that signed by a "Mac"?

Amongst the Listeners

The Human Side of Radio.

"Being an interested listener-in last Wednesday, I heard Mr. — singing," writes a listener. "I saw his name in the 'Radio Record,' and wondered if he was the Mr. — I knew. When I heard the voice I knew it must be. I have very often wondered where he was. I knew him to be in Christchurch somewhere, but wondered why I hadn't heard him over the air before. I have listened intently to the programmes given sometimes by a Welsh Society in Christchurch, also from the Cathedral, and I have fancied the voices have been familiar, but as no names were announced my curiosity wasn't satisfied. Being Welsh and coming from about four miles away from the same place, also being associated with him and his sister on the West Coast, you can imagine I was interested."

A Distant Listener's View.

Sir,—Just a word concerning your paper, and the discussion going on about the newspapers copying the programmes. Now, if some of those people would like to change places with me for a month they would understand the need and value of such a paper. We get the daily paper two days old, so what good is it to me? I hope that the paper is taken by every listener-in. I have a Browning-Drake five-valve set, and 2YA comes in like a peal of thunder, although I am nearly 375 miles away. I must say we enjoy every item, except one, and that is the piano and organ. The organ spoils it. When played separate nothing could be nicer. The announcer's words come perfectly clear, and I hear the motors sounding their horns in the streets. I must wish you and all the artists who entertain us so nicely the very best of luck.—Yours, etc., C. F. Bennett, Earsclough.

Query About Fading.

Sir,—Will you kindly advise me why it was, on Monday evening, August 15, portion of 2YA's programme, the Christchurch station was at least 50 per cent. louder than we received Wellington direct. This is very strange, considering that Christchurch is considerably farther away from here, also with a power of 500 watts against Wellington with 5000 watts. This was noted by several listeners up here who are curious to know why this should be so. 3YA is always received here considerably louder and with better modulation than Wellington; there is also less fading.

Programmes are very much improved, but 3YA is our only consistently reliable station. Why this is so is best known to those behind the scenes. I certainly think the Broadcasting Co. should leave no stone unturned until both Wellington and Auckland are made as reliable. 1YA, at least, should be in working order by now, considering it was installed before Christchurch. There is, perhaps, an excuse for Wellington, although, on the other hand, it is ten times as powerful, therefore should, at its worst, be superior to Christchurch if power counts for anything; yet at present it is far inferior. There must be a considerable amount of power going to waste, and we suggest that this be pointed out to the expert sent to install same. Wishing your journal every success.—I am, etc., W. M. PITCHER.

[Fading is a phenomenon which even technical experts cannot explain, much less remedy. There is scope for much research work here. Even an alteration in wavelength affects certain localities. It certainly seems inexplicable that 3YA should be received more

loudly in Hamilton than is 2YA, but there it is. It is proposed to conduct a test, or series of tests, to ascertain how the various New Zealand stations are received in the various parts of New Zealand on certain nights. Listeners will be asked to co-operate in this respect. Some places in New Zealand are "black" to some of the stations. Correspondence received by the Broadcasting Company shows that in certain districts of the South Island 1YA is received better than is 3YA, while a great area of the North Island receives 3YA better than 1YA—the East Coast, Bay of Plenty, Hamilton, etc. Reports show that while stations are received specially well in certain districts on certain nights, in other districts on the same nights the reception has been bad, so bad that listeners have complained, thinking that the transmission was at fault. It can be accepted as a fact that all is well at the transmitting end. The entertainment goes on the air in "good order and condition," but the company has no control over the reception. Atmospheric conditions may be unfavourable and receiving sets may not be above suspicion. In a great many cases it is

HELD OVER

OWING TO PRESSURE ON SPACE A NUMBER OF VERY INTERESTING LETTERS FROM LISTENERS ARE UNAVOIDABLY HELD OVER TILL NEXT WEEK.

a receiving set, in bad order and badly operated, that does more harm to the reputation of radio than do atmospheric conditions. Atmospheric, however, provide a great problem, and a test of the conditions prevailing over the Dominion at a given time would be particularly interesting. Though the Broadcasting Company receives many letters reporting on reception, these reports have not been made systematically. It must not be assumed for a moment that fading is peculiar to New Zealand stations. Letters from Australia are continually reporting the fine reception of 2YA, 1YA, and 3YA, which, the writers say, fade less than their own local stations!—Ed.]

Press Writer Corrected.

"I notice a paragraph in the Christchurch 'Star' relative to the present wavelength allotment, and the paragraph mentioned will bear quoting if only to demonstrate the appalling ignorance of even the fundamentals of radio, shown by some of the writers in the daily Press. The paragraph runs as follows: 'High-power stations cannot be worked at a closer separation than ten kilocycles (100 metres), and stations which are comparatively close together should be separated by fifteen kilocycles or more. Will this convince the P.M.G., New Zealand, that 3YA's wave is too close to that of 1YA?'"

Somewhat, I do not think this paragraph is going to cause the P.M.G. any concern, for if the relationship between frequency and wavelength had been understood by the "Star" writer he would not have "put his foot" in it to the extent of demanding a separation of "at least fifteen kilocycles," where already he has nearly eighty kilocycles. Anyway ten kilocycles represents a difference of 100 metres at only one point in the wavelength band, and that is between 1800 and 1900 meters.—Nuf sed.—I am, etc., MODULATOR.

INDIA BROADCASTS

TWO BIG STATIONS

EFFECT ON THE NATIVES

BOMBAY.

7BY, 357.1 METRES, 3000 WATTS.

CALCUTTA.

7CA, 370.4 METRES, 3000 WATTS.

(From Our Own Correspondent.)

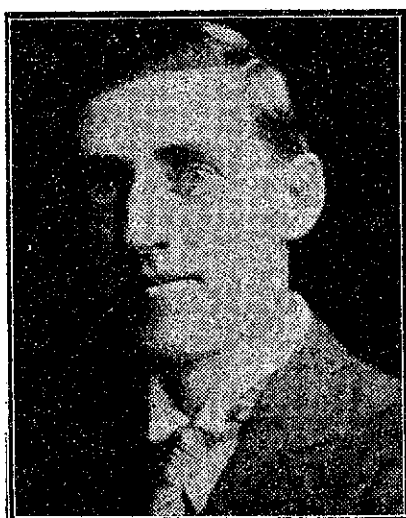
Bombay, July 19.

Broadcasting, that all embracing carrier of entertainment, news, and instruction, has struck out on bold lines in India, which, within a few weeks, will possess two of the most up-to-the-minute high-power broadcast stations in the world. It would be difficult to assess the far-reaching influence that broadcasting is going to exert upon the national life of this wondrous land of mystery.

Old friends in distant New Zealand may, without being over optimistic, expect to hear the Indian stations once they have dropped into their stride, and with the zeal and experience of the engineers conducting these stations they should be operating at their peak efficiency before the end of August.

7BY, BOMBAY, ON THE AIR.

Last evening, with great eclat, 7BY, Bombay, 357.1 metres, 3000 watts aerial energy, was officially opened by the Viceroy of India. This station is located at Worli. It sweeps a vast area for crystal reception alone, not to mention its range for valve sets. The chief object in establishing so powerful a



—Photo, S. P. Andrew.

Mr. Preston Billing, of the Wellington Radio Society, who has begun a series of Radio talks from 2YA, of which much appreciation has already been expressed. Notes from Mr. Billing's talks will be incorporated in our columns as far as possible.

station was to bring broadcasting per medium of inexpensive crystal sets to the homes of a substantial proportion of the teeming millions of the Presidency of Bombay. In this Presidency alone there is a population of something like 23,000,000, or, roughly, over eighteen times the total population of New Zealand. The Presidency, despite the ravages of pestilence and famine, is quickly recuperative and produces an enormous supply of cotton, cereals, sugar, tea, and wool. The secondary industries, too, are extensively developed, so the masses, seeing that crystal sets can be purchased for seven or eight rupees, are in a position to enjoy the boon of broadcasting.

CALCUTTA COMMENCES.

The Calcutta station, 7CA, 370.4 metres, 3000 watts aerial energy, is dated to be opened officially at 6.30 p.m. on August 26, by Sir Stanley Jackson, Governor of Bengal. The time in New Zealand will be midnight on August 26. The Calcutta station has been erected at Cossipore, in Calcutta, the capital of Bengal. Here, again, we have not only a huge city (population of about one and a half millions), but a territory supporting something like 50 million people. The earning capacity of the masses is relatively high, the primary products embracing innumerable varieties of cereals, tea, cotton, sugar, pepper, spices, cinchona, coal, iron, and copper. There are also big jute and cotton mills around Calcutta employing tens of thousands of natives. By means of the inexpensive crystal set the natives will be able to have this modern miracle, broadcasting, at their disposal. Calcutta is built on the River Hooghly, 80 miles inland, and is well situated for the site of a broadcast station.

BROADCASTING HOURS.

For the first few months the broadcasting hours of the two stations will be:—

Sunday.—11 a.m. till noon; 6.30 till 10 p.m.
Monday.—11.30 a.m. till noon; 7.45 till 10.30 p.m.
Tuesday.—3.30 till 4 p.m.; 8 p.m. till 11.30 p.m.
Wednesday.—11.30 a.m. till noon; 7.45 p.m. till 10.30 p.m.
Thursday.—3.30 p.m. till 4 p.m.; 8 p.m. till 11.30 p.m.
Friday.—11.30 a.m. till noon; 7.45 p.m. till 10.30 p.m.
Saturday.—3.30 till 4 p.m.; 8.15 till 11.30 p.m.

NEW ZEALAND TIME.

To enable New Zealand friends to pick up the Indian stations it is advisable to explain that Calcutta time is 5 hours behind New Zealand, and Bombay is 6 hours behind New Zealand. For instance, when it is 8 p.m.

in Calcutta it is 1.30 a.m. in New Zealand. It will be 2.30 a.m. in New Zealand when the clock shows 8 p.m. on Bombay.

GOOD EXPERT STAFF.

We have a highly-qualified expert staff in charge of the technical side of the broadcasting scheme which is operated by the Indian Broadcasting Co., Ltd., Radio House, Apollo Bunder, Bombay. The chief radio engineer is Mr. V. A. M. Bulow, who is an experienced radio man, with an abundance of resourcefulness and energy. The general manager of the company is Mr. E. C. Dunstan.

UNWIELDY ADVISORY BOARD.

There is one flaw in the general scheme, and that is the creation of an unwieldy Advisory Board of no fewer than a dozen leading citizens. It is my experience that the advisory boards are nothing short of a clog to progress in all forms of public enterprise. A capable manager who is desirous of catering for the greatest number, and who is imbued with the spirit of progress, is only hampered by the widely diverse opinions and fads of inexperienced persons who interfere with his own carefully-considered plans. The thing would not be tolerated in a railway company, steamship company, or banking organisation. Not infrequently, too, the person with the most unreasoning fads possesses a zeal and a flow of eloquence which converts the less combative minds of their colleagues. This renders the position of the general manager most unenviable. Just how our Advisory Board will function remains to be seen, but at the very best it cannot give the general satisfaction that would result from the untrammelled endeavours of a competent and energetic manager.

THE FADING QUESTION

(To The Editor.)

Sir,—It is a pity that your correspondent "Ex-Maorilander," who contributed an article in your issue of August 5, touched upon only one side of the question of reception from Sydney stations.

The letters which were published in his article were of course published in the first instance, in "Wireless Weekly," but anyone who has a complete record of the issues of the last few months will see that while a proportion of people complain about poor reception, many others have nothing but praise.

It is ridiculous to condemn 2FC and 2BL, simply because certain people in certain localities find that fading and distortion interfere with their reception.

The question of fading and distortion, as you know, is one that is not peculiar to Australia, as the same conditions prevail in every other country under the sun where broadcasting is conducted.

They are properties not of the transmitting station itself, but of a series of natural phenomena which of course are not controlled by the broadcasting stations.

Experience seems to show that no matter what wave-length is adopted, some listeners in some territories will get poor reception at some period during the day or night.

In the main, general satisfaction is expressed locally, concerning the service put out by 2FC and 2BL, and no doubt reference to the correspondence files of these two stations will disclose thousands of letters supporting this point of view.

These points of course, while obvious to anyone versed in radio, are not obvious to the listener who cannot understand why reception from a station a hundred miles away is poor, while reception from a station situated hun-

dreds of miles beyond is consistently good.

It is, of course, purely a technical matter, involving at present the little known properties of skip-distances, ground waves, sky waves and the heavy-side layer.

I think, in justification, "Ex-Maorilander," in his somewhat sweeping article, might have touched upon these points, instead of conveying the impression that 2FC and 2BL are unsatisfactory stations. An examination of the increase of license fees will show that the reverse is the case.

In any case the publication of an article outlining the points above in an early issue of your paper would, I am sure, serve not only to remove the unpleasant effect of your correspondent's article, but would also prove a source of enlightenment to many of your readers.—I am, etc.,

A. W. WATT.

Editor "Wireless Weekly."

We are glad to publish this letter and to acknowledge all the claims made. The purpose of our contributor and of ourselves in publishing the article was to point out that the fading problem was not peculiar to the reception in New Zealand—that the admittedly good stations of Australia were encountering the same difficulty in certain areas. We endeavoured to make this point plain in our introduction to the article where-in we said that the faults were such as to be apart from station faults. Our purpose was to enlighten our readers as to overseas facts and in no way to reflect upon Australian transmission or reception.—Ed.

ESPERANTO

Lesson V of our Esperanto course is presented to readers this week. The course is being conducted in conjunction with 2YA, from which station an explanation of each week's published lesson is broadcast.

Judging by reports which have been received by the instructor from various parts of the Dominion, a great deal of interest is being taken in the lessons, it being evident that radio enthusiasts are appreciating the facilities afforded them to study this delightful language.

Inquiries relative to Esperanto may be made to "The Esperanto Instructor," New Zealand Broadcasting Co., Wellington, or care of "Radio Record." A stamped addressed envelope must accompany each inquiry, otherwise a reply cannot be guaranteed.

LESSON 5.

(To be broadcast from 2YA on September 1, from 7.30 to 7.54 p.m.)
Salutation: Bonan vesperon. Good evening.

THE PRONOUN.—The PERSONAL PRONOUNS are: mi, I, ci, thou, li, he, s'i, she, g'i, it, ni, we, vi, you, ili, they. oni, one, they, people. (oni is the indefinite pronoun.) si, himself, herself, etc. (si is used in reflexive sense; refers to 3rd personal pronouns only.)

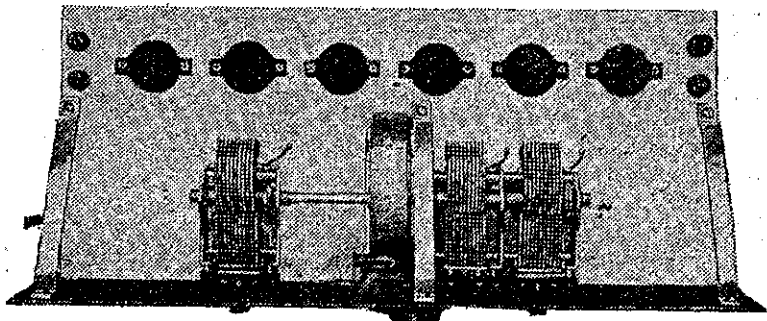
THE POSSESSIVE PRONOUNS, being adjectives, are formed by adding—A: mia, mia, his, via, etc., mv or mine, our or ours, his, etc. They take the endings—J, —N, —IN, according to number and case, when necessary.

Li invitis siajn amikojn. He invited his (own) friends. Li invitis siajn, He invited his (someone else's) friends. Mi rompis mian valvon, I broke my valve. Lia amikooj estas miaj. His friends are mine. Oni diras. . . They say, it is said . . .

WORDS.—Legas, read; skribas, write; franco, a Frenchman; Sinjoro, Mr., sir; diras, say; ke, that; domo, house; amas, love; is loving; mem, self, selves (reflexive); ĉiu, all, everyone; vidas, see. Mi legas. Vi skribas. Ni vidas g'in. Ii estas Francoj. Oni diras, ke la domo apartenas al li. Li estas mia onklo. Niaj libroj kus-as sur la tablo. Mi amas min mem, vi amas vin mem, li amas sin em, kaj ĉiu homo amas sin mem.

Salutation.—Bonan nokton. Good night.

Announcing the NEW PIERCE AIRO



Model B Single Dial Drum Control Six Tube All Aluminium Receiver.
Tone, Quality, Selectivity and Uniformity of Performance are Outstanding features of this Set.

ADVANTAGES INCLUDE:

1. All Aluminium Chassis.
2. Illuminated single drum control.
3. Brass compensated condenser gauged in line and permanently calibrated.
4. Drum band graduated in degrees and wave lengths.
5. Chassis heavily reinforced throughout to prevent distortion of units.
6. Amplification consists of combination resistance and audio coupling designed for power and tone quality.
7. A five-foot six cord coloured cable eliminates binding post battery connections.
8. "C" battery connection provides for a power tube in the last audio stage.

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Get the Best from your set, too,

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Mainly about Construction

BY "MEGOHM"

THE "RECORD" CRYSTAL SET

SOME ADDITIONAL NOTES—ALTERNATIVE TUNING

Several correspondents residing within a mile of 2YA are desirous of receiving that station at loudspeaker volume, using a crystal without amplifier. In our last issue the "Record" crystal set described is a good one with which to make the attempt. It can be done, but of course the error should not be made of expecting boisterous volume such as is given by a valve set. The writer has heard several sessions through at a distance of two miles, and the speaker volume was such that not a word of a lecture on Hollywood was missed, sitting three or four yards from the speaker, and on Sunday, the 6th instant, the band concert music could be heard fairly well in an adjoining room. This way of listening is more comfortable than wearing headphones, but quietness is necessary during reception. A carborundum crystal without battery was also tested and gave splendid results. For 'phone reception round the city and suburbs the aerial need not be of very great dimensions, but of course the larger it is the more volume there will be. The earth connection is of very great importance in every case, and if this is made to a water-pipe (the cold water supply), care must be taken that the connection is a clean and tight metallic contact between the wire or earth clip and the pipe, which must be well cleaned at the point of contact. In damp weather a water-pipe is usually a very efficient earth connection, but in dry weather it may in some cases prove otherwise. Dry sand is a bad conductor and in sandy districts, if signals are noticeably weaker after a

spell of dry weather, it is wise to replace the water-pipe earth with something more reliable. This consists of some kind of metal plate sunk in the ground near the aerial to a depth of several feet, where the ground is always moist and damp. A copper plate about two feet square is the ideal earth plate, but a petrol tin with a 14's wire soldered to it as an earth lead will serve quite well. An end of the tin should be cut out and earth, coke, or cinders put in. With one of such plates sunk near each aerial pole and connected by a buried wire, the same wire continuing to the earth terminal of set, best results are assured so far as the earth portion of the circuit is concerned.

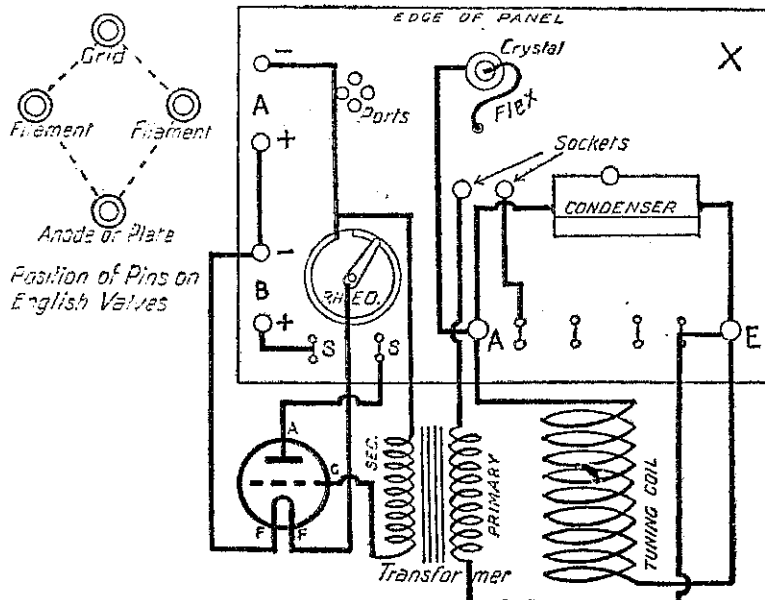
The coupling of the condenser in the "Record" set is that known as "parallel," but listeners can try the "series" coupling in an easy way as follows:—Disconnect the B terminal connection from the condenser, and in its place, on the condenser, connect the aerial direct, leaving the A terminal unconnected. The condenser will now give a much higher reading to tune in, and whether the result is better than parallel tuning can soon be judged. The series tuning is an equivalent to reducing the number of turns on the coil for the lower broadcast wave-lengths. If it is desired to keep the set permanently in series, then the present connections to A terminal should all be taken off, but still keeping condenser, crystal, and coil connected. The A terminal is then connected to the condenser terminal that was previously connected to B. The aerial is then connected to the A terminal as before.

AMPLIFYING THE CRYSTAL OUTPUT

DETAILS FOR ADDING ONE VALVE

However wonderful reception may at first seem with the aid of a simple crystal, there soon comes a desire for something that will put a little more "ginger" into the concerts, and from 'phones to a loudspeaker is the natural step. This necessitates, if a crystal is still to be used, the addition of one or perhaps two amplifying valves, according to the distance from the station. The addition of one amplifier will now be described to work in conjunction with the "Record" crystal set. Those who wish to build the set complete may increase the width of panel to 9 or 10 inches, keeping the height the same, 7 inches. A depth of six inches from back to front will be ample. If the crystal set has already been made, the size of the panel may be increased by adding a strip at the right-hand side

are required to an existing detector. When it is desired to use the amplifier, the pin on the end of flex is plugged into the right-hand socket, and for the detector only 'phones, the pin is put in the left-hand socket, looking at the front of panel. The positive or marked tag of the speaker or 'phones must always be placed in the clip connected with the positive of B battery, that is, the right-hand clip or terminal. The baseboard and panel having been completed, the transformer and valve-holder may be fixed in position as shown, and the rheostat and terminals fixed in place on the panel. Four holes may be drilled in the panel as shown so that the filament of the valve may be seen, unless it is a dull filament valve such as the P.M.3, in which case the "ports" would hardly be necessary.



of the present panel, extending the baseboard and cover to suit.

The extra components required will be a valve, and holder for same, rheostat, 2-valve sockets, 1 pin for do., large L.F. transformer, A battery, B battery, 4 terminals, ebonite panel, connecting wire, etc.

Provision is to be made for using 'phones on the detector only if desired, cutting out the amplifier. This is arranged for by drilling three holes as shown below the crystal. The two lower holes must be about 1/2-inch apart and drilled to take the sockets, which should, if procurable, be a type that will sink flush with the panel. A short piece of flex. is to be put through the top hole, and to its outside end is connected the pin that fits the two sockets. The wire that connects the back of the crystal to the right hand 'phone clip is disconnected from the crystal and the inner end of the flex connected in its place. The free end of the wire from the 'phone clip is now connected to the back of the left-hand socket. These alterations are all that

At the lower part of the panel two clips or terminals are provided to connect the loudspeaker.

In wiring-up, one primary terminal of the transformer is connected to the left-hand 'phone clip of the earth terminal, which amounts to the same thing, as both are connected. The other primary terminal of the transformer is connected to the right-hand socket on the panel. One secondary terminal of the transformer is connected to the grid connection of the valve holder. On an American holder the terminals will probably be marked, but a diagram is given of an English holder so that no difficulty is presented. It will be noticed that the four sockets are arranged in the shape of a kite. The plate connection is where the tail would be attached, the grid the top, and the two filament connections are at the "ears." The other secondary is connected to the end of the rheostat winding and then continues to the top terminal of the four on the panel front. The plate connection of valve holder is wired to one of the speaker connec-

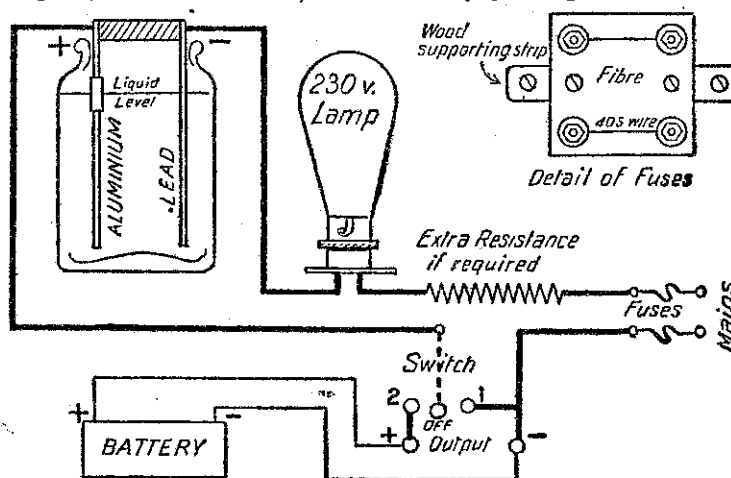
A SIMPLE A.C. RECTIFIER.

Correspondents are making inquiries regarding chemical rectifiers for 230 volts alternating current, so the following brief description will be given.

A glass jam jar about 2 1/2 by 4 1/2 inches makes a suitable container, and all that is required in addition is a wooden cover of some kind to keep out dust and to hold the plates, which must be kept as far apart as possible in order to ensure proper rectification. The two plates are of lead and aluminium respectively, and the dimensions of these should be about 4 1/2 in. by 3 in. A hole is drilled in one end of each and a screw through this will affix each to the sides of the cover, the connecting wires being either clipped round the screw under the plate or soldered to each (special solder for the aluminium). The lead must be well cleaned to present a bright surface.

The aluminium is the vital part of the rectifier, and unless this is pure metal, cannot perform its duty satisfactorily. Thin sheet aluminium of perfect purity can be obtained, and

not permanent. When the forming is being carried out the battery is not connected up, but the aluminium side of the rectifier and the main not connected with the lamp resistance are connected together with or without a suitable resistance in place of the battery. In order to cut down the voltage where such is an advantage, it is a good plan to have two rectifier cells in series, the lead of one being connected to the aluminium of the other. This is also a safeguard, as if one cell happens not to be rectifying, the other may continue to do so and save any trouble. When charging the accumulator B battery recently described in this column, a 60-watt lamp should be included in series with the rectifier, and for smaller accumulators a lamp of less power may be used, whilst for voltages of 46 or 56 it may be found an improvement to include in the circuit next of No. 36 mchrome resistance wire space wound upon a piece of red fibre or other non-inflammable material. Such a resistance only gets slightly warmed up, but



will last quite a long time if the precaution is taken of cutting a strip about an inch wide and folding it round the aluminium plate so that the level of the liquid comes at about the centre of this reinforcement. This is done because most of the corrosion of the plate takes place at the surface of the liquid. Put into the jar sufficient tap-water to reach about 1 1/2 in. from the top. Ammonium phosphate is then put in and allowed time to dissolve, or stirred to quicken the process. A saturated solution is required, so that a small quantity of the chemical should remain undissolved at the bottom of the container. Occasionally, as the water has evaporated, more water should be added to keep it at the proper level. If the aluminium is pure it will only show a luminous glow in the dark when rectifying properly; if violent sparks are dancing all over the surface, rectification is not as perfect as it should be. No trouble will be experienced with the lead plate, but before the rectifier will work properly it must be run for an hour or two so that the plates will "form," and this should be done as a precaution for a minute or so before each charging operation, if more than a day or two has elapsed since the last time of using, because the formed oxide is

it should be put upon the material mentioned. Should this be found necessary the fibre can be cut slightly narrower than the baseboard and fastened underneath out of the way, a strip of wood being screwed under each end of the base to raise it up sufficiently high. The diagram shows a two-way switch that can be put on contact for a minute to start rectification and then put over to 2 to charge the battery. The aluminium is always the positive electrode, and when charging is connected to the positive side of the battery.

When using any apparatus such as this connected to the electric mains it is a good plan to go to a small amount of extra trouble to include a fuse on both mains. A piece of fibre about two inches square is drilled with six 1/8th inch holes as shown. The two centre holes are for screwing down to a strip of wood. The other holes are fitted with 1/8-inch brass bolts with a washer and nut on top, to which connections are made. A short piece of 40's copper wire (thinner if handy) is carefully cleaned and a piece clipped under each pair of washers. All wires in the circuit should be insulated where possible. If the switch is provided it can also be fitted with an "off" position for convenience.

Amplifying the Crystal (Continued).

to the lowest terminal, B positive. Now connect the two centre terminals on the panel, A positive and B negative together, and the same wire is to continue to one of the filament connections on valve holder. The other filament is connected to the arm of the rheostat. If there is 20's enamelled wire left from making the tuning coil, it may be used for connections, but the enamel must be very carefully scraped away wherever contact is to be made with the wire. No thinner wire than this should be used.

The Batteries.

A very suitable accumulator for the filament of one valve is a couple of small Exide cells in series to give up to four volts. A small carrier could be made to contain these for convenience in taking to a charging station or garage. These small accumulator cells can be obtained for 7s. 6d. each, and if a two-volt valve is to be used, only one of these cells would be required. A P.M.1 L.F. Mullard valve would be suitable as a two-volt amplifier valve, or a P.M.3 as a four-volt, requiring two Exide cells.

A dry B battery of 45 or 60 volts will be most suitable.

Anybody not used to handling batteries must be very careful not to allow the positive and negative ends to become connected, even for an instant, except in the specified way provided for in the set. In the case of the A accumulator an accidental connection of the two terminals results in an instant discharge of all the stored-up energy, and only many hours of recharging can restore its former condition. In the case of "grid plate" accumulators, such accidental "shorting" may cause permanent ruin of the plates. Short-circuiting of the B battery must also be carefully avoided, and great care must also be taken in connecting the B battery to the set, as if connected across the top two termin-

always be recharged when not more than about three-quarters of its full capacity has been used.

Grid-bias is not usually provided on a single L.F. amplifier, but is an assistance towards greater volume and clarity. It can be added by breaking the wire running from rheostat to transformer secondary and inserting one or two small dry cells to give 1 1/2 or 3 volts. The negative side connects to the transformer.

If dry batteries are preferred to the small A accumulator, then a valve suitable for dry battery operation must be selected. If the charging of an accumulator can be conveniently managed by taking it to a garage, it will be found more satisfactory to use one rather than dry cells, which use up much more quickly on the filaments than is the case with dry B batteries. Charging at home is, of course, the ideal, but hardly worth the expense of installing for one valve. The chemical charger described elsewhere is for charging B batteries only, and is not suitable to charge an A accumulator.

WINDING COILS ON FORMERS

The method of making thin cardboard formers described two weeks ago will be found to answer well if instructions are properly followed. Zig-zag strips of card on edge can be used to separate the circles in core if nothing else is handy. The safest way of winding is to keep this core inside while the wire is wound on. If this is done, 18's wire can be tightly wound and the coil will keep a good shape. Stand the former upright on the table with the core inside, make holes in end for wire, starting winding at the top. With the left hand turn the former clockwise, steering the wire on with the right thumb, the wire running through the right hand. The right forefinger must hold the top of the former while the left hand gets a fresh grip. By this method it will be found that quite a good pull can be made on the wire without spoiling the shape of the former, so long as there are sufficient circles of card inside to support it.

The supply of wire should be on the table at the right, and if a loose coil can be laid flat and if turned round frequently to release enough wire for a number of turns will come away without any tangling or kinking.

ANSWERS TO CORRESPONDENTS

"Puzzled" asks for an explanation of why he can receive 4YA in two positions of the dials on his five-valve neutrodyne. It was what is known as a "harmonic" that was being received in the unusual position towards zero. Wireless vibrations behave much in the same way as the vibrations of sound in the matter of harmonics. The second harmonic is the strongest; and received at exactly half the wave-length in metres of the transmitting station. Thus the second harmonic of 4YA would be at 281 1/2 metres, and that is why a New Zealand station was found among the American stations. Quite a strong harmonic of 2YA can be received on a short-wave set at 70-80-85 metres. Most of the interference by morse on the wave-length of 3YA is owing to its nearness to the harmonic (300) of VLW's 600-metre transmission. The harmonics are simply sub-multiples of the fundamental wave-length, so that dividing the fundamental by two gives the second harmonic, by six gives the sixth, and so on.

From the district north of Gisborne comes an inquiry regarding push-pull amplification. Upon making inquiry in Auckland regarding such equipment, the firm in question informed our correspondent that they were sold out of Pye push-pull transformers, and had not replaced them on account of a considerable change being expected in this method of amplification. Probably this statement refers to the fact that push-pull transformers are now being constructed upon lines following the more modern type of ordinary low-frequency transformer, whereby the output of power valves may be handled without distortion. Without such improvement the push-pull method would probably not have much advantage over the latest power valves with straight transformer coupling.

The Italian Government, now planning a very elaborate broadcast system, proposes to lay a small radio tax on householders, whether or not they now have sets.

HOME CONSTRUCTORS

Write for our Illustrated Catalogue of Radio Parts.

DE FOREST VALVES
BRAND'S 'PHONES
IGRANIC COMPONENTS
RADION PANNELLING

INTERNATIONAL RADIO CO., LTD.,
FORD BUILDINGS, WELLINGTON.

WAVE TRAPS AND WAYS OF REDUCING INTERFERENCE

LECTURE BY MR. E. W. MAHONEY AT IYA

The sensitivity of the set, emphasis-
ed Mr. Mahoney, had a great deal to
do with the selectivity. If we have two
receivers which have equal selectivity,
but the one receiver is much more
sensitive than the other, the more sen-
sitive one may seem to be broader
than the other, but if the volume con-
trol is adjusted that the volume output
of the two sets is the same, the ability
to separate the stations may be the
same for both sets. Again, if you have
a very sensitive receiver, and are locat-
ed in a place where the air is crowded
with stations, you are not only likely
to experience interference between
locals, but you will also encounter het-
erodyne whistles from distant stations
in the background. This is impossible
to remedy in the set itself. The only
possible way of this trouble being
eliminated is for the interfering stations
to have a new wave-length allotted to
them.

Any or all of the following ideas and
methods may be tried out by those in-
terested, and eventually you may be
able to find a special method that
suits your receiver best, when it can be
adopted as a permanent feature for
your set. It must be clearly under-
stood, however, that wave traps, etc.,
are not suitable for sets under the four-
valve type and are really best when
used with a more powerful set. The
reason is that when you install a trap
of any type whatsoever, or use a re-
sistance in the circuit, a decrease of
total amount of volume, that is ob-
tainable from the set under ordinary
circumstances, is inevitable, and for
that reason it is more advisable to try
and use the following methods on
smaller sets.

The first method is:—Follow out the
wiring of the set and find out if the
radio filaments are grounded, that is,
connected to the ground connection,
either by a wire soldered in place or by
terminating the grid returns at the
tuning condensers, whose rotor, or
moving plates, are grounded to a metal
panel. In many cases if this wire is
removed an increase in selectivity will
be experienced. It may be found in
some receivers, however, that this will
materially decrease sensitivity, or in
regenerative sets, may allow the re-
ceiver to oscillate, in which case it
would not do to eliminate this connec-
tion. You must use your own judg-
ment in adopting the circuit that will
suit your needs.

Second Method.—Although not now
extensively used and amongst the
newer radio enthusiasts hardly known,
a variometer can be used quite suc-
cessfully to tune the aerial circuit.
Nearly all receivers now use the tuned
primary circuit; that is, the ap-
tenna circuit has no variable element
in its makeup, but consists only of
the antenna and ground and between
them a fixed coil called the primary.
Now the relative action between these
two is as follows:—Radio high fre-
quency currents flowing through the
aerial circuit are induced or attracted
by the fixed primary coil, although
these coils are not touching one an-
other. This is really a rough idea of
the action between the aerial circuit
and the primary, a longer description
not now being desirable. Now to get
back to the variometer. Where it is
possible to use this type of circuit,
it will be found to give not only ad-
ded selectivity, but sensitivity, the
reason for this being that supposing
you are using a set with two condens-
ers of four or less, the method of tun-
ing is always the same. You tune the
secondary circuit until you have the
maximum amount of current flowing
through the receiver. Now it does not
seem possible to increase the maxi-
mum amount of current in face of
this, but it is quite possible, by using
the variometer, to tune the aerial,
when an added gain in volume is pos-
sible and a larger degree of selectivity
is also possible. If you are using the
secondary method of tuning in your
set, the aerial is untuned, or, in other
words, simply acts as a piece of wire
to pick up the high frequency cur-
rents that may be sent out by the sta-
tion. Now by tuning this aerial it is
possible to make it respond to any
wave-length, and to that one alone. So
you can quite easily see that where
the variometer is used it is quite pos-
sible to make it respond to any wave-
length and to that one alone. So you
can quite easily see that where the
variometer is used it is quite possible
to gain selectivity and sensitivity.

Of course, it must be understood
that any method of reducing interfer-
ence or using a wave trap means an
added control to the set except where
a fixed condenser is used. This meth-
od will be described later on. An-
other means of tuning the aerial cir-
cuit is to use a variable condenser
connected in the ground lead, but
with this must be used a loading coil
in the aerial circuit. The number of
turns of this coil is roughly about the
same as the secondary coils in your
receiver, but it is quite simple to wind
a coil of the solenoid type and just
take a few turns until you find the
best number. At least you should
start off with 60 turns, and if you
find that is too many just reduce the
number of turns by taking off about
three or four at a time. It will take
a little time to determine the correct
number, as it will depend on the type
of receiver you are using and the
capacity of your aerial. If you are
not particularly interested in making
your set very sensitive and merely
wish to add a little selectivity to it,
you will find that if you install a fixed
condenser of .00025mf in series with
the ground lead, this will help to
make your set more selective. A
condenser of less capacity may be

found even better, again depending
on the type of receiver, etc.

In connection with oscillating sets
Mr. Mahoney said it is a very hard
task, and a very thankless one, to al-
ways be talking about the one thing
all the time; but evidently, at last,
public opinion is taking shape, and
many of you are beginning to look on
this type of pest the same way as I
am doing, and that is, he must be
eliminated if we wish for the best re-
ception possible. It is bad enough to
have to endure the interference of
static and fading, with consequent dis-
tortions, whilst listening to a station,
without having in addition the con-
tinual howling and squalling of these
parasites of the radio ether. The
Post and Telegraph Department has
tried to assist by forwarding to all
listeners a copy of a stage of neutral-
ised high frequency to be installed
before the detector, and also other cir-
cuits and advice, and the sum total
of this kindly forbearance on the part
of the Department has been nil. They
delight in making the concert that you
are listening to a hideous nightmare
of growls, howls, and shrieks. They
do not receive the station, and ap-
parently do not intend to let anyone
else hear it and enjoy the programme.

There is only one method with these
disturbers of our radio programmes,
and that is to ban them thoroughly
and completely by compelling them to
use a stage of neutralised radio fre-
quency. The time is past for talking
kindly to them and trying to show
them how it should be done. They
must be, as I said before, compelled
to cease from making what should be
an enjoyment into nothing less than a
hideous row. I myself have never
heard 2YA, Wellington, with satisfac-
tion yet, there always being some
howlers doing their best to turn music
and musical items into a series of cat
calls and pig grunts. My advice to
these so-called ether hogs is, shut up
or leave radio alone, and have a lit-
tle thought for those who wish to en-
joy a programme, and can do so, ex-
cept for the efforts of these dear, kind,
thoughtful squawkers.

TESTING OSCILLATION

Many people believe that no interfer-
ence can be caused unless howls and
squeaks are audible in the headset or
the loudspeaker. It should be realised
that howling is an audio-frequency
noise due to oscillation of the most vi-
olent type. Interference can be, and in
most cases is, caused long before the
set reaches this stage. When even mild
oscillation is present energy is transfer-
red from the set to the aerial; the re-
ceiver thus becomes for the time being
a weak transmitter sending out waves
of small amplitude. As these have usu-
ally a frequency very near to that of
the transmission being received they
heterodyne it and may set up in other
receivers in the neighbourhood a low
continuous note which utterly spoils re-
ception. If the heterodyne produces a
beat that is either above or below audio
frequency no note will be heard, but
receiving sets in the vicinity will be af-
fected. Often there will be a tendency
on their part to oscillate and certainly
reception will be blurred and distorted.
The unmistakable signs of oscillation in
one's own set are these: As adjustments
are made, the received signal grows
very loud, and is accompanied by rush-
ing or rustling noises; C.W. signals
may be heard faintly if any are in pro-
gress on the same wave-length; any
tendency that the set naturally has to
noisiness becomes exaggerated—thus if
faint cracklings are heard normally they
will become very loud and may assume
proportions of atmospherics when oscil-
lation is present.

But there is one absolutely certain
test for the presence of oscillation. This
consists in touching the aerial terminal
of the set with a wet finger. If there
is no oscillation the result will be to
cause signals to fall off, since by touch-
ing the terminal the aerial is earthed to
some extent; but there will not be
anything like a sharp click in the re-
ceivers as the finger makes and breaks
contact. This click is certain proof
that the set is in oscillation and that it
is radiating. Interference produced
when the set is in this condition will
not, of course, be so bad as that which
occurs when it actually howls, still its
effects are fairly powerful, and they af-
fect other receivers at a considerable
distance. During some experiments,
carried out some time ago in conjunc-
tion with a friend who is also an enthu-
siast, it was found that if a microphone
was inserted into the earth lead of a set
oscillating just sufficiently to cause the
clicks referred to telephonic transmis-
sions could be made to a distance of
at least half a mile. All amateurs then
who are engaged upon broadcast recep-
tion, whether from home stations or
from those overseas, should make this
test frequently, and should do every-
thing in their power to avoid giving
rise to interference by allowing their
sets to oscillate even mildly.

Another misconception which is fair-
ly widespread is that interference can
not be caused unless reaction is used.
Nothing could be further from the truth.
A set employing tuned anode or tuned
transformer coupling oscillates very
readily unless the grid potentials are
properly controlled and is capable of re-
radiating even though the reaction ter-
minals are short circuited and the coil
removed altogether. Those who use cir-
cuits of this type therefore should be
particularly on the look out for oscilla-
tion, and should not allow themselves
to be lulled into a false feeling of secu-
rity.

The Children's Corner

By "ARIEL"

DEAR BOYS AND GIRLS,—

We are getting on famously with our "Priceless Wireless Zoo,"
are we not? How do you like our "Smiler"? I think he makes
an admirable second animal, and the prize is carried off by Alma
Chamberlain, Riccarton, this time. I am going to make the closing
date for No. 3, the criticising "Krytik," just a week later, just to
give you a little more time to get in before closing date. Last week
such a lot of "Howlers" arrived after the door was shut, so we will
have an extension till August 31. I think you are all splendid with
your drawings, and when our Zoo is complete, I am going to mount
them all to hang in a row on the wall over my desk.

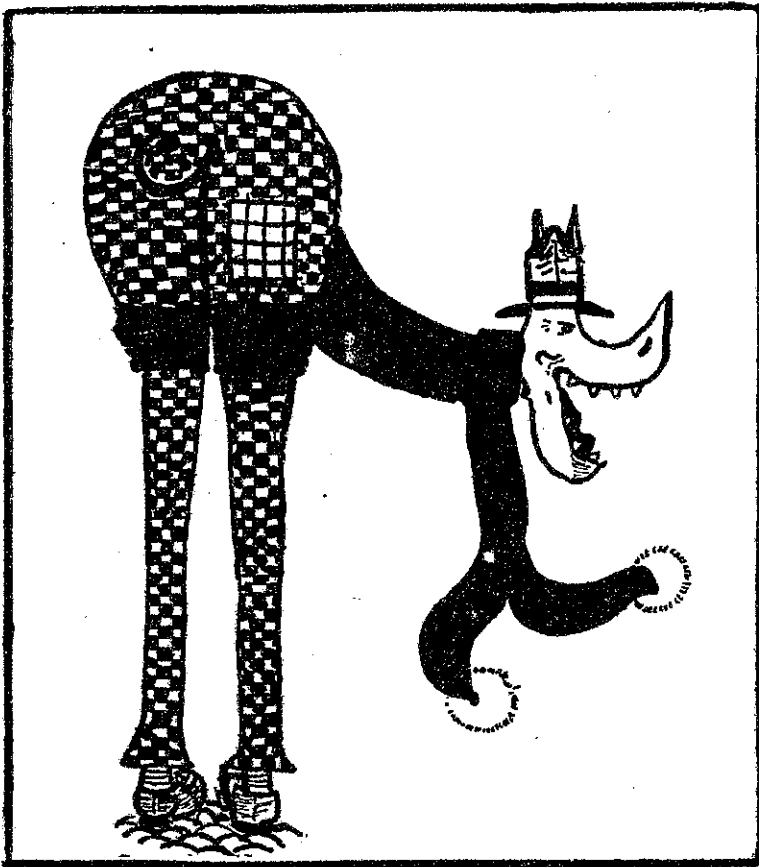
For No. 4 shall we have a "Faydout"? He is a gentle, ghost-
like creature, very timid and "trembly." He never talks aloud—he
only whispers and sighs. There's no accounting for him—he just comes
and goes, and, being so timid, there's no chance of getting hold of him.
Have him ready with his verse by September 14—plenty of time to get
bright ideas!

My family has grown so large in such a short time that I am
beginning to feel like the old woman who lived in a shoe. You manage
to keep me very busy, but so long as you are happy I wouldn't have it
otherwise.

Now, get to work again without delay—there's quite a lot to be
done!—Your loving, ARIEL.

OUR WIRELESS ZOO—No. 2, THE SMILER

Here we have the second inmate for our Zoo. Isn't he a dear?
The prize this week goes to Miss Alma Chamberlain, 25 Rata Street,
Riccarton, Christchurch.



"THE SMILER."

If you have a holiday and nothing else to do,
There's a peculiar beastie I must introduce to you;
He is called the "Wireless Smiler," and is very, very nice,
We really couldn't sell him—no, not at any price!
He smiles and laughs and giggles—Oh! he's such a funny thing!
The only thing that he can't do is talk to you—or sing. . . .
So if you have a holiday, I'll introduce to you
The guileless "Wireless Smiler" at our priceless Wireless Zoo.
—Alma Chamberlain, Riccarton.

OUR LETTERS

Geoffrey Cole, Nelson.—Both your
drawings were good, but not quite
the right kind for our Zoo. I have
taken one of your verses, though. Try
again for the Krytik for August 31.
Thank you for your "Sing a Song of
Sixpence."

J. Jordan, Christchurch.—Thank you
very much for the limericks last week.
Were they all original?

Betty Levy, Wellington.—Have an-
other try, Betty! It was very good
for such a little girl.

Suzanne Riddiford, Havelock North.—
Yours was certainly a dear little
"Smiler," but he didn't have any mouth
or eyes! What a pity! Thank you
for the verse.

Naneye McNie, Wellington.—Why did
you paint your "Smiler," dear? She
would have been better uncoloured. I
expect you have read the rules by now,
so have another try. Thank you, too,
for the verse.

Ronald Satten, Invercargill.—He
really was a beauty, and ever so nicely
drawn. I think you must have put a
lot of work into him, but, you see, he
had no verse, so he couldn't win a
prize. Write a verse next time, even
if it's only a few lines.

"Crystal," Christchurch.—Thank you
for your "Percy" poem. When you
next write, please let me have your
real name instead of a nom de plume.

M. Carter, Hastings.—Draw your ani-
mal on a separate sheet of paper next
time, and do him in ink if possible.

Mervyn Jillings, Hastings.—You were
another of the "verseless" ones! All
our animals have to have a little poem,
too, and I think you could make up a
tiny one if you tried. It isn't so very
difficult. I am so glad you like draw-
ing and painting—the result of the
"Pokkit and Pykk" painting will be out
next week. Will you draw a "Krytik"
for me by August 31?

J. A. Crawley, Dunedin.—I think you
attempted a little too much—just a
simple animal after the style of the
prize-winner would have been better.
Your poem should have had twelve
lines instead of thirteen, but I admire
your beautifully neat writing. Send in

a letter for the competition and just
see how successful you may be!
Elma Clapham, Papatoetoe.—Thank
you for your dear little letter. Yes,
you must have a wonderful time with
your five-valve set. I am so pleased to
know that you have such a good opinion
of our "Corner"! Of course, we couldn't
possibly forget you!

SOME SMILER VERSES.

I love the smiler just like this—
He thinks the world is full of bliss;
He looks at me and seems to say,
"Why sit here moping all the day?
If you'll come with me and play
A game will chase all care away."
—Geoffrey Cole, Nelson.

The smiler is cheery and happy
And never inclined to be snappy;
He will smile
All the while,
And help others to smile—
He's really a dear little chappie.
Suzanne Riddiford, Hawke's Bay.

Smile and the world smiles with you,
Grouch and you grouch alone.
If you wear a cheerful grin
They will always let you in
Where the "groucher" is never
known.
—Naneye McNie, Wellington.

COMPETITIONS

1. Our Wireless Zoo—Drawing and
verse:
"Krytik," closing date August 31
(prize 5s.).
"Faydout," closing date September
14 (prize 5s.).
2. Letter: "What I Like Best About
Broadcasting." Closing date August
24 (prize 5s.).
3. Painting: Closing dates August 24
and August 31 (prize for each—a book).

RULES FOR COMPETITIONS.

1. Draw on smooth surface paper and
use Indian ink, when possible.
2. Write on one side of the paper
only.
3. Attach name, address, and age to
each entry.
4. Use watercolours for painting.
5. Address all entries to "Ariel," P.O.
Box 1039, Wellington, and post early.

PUZZLES AND TEASERS

Here are a few little puzzles—quite
easy ones, but they may amuse you.
In the first one, a number of English
towns are described in separate syl-
lables. For instance: No. 1 is Oxford—
an animal, ox, and a shallow stream,
ford. The others are much the same.
See if you can puzzle them out.

1. An animal. A shallow stream.—
Oxford.
2. A colour in a letter of the alphabet.
3. Another word for trot. What your
dog does with his bones.
4. A number of trees.
5. A stately bird. The ocean.
6. Another word for "modern." A
Spanish wine.
7. Old fashioned word for people. A
hard substance.
8. A popular game, also the name of
a school.
9. A term of endearment. Twenty
cwts.
10. A colour. What hayricks do
when set alight.

SING A SONG OF SIXPENCE

Sing a song of sixpence,
A pocket full of shot.
Four and twenty blackbirds—
I shot the lot.
They were stealing cherries,
We wanted for a pie,
So I took my little gun
And "popped" them on the sly.
(Original) —Geoffrey Cole.

"I THOUGHT I SAW—"

A JOLLY PENCIL-AND-PAPER GAME FOR WINTER EVENINGS.

Are you fond of playing pencil-and-
paper games? One of the best of all
these is writing little, simple verses, all
of which have to begin in the same way.
You can have lots of fun at this game.

Each player is given a piece of paper,
on which he is to write a line begin-
ning, "I thought I saw," and add a
word of three syllables, such as:—

"I thought I saw an omnibus."
The paper is then folded, and passed
to the next player, who writes the next
line, without knowing what the first
one is. Perhaps he will write, "Eating
pickled ham." When he has written
his original line, he has to add, "I
looked again and saw it was," fold the
paper and pass it on. The third player,
who, of course, has no idea what the
first lines are like (except that he has
to rhyme with "ham"), does the last
line.

Perhaps he will write, "An airship
on a tram," or "A pot of raspberry
jam," or anything else ending in "am."
The completed "poem" will read as
follows:—

"I thought I saw an omnibus,
Eating pickled ham.
I looked again and saw it was
An airship on a tram."

In playing this game, you must al-
ways remember that two lines are al-
ways the same, "I thought I saw," and
"I looked again and saw it was." The
player who writes the second line—
"Eating pickled ham"—must write his
last word—"ham"—on the paper when
he folds it over, so that the last player
can see what the rhyme is.

With a company of smart players this
game can be most amusing; and the ab-
surd verses, when read out, will cause
roars of laughter.

ANSWERS

TREX-MENDOUS RIDDLES.

1. Date.
2. Palm.
3. Gum.
4. Beech (beach).
5. Pear (pair).
6. Plane (plain).
7. Ash.

THE MISSING E's.

Were there ever perfect men, ye
clever clergymen, tell me when?

PERTINENT PERCY

Percy made a "one-lung" set,
And he, Sydney, tried to get—
Put such cat-calls on the air,
Others chuckled in despair.
Meetings soon were quickly called—
Result, poor Percy badly "mauled."
So he's satisfied to-day
To tune in for 3YA.
—"Crystal," Christchurch.

BILLY'S GERM

Billy had a little germ,
It's look was hardly pleasant,
And everywhere that Billy went
That germ was surely present.

It got into a scratch one day,
And tried to turn it septic,
But Billy got some iodine
And now that germ's dyspeptic.

Yesterday now is a part of for ever—
Bound up in a shcaf, which God
holds tight,
With glad days and sad days and bad
days which never
Shall visit us more with their
bloom and their blight,
Their fulness of sunshine or sorrow-
ful night.
—Susan Coolidge.

In a court at Bradford, England, re-
cently, an aggrieved broadcast listener
who had threatened to knife his next-
door neighbour for maintaining an os-
cillating set was bound over to keep
the peace for six months.

Investigation Into Fading--Thrilling Travel Tale--Valuable Time Chart--Afternoon Sessions Welcomed.

THE RADIO RECORD

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Thrilling Travel Tale From 1YA.

This article is continued from the cover. In it, Mrs. Gladys Sandford gives a thrilling account of her experiences while establishing the record of duration run round Australia.

RUNNING NORTH.

would make camps at night on the track without ever any fear.

We travelled via Kingoonya, over the Tarcoona Tablelands, where for 60 miles not a tree is to be seen, nothing but salt bush about 18 inches high. From Lanjoonya on to the Opal Fields, where everyone lives underground, even the Commonwealth Savings Bank and Post Office have their quarters like that. Toot the horn and the inhabitants come out like rabbits!

Then 110 miles on to Anna Creek without meeting anyone. From here to Oodnadatta, 120 miles, is heavy sand and bad creeks, and we learnt our first lesson of getting stuck in sand. Oodnadatta is the railway terminus, with an ordinary population of about 60 or 70 people. From here to Alice Springs, 367 miles, is mostly very heavy going, and with a load of 3½ cwt. it meant heavy driving. We crossed the Finke River five times. In the wet season this is a roaring torrent, but now it is a dry riverbed of heavy sand, and unless tackled in a correct manner will cause hours of hard work to a driver. We were very lucky, and only had to use our coconut matting twice, and were most thankful, as the flies came round us in swarms.

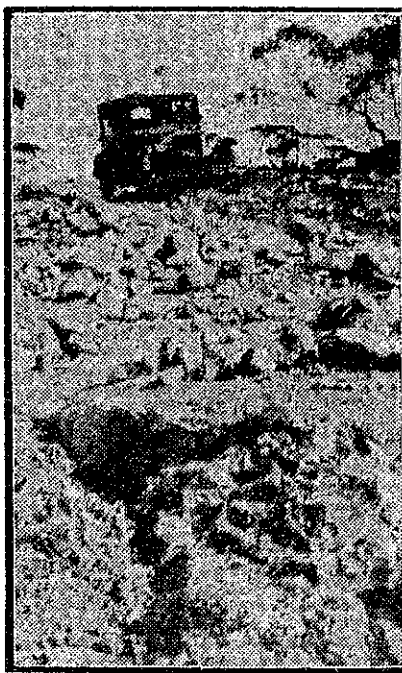
At one crossing there is a mile of heavy sand known as Tragedy Mile, because so many motorists have come to grief there. This part of the country is almost waterless, and yet for miles on end one is always faced with a mirage of a lake in the distance. Alice Springs is the last settlement from here to Katherine, a distance of about 800 miles, and on this stretch we met not more than 42 white people. The overland telegraph is followed most of the way, but one has to deviate sometimes several miles from it in negotiating the different ranges. Petrol supplies were laid down for us. In one instance it had been carted 900 miles from the rail-head for us. The track is almost always fairly visible, but on wide stretches when cattle have obliterated it there is constant danger of losing it, and one may become hopelessly tangled up in one's own tracks, unless great care is taken.

MEETING THE NATIVES.

We often passed natives carrying hunting spears. They were invariably devoid of clothing and would run into the long grass and hide, but never molested us.

The northern route varies a great deal where troubles are concerned. Anthills are a big menace, as in the very high grass it is difficult to see them. Then bad creeks, washaways, prospecting holes, big stones, bush fires, and particularly between Darwin and Katherine, bogs, made me keep a wary eye well open. Grass was often 6 to 10 feet high for miles on end. But we seemed to have days when all went without a hitch, and others when nothing was right. There came one day when I burnt the clutch out in a sandy creek, which seemed to be quite easy to negotiate, but as soon as the four wheels of the car were in it they sank down almost to the axles. We had left the coconut matting at Alice Springs for our return journey, so the proper assistance was not available. However, there was only one thing to be done, and that was to rework the plates. Fortunately, before leaving Oodnadatta I purchased five dozen medicine bottle corks. The weather was frightfully hot--glaring sun and no shelter--and the sun's rays seemed to concentrate in the basin of the creek. I have often thought that I must have made one of the most pitiful sights in Australia that day. You can picture car axle deep in sand and me sitting on the bank on an old army blanket to

avoid the grass seeds, which have a horrid habit of digging into the skin, with the complete clutch and transmission lying around me--our precious billy at my side full of corks bobbing up and down as they soaked in engine oil--flies all around me, on my lips and in my eyes--the air was black with them. I not only had to put in the cork inserts, but had then to shave them down to the necessary thickness with a sharp hunting knife we had, which, incidentally, was never used for its original purpose--that of skinning alligators. At the end of two hours the plates were corked and my forefinger was one large blister. Then came the crisis--the clutch had again to be assembled and we had no clamp to control the heavy springs. How we wrestled with that clutch. The sergeant-major stood by with the four large nuts to whip on as soon as the thread was visible, and for over an hour I sat and stood in turn on the wretched plates, which would spring apart just when it seemed we were about to conquer it. Finally, with the aid of a tire lever and hammer handle, levered down with my knees, we fixed it. Then the whole thing had to be replaced--not an easy matter when there is no pit and a heavy piece of mechanism to handle. But there is always an end to everything, and at 6 p.m. we turned in for the night, still in the creek bed, but with only a little coupling up to do in the morning before getting out. After replacing the clutch we moved on again through Newcastle Waters Station, where we stayed the night, in order to wash our only pair of breeches, which were covered with oil after the heavy work, then over the Stuart Plain, where for sixteen miles we never had a yard of smooth running owing to the black soil foundation and cattle footprints which had dried hard. turkeys, but only wounded two, and then could not find them in the long



A well-metalled road through Australia's ack-blocks.

tance of 204 miles. I was anxious to see the road, but the guard assured us there was no road, only a bridle track. This route of 240 miles by car has only been traversed by an average of two cars per year for four years.

ARRIVED AT DARWIN.

At Darwin we were greatly surprised to find the Mayor and town councillors down to meet us. We stayed here ten days to give the track time to dry after the rain. We were assured by one and all that it was eight weeks too early in the season to tackle the trip, and many bets were laid against our getting through. This was the only part of the journey on which we carried

Radio is bringing back into modern life the thrill of the old-time personally-told tale. For half a century the printed word has dominated. Now the doer of deeds can impart to a vast audience a share in the deed done.

ward position with a train expected to arrive any moment.

WAYSIDE PROBLEMS.

I jacked up the chassis and cut down a young gum and gradually got the car back. This was only one of many incidents. We were 30 hours in one creek, during which time we cut down about 15 blue gums and split them into lengths of three pieces to build up the bank. After getting the car three-quarter way up a ganger came along the line on a motor-trolley and showed us how to use a Spanish windlass. It took another six hours to get out, even with that assistance, and the car was on such an angle that all the oil drained out of the clutch down the transmission shaft. Another time our guide took us 14 miles out of our way up and down steep gullies, into creek beds and Chinamen's holes. Finally we came to a small clearing and a bush hut, out of which came an old Chinaman. After repeatedly saying "Which way road," he wave his hand towards the country ahead and said he come "he go two mile." We looked in vain, getting into more and more trouble. At last, seeing a big bush fire approaching, I took matters into my own hands and turned back, eventually finding our way back to the line. The petrol tank was crushed underneath like an accordion and a good leak started, but I made a temporary repair with a patch of soap.

At Borroondie Siding a ganger brought us two large tins of water, which we heated, and then bathed in the tiny waiting-room and general office. On the fifteenth day we forded the river into Katherine, having put up the record of being the first closed car to have done the trip, and also the first women to have tackled it. It had previously been considered impossible for a car to get through without

AT A CORROBOREE.

At Marenboy we were taken to a corroboree--a wierd sight, the natives squatting naked within circles of small fires. There were two tiny babies, which I christened, saying to the lubra, who translated it to her tribe, "This fella, him name Hudson" for the boy, and "This fella him name Essex" for the girl. One native blew through a very long burnt-out piece of wood--they call it a didgerie doo, and it makes a weird hollow noise. Three lubras danced a sort of Charleston shuffle in the background, but the men continued their chant, taking no notice of them.

Six hundred miles away from any shops the sergeant-major wore out her only pair of breeches. She is a tiny thing, and weighs under seven stone, and a friendly mounted police from Newcastle Waters Station, who weighed easily 14 stone, gave her a pair of his riding breeches, so the situation was saved. Farther down the line we went on to a station, where there was a sewing machine, and they were cut down to fit her.

Two hundred and forty miles north of Alice Springs we ran short of water, and after waiting on the track for four days in the hope that a native might possibly come by had to walk 16 miles through heavy sand, the sergeant-major carrying water bags. I carried the .38 Winchester, not because of blacks, but on account of cattle, for which I must confess a deadly fear.

ISOLATION.

Seven miles in from Wycliffe Wells we met a man, his wife, and two daughters. The girls, aged 20 and 23, had never yet seen a white baby or a train, and we were the first white women they had seen for 12 months. We spent three weeks with them. They lived in a bush whirley, and we slept in the car. Every night we sat out in the open on benzine boxes and taught them the latest ragtime songs, while one girl picked up the tunes on an accordion. As soon as the girls grew to know us they drew the sergeant-major aside and wanted to know "did she believe in love at first sight as they had read about it in books!"

The rest of the journey was fairly uneventful. Very bad weather again held us up, and we were bogged several times south of Oodnadatta. Game was plentiful on the northern route, turkeys, pigeons, kangaroos, dingoes, emus, and an occasional snake--one I killed with the spade measured over 6ft.

THE RECORD TRIP.

At Adelaide, Melbourne, and Sydney we received a great welcome, and as we drove into Macquarie Place to the Obelisk, the spot from where we commenced our journey, the cinema man was busy turning the handle, a host of photographers and a large crowd waiting to welcome us. A remarkable feature of the trip was the wonderful hospitality shown right through Australia, and the kindness of the people out back will always be remembered by us.

On our return to Sydney a leading motorist remarked:

And to think it took two New Zealanders to hold the record of doing the longest single trip ever completed in Australia.

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This shows some of the company kept by Mrs. Sandford on her journey. Although warned to carry revolvers against these

aborigines that was

grass. We came back after our search with our legs like porcupines from the long, sharp grass seeds. We took just three hours to do sixteen miles. It is impossible to travel at more than seven miles per hour on this soil.

The fine sand was a source of constant annoyance, and after a hundred miles or so it was quite a usual occurrence to find the inside of the carburettor thick with sand. On one occasion after breaking our only screw-driver, I took the carburettor to pieces with the tomahawk and a tin-opener.

At Marenboy we were warned by telegram not to attempt the trip from Katherine to Darwin, as two inches of rain had fallen the night before at Pine Creek, so on arrival at Katherine the car was mounted on a truck, and we We rested occasionally by shooting at ourselves travelled in the only accommodation, the guard's van, for a dis-

a guide, but as the grass grows higher than the top of the car after each rainy season, it is impossible to find any track over a great part of the way. Our guide lost us repeatedly, and we decided too late it would have been better to have risked it ourselves. We took five days to travel 240 miles--into deep black soil bogs which can only be likened to quicksands, into prospecting holes dug by Chinese who forgot to put the rubbish back, digging a track up and down creek banks where heavy rain had washed away the approach, and chopping down trees with our precious tomahawk to build up roads out of apparently impossible jump ups. On one occasion I drove a short way along the railway line to avoid bogs and, crossing a culvert, the loose sleepers piled ahead, and down came the car on the front axle with the wheels spinning round in mid-air. An awk-

the hood being either fastened down or entirely removed.

There are some old characters in the Northern Territory, and unless one meets them personally you have never really been up there. There are Macay, the original Mac of "We of the Never-Never," by Mr. Gunn, travelling carrying stores complete with goats and hens for fresh milk and eggs. Also Freddy Haines, who keeps a tiny inn between Darwin and Katherine. Fat red arms akimbo. "Hullo, old sport."

I was presented with a .38 Winchester rifle in Darwin, and shot some good turkeys, using the smaller rifle for pigeons. We had some jolly good stews of pigeons, tinned peas, and onions. Once we ran short of water, and had to boil up some dirty water from a pool under a bridge, but it

not done, and no dangers were encountered from them. A feature of the trip was the human element met with at various points. Read this story--it is romantic.