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The Exponential Horn for Perfect Reproduction

IN this article by "Switch" there is given a brief outline of the evolution of the radio loudspeaker, supplemented by constructional details for an easy method of building an exponential horn which type marks a big advance in loudspeaker efficiency. The materials are easily procurable in New Zealand, and the method of construction is so simple as to be possible for anyone with the slightest mechanical skill. The exponential horn has been developed along scientific lines, and its success has been acclaimed far and wide.

WHILE radio engineers had wrought wonderful improvements in the components and design of broadcast receiving equipment the problem which proved one of the most baffling was loudspeaker efficiency. The old type of horn loudspeaker was universally adopted in the genesis of the broadcasting era, and it still maintains a prominent position in popularity the world over. The old horn-type loudspeaker possesses inherent infirmities which no amount of scientific application has been able to completely cure. The radio technicians of the world long since realised that while efficiency in transmission and radio receiving equipment had progressed to well nigh perfection the efficiency of the loudspeaker had lagged badly. In the United States more than in Great Britain the horn type loudspeaker had failed to keep pace with radio advancement. In the Homeland the horn-type loudspeaker manufacturers had certainly made far more progress than in America. This was so manifest that one of the biggest loudspeaker manufacturers in England invaded the United States and by setting up a factory there and capturing a large market demonstrated the superiority of the English article over the considerable majority of American loudspeakers.

ARRIVAL OF THE CONE SPEAKER.

THEN came the cone loudspeaker which the Americans evolved with considerable ingenuity and not a little success. Without going into the scientific deficiencies of the average horn-type loudspeaker, and even the best plain cone-type, it can be stated that these individual types failed, generally speaking, to reproduce the high and low pitched notes with equal efficiency. That is to say, one type would give emphasis to the bass notes and fail in its treatment of the higher treble register, and vice-versa. The position was promptly realised by the American manufacturers who then applied the cone principle to the moving coil or electro-dynamic mechanism. The cone was then much reduced in size as the pitch was then obtainable by the amplitude of the vibrations of the cone which is mechanically restricted in the small diaphragm of the original horn-type loudspeaker and the mechanism of the original cone-type.

A NEARLY PERFECT LOUDSPEAKER.

THIS marked a striking advancement in loudspeaker efficiency, and it may be reasonably claimed that the electro-dynamic cone loudspeaker is as near perfection in tonal qualities as can be reasonably expected for some years to come. But an inherent disadvantage of the cone-type electro-dynamic loudspeaker is its cost, and in this respect, so far as the general body of the public is concerned, has not seriously menaced the popularity of the less-costly original horn-type and cone-type loudspeaker. Still, those who could afford to purchase the electro-dynamic loudspeaker of the cone-type enjoy a quality of reproduction incomparably in advance of the older and more popular types of speakers. In order to capture that section of the public who can afford to pay a substantial sum for a loudspeaker, some of the American manufacturers have contrived to reduce the cost of the electro-dynamic cone-type to a more reasonable figure than originally. Still, the vast majority find the cost of this article above their means.

IMPROVING HORN LOUDSPEAKER.

WITH characteristic resourcefulness the American radio manufacturing companies turned their attention to improving the original horn-type speaker so that its tonal qualities would be more efficient, and its cost could still remain within the reach of a large proportion of the general public. The services of scientific men were requisitioned and the science of acoustics was delved into. Sound responds or conforms to well-recognised laws. For example, sound is reflected in a manner analogous to the reflection of light. When it is reflected from a plane surface the reflected sound comes as though it was propagated from a point beyond the surface at a distance equal to the distance of the real point of propagation from the surface. Sound is produced by certain vibrations in the air or other matter in contact with our organs of hearing and it is through the column of the vibrating medium, air, within the horn of a loudspeaker or surrounding the surface of a cone loudspeaker that the original vibrations of the horn diaphragm or cone are reproduced in the drums of our ears and made audible through the connecting nerves to our brains.

INVESTIGATIONS BY SCIENTISTS.

SCIENTISTS investigated the relation between the number of vibrations per second of the horn speaker diaphragm and the length and shape of the column of air contained within the horn. The vibrations of the horn diaphragm create waves in the air

readily procurable and with a little mechanical skill the horn can be built so as to reproduce tone of such superior quality and fidelity as to afford the listeners an entirely new pleasure in listening to broadcast entertainment. To facilitate its construction by an amateur the horn can be made with a square cross-section, for it has been found that the shape of the cross-section is not a critical factor as square horns have been found to give excellent results.

METHOD OF CONSTRUCTION.

THE inside dimensions, from the 5-in throat to the 20-inch mouth of the bell, are shown in Fig. 1. Dimensions are given for every six inches up to four feet from the throat, and for every three inches thereafter, because of the more rapid increase of the curve. After the points have been laid off, they may be joined by freely-drawn lines, if no suitable curve is at hand. If you have not a straight-edge sufficiently long, a chalk-line may be used for the centre.

A single sheet of beaver or wall board contains enough material to make one horn; it is eight feet long, four feet wide, and 3/16-inch thick. It is divided into four pieces, as shown in Fig. 2, as a preliminary step. The pattern, laid out as shown in Fig. 1, is then applied to each piece in succession; a strip equal to the thickness of the material being added to one side, on each strip. All four pieces may then be cut out; they are exactly alike.

MOUNTING THE SIDES.

THE next move is to shellac each piece on the face which will be inside. They are then put together, as shown in Fig. 3, overlapping on successive sides. All are fastened partly by small brads. (It is well to drill the wall board for the brads, as otherwise they are apt to split it.) In this operation, two pairs of hands, though not absolutely necessary, are better than one.

The wall board is sufficiently flexible to accommodate itself to the curve desired, under pressure; and the outside edges are fastened with gummed mending tape, 1 1/2 inches wide. This tape should be creased down the centre before it is applied. A ten-yard box, costing about half a crown or less, is ample for one horn.

When everything is in place and dry, a very neat fillet can be made in the inside corners, by carefully running a good glue down each in turn, catching the excess at the bottom. One corner, of course, must dry before work is undertaken on the next. This will prevent pinhole leaks at the corners.

Before finishing the horn on the outside, try it with your set at full volume. If the bell develops a vibration, due to the thinness of the material, reinforce it with panelling of the same material. After that, the horn may be decorated to suit your fancy.

Although this horn is large, it is easy to handle if it is mounted on a suitable base. The results are so satisfying as to encourage experiment to find a more compact form, which can be mounted in a cabinet, with no sacrifice of efficiency.

The horn may be connected to the unit of your loudspeaker after removing its original horn.

A small piece of heavy rubber tubing can be used to connect the exponential horn to your loudspeaker unit. Loudspeaker units can be purchased separately, and it would be greatly advantageous to purchase the best procurable, for one cannot expect good tone even from an exponential horn if a cheap loudspeaker unit is used.

FOR ILLUSTRATIONS SEE PAGE 2

of a certain length just as there are various wavelengths in radio transmission. The deep notes of the bass produce longer waves than the shrill notes of the treble. To faithfully control the longer waves of the bass before they progressed beyond the control of the loudspeaker horn scientists agreed that the loudspeaker horn would have to be lengthened. Next a relation between the gradual widening of the horn and its length was found necessary by a scientific process which need not be detailed here. Exhaustive experimentation was finally rewarded by the evolution of the successful exponential horn loudspeaker.

EXCELLENT TONE AND VOLUME.

BESIDES its tonal excellence, the new speaker, through its admirable control of the air column within the horn, has remarkable volume and some striking open-air demonstrations of this were given by one of the American companies which devoted a considerable sum of money to its development. The success of the exponential horn was acclaimed by the American radio press, and in very short time the market was well supplied with the new speaker. A substantial advantage of the best exponential horn is that it can be sold at only a trifle higher price than the average high-priced old-type horn loudspeaker.

New Zealand ever eager to keep pace with the world's progress has already had some very excellent exponential horns on the market and these have been purchased with avidity by the radio public.

EASY TO CONSTRUCT.

THE construction of an exponential horn is within the capabilities of anyone possessed of the slightest ability in handicraft. The main thing to be considered is that the measurements must be strictly adhered to in order to preserve the remarkable characteristics of the speaker. The materials are

Australian Move

CO-ORDINATION OF STATIONS

TO COMBAT BOREDOM

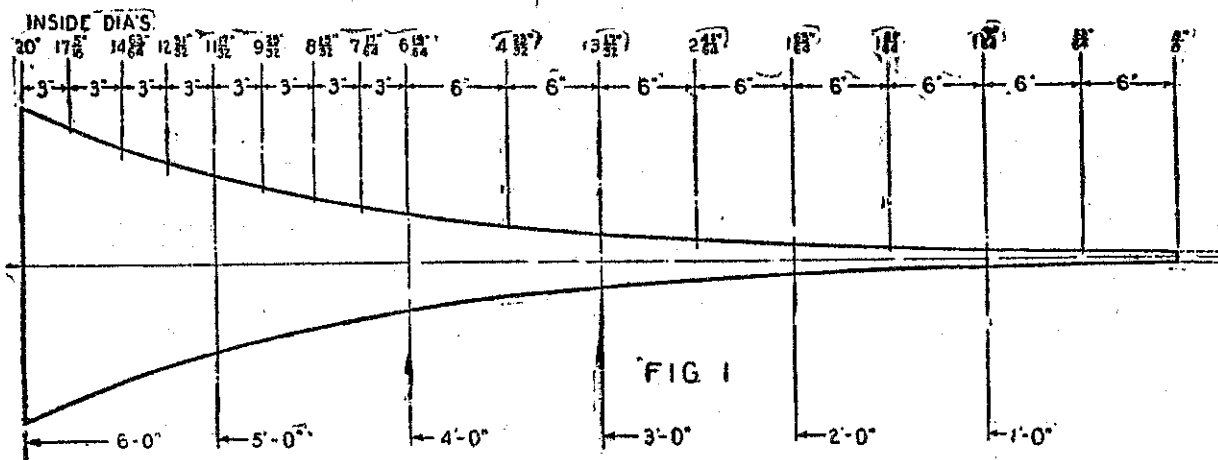
A FURTHER stage in the co-ordination (which involves financial amalgamation) of broadcasting services in Australia was reached on May 21, when the Broadcasting Company of Australia Pty., Ltd. (3LO, Melbourne), announced that arrangements had been made whereby that company obtained the controlling interest in the Adelaide station (5CL). It has taken some time for the companies concerned to come to an amicable agreement, as was requested by the Commonwealth Postmaster-General some months ago. The effect of the co-ordination of the services of 3LO and 5CL is that it is now possible for artists to be engaged for a longer period than was the case formerly, when the companies were under different management.

5CL, Adelaide, has at last agreed to join forces with 3LO, and the organisation will help further to bring about that cohesion in broadcasting from "A" class stations in Australia. Negotiations are still in progress with the Queensland Government station (4QG), but no difficulty is expected to arise in bringing an agreement to finality there.

This done, broadcasting begins the second great phase of its career in Australia (states the Sydney "Wireless Weekly"). No invention in many decades has travelled so far or so fast as radio. Men have been forced to devise methods for its application as

The Exponential Horn for Perfect Reproduction

The two diagrams below illustrate the article on front cover of this issue.



Above are shown the widths of the six-foot exponential loudspeaker horn at suitable short intervals along its length. The material necessary for making one of these horns can be obtained from a single sheet of wall board. The pattern, which is shown in Fig. 1, is prepared and laid upon the wall board; and the latter is cut along the lines indicated, allowing on one side an extra lap equal to the thickness.

the greatest entertainer in history in a space of time that has often been given to the organisation of a single theatrical company. This measure of success has been so great as to destroy the onlooker's sense of proportion. So much has been done that it appears to the outsider that much more could have been accomplished. Radio has succeeded so smoothly to the throne of entertainment that it has become a commonplace. Greater obstacles, greater failures would still have kept it among the world's wonders. Now it is a toy for schoolboys, who have ceased to marvel at a thing they can so easily manipulate.

Future Developments.

WHAT is to be the development in the future? The co-ordination of "A" stations will allow of much more closely-knit programmes. There has been a great deal of loose criticism of the programmes of the big stations, often on the part of the officials. It has never been dealt with in detail. A little trouble in examining the basis of the criticism will serve to show its shallowness.

As a type of fault-finder, let us take the recent utterances of Mr. Haldane, of the P.M.G.'s Department, who actually hinted that the Commonwealth Government had the power to withhold revenue from stations that were not up to the mark in the class of entertainment they supplied. He went on to say that people were beginning to prefer the "B" stations, which were not in receipt of any revenue, and which broadcast only gramophone selections and advertisements.

Meaning of the Criticism.

CLOSELY examined, this criticism boils down to the charge that much is put on the air by "A" class stations with which people are bored. Further, that no one who listens to a "B" station is bored. Stripped of verbiage, this is the plain meaning of the criticism which is only an echo of that voiced in letters to the Press.

Let us consider it, and weigh its justice. In the first place, there is not a similar station in the world against which the same charge of boredom is not levelled. And the charge can be sustained. Not a man lives, however wide his knowledge of psychology, who can devise a programme which is to last for about 18 hours and appeal to such divergent taste from that of the moron to that of the savant, and which will not bore at least portion of the immense audience.

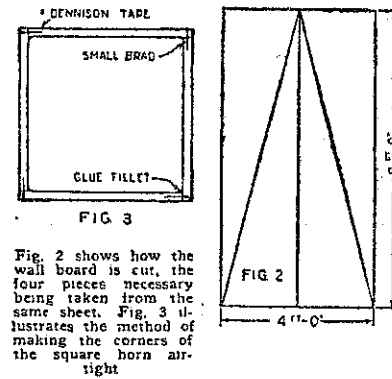
It is precisely because "A" stations have this big field to cover that they must necessarily contain boring details. When women's work is being demonstrated, for example, how is it possible to avoid boring men who happen to be listening. As far as possible these sectional interests are catered for at times of the day when it is expected that the greatest proportion of listeners will be those specially interested. To make every item successful, however, is impossible. Later, market reports come on. Of course, thousands of city dwellers give an exasperated curse, shut off their instruments and take pen in hand to write to the daily papers or the P.M.G. They don't bother to give details of the part that bored them. They simply write: "The programmes are getting worse and worse."

A Broadcasting Duty.

IF the broadcasting of gramophone records was the criterion for successful entertainment, it would surely pay the big stations to dismiss their bands, throw out their singers, let half their staff go into unemployment, and buy a good gramophone. But the opposite is their course. They are charged with the duty of broadcasting public events, the views of distinguished visitors, explanations of live public questions, racing and sporting results, market and weather reports, and a score of other things that must necessarily be broadcast, though it is known beforehand that half of the customers will be bored, and another quarter will write to the papers.

IT is through co-ordination that it is now possible for an Australian listener who feels bored by a talk from one station to tune over to another which is transmitting music.

The co-ordination between 3LO, Melbourne, 3AR, Melbourne, and 5CL, Adelaide, commenced on Monday, the



Europe Lags BEHIND U.S.A. RADIO A CONTINENTAL LUXURY

IN a recent interview with Alfred Marchey, president of Temple, Inc., Chicago, some very interesting conditions about the radio situation in the European countries were brought to light. The facts that are presented are all the more important, because in the three months that Mr. Marchey just spent in Europe, his investigations were made, not in the superficial way in which the average manufacturer sees conditions there, but as a former European knowing European conditions not only on the surface, but beneath. Mr. Marchey's remarks come from below the surface, and can be taken as picturing true conditions, having actually lived within the sphere where his remarks have their basis.

Europe is still four years behind America in radio. In other words, if we go back four years and think of the American receivers with many controls and do-dads, to the era of the dial twister, then we have a picture of the average set in operation in the European countries to-day. Those employing valves form only about 30 per cent. of the receivers in operation, 70 per cent. being crystal sets with an average range of about twenty-five miles.

COMPARING the number of receivers in Europe, crystal sets and valve sets, with the sets in the United States, numbers are about equal. Leaving Russia out of the picture, the population of Europe is 350,000,000. This brings about a per capita ratio of three and one-half sets in the United States against one in Europe. The countries with the greatest number of receivers are England, Holland, Denmark, and Sweden, and the countries of less radio activity are France, Germany, Switzerland, Italy, and Austria.

Radio a Mystery.

THERE seems to be a popular misconception in the United States that many European nations, particularly Germany, are countries of mechanics, where radio is not only thoroughly understood, but where conditions in the United States are closely approached. This is wrong. In Germany, for instance, radio is a mystery. The principles are not generally understood, nor is any attempt made by the owner of receiving apparatus to correct any difficulties with the set himself, nor does he ever attempt to service it. If anything is wrong, the set is taken to the store from which it was purchased. This is carried so far that even when batteries need recharging this same procedure is gone through with. Why this condition should be so different from conditions in the United States is probably because the American has learned to help himself, while the European has grown to depend upon specialists, each in his respective line. In America a man will repair his own motor-car if minor difficulties develop, he will paint his own front fence, he may even paper the dining-room if he has the time—but these things are not only unheard of in Europe, they are never even thought of. In Europe, not only is radio a mystery, but the man who drives his own car is

an exception—chauffeurage is a profession.

With this as a background, it is easy to realise why European radio conditions are as Mr. Marchey found them.

In Europe there are three principal classes. The rich, the middle class, and the poor—a class distinction that America does not readily understand. The first class considers radio a luxury, the middle class hardly considers it at all, and the third class is entirely out of the picture. Radio in the United States, like the automobile, in its beginning was a luxury, then a pleasure, now a convenience, and like the automobile to-day, soon a necessity. Americans depend on it now for weather reports, market reports, news items, first aid calls and many other things. For the farmer, radio in America to-day is already a necessity. In Europe it is still a luxury, and it was but rarely in his travels that Mr. Marchey saw any kind of an aerial from the window of the train.

Use Mechanical Reproduction.

ABOUT the broadcasting situation, stations are located in the principal centres, and the chain idea also is used, but not as in our case to transmit exceptional programmes to all sections of the country, but rather to save expense on the talent. Talking machine record broadcasts are much in evidence, as are also talks along educational lines. Moscow has the best broadcasting station in Europe. Its concert orchestra broadcasts are far famed. As a matter of fact this station is looked upon in the same way that station KFI, Los Angeles, California, is thought of from eastern and middle sections of the United States. In other words, if the receiver will bring in Moscow it surely is a real receiver.

From the standpoint of the sets that are in use Europe is about four years behind the United States. That does not mean that inside of four years conditions there will closely approach the conditions in America to-day, because progress in Europe is much slower than it is in the United States. If it will take the United States five years to approach the saturation point in radio in America, it will take twenty years in Europe. The valve sets are nearly all regenerative circuits—sometimes trick circuits. The popular radio-frequency receivers of the United States are seldom found. Because of the broadest range of from 400 to 2000 metres sets must be made with interchangeable coils. Receivers, therefore, are sold without valves and without coils, the latter two items being extra equipment.

Germany, in particular, contains many stage valves. One particular set takes care of two stages of radio-frequency by the first valve, detection and the entire audio system, which consists of a two-stage resistance coupled amplifier, is all contained in the second valve, and this is not a very large tube, either. It is about the size of a 280 valve.

[The above type of set is on the market in New Zealand.]

A. C. Not Used.

COMPLETE A. C. operation of receivers in Europe is a thing that is in the very dim and distant future, mainly because there is nothing that approaches a standardisation of available current. We are liable to find 110, 220, and probably a half-dozen other voltages used to a considerable extent in any one country on the Continent. As a result of this condition all electrical apparatus is comparatively high in cost. This will prove a considerable handicap to the ultimate A. C. operated receiver in England and on the European Continent.

From the standpoint of the sale of

radio equipment in Europe conditions are very much like they are in the United States, and in the sale programme the jobber and dealers are to be found. The discounts granted by the manufacturer to the jobber vary, and may be anywhere from 40 per cent. to 50 per cent. and 10 per cent. off the list price. However, these discounts are never allowed on small orders as they are in the United States. A jobber, in order to be entitled to them, must take practically his entire season's allotment, or at least enter into a noncancelable contract for same. The dealer will buy radio equipment from his jobber anywhere from 25 to 33 per cent. off the list price. No standard discounts prevail.

As a general thing stores handling radio sets and accessories are exclusively radio stores. Radio is not to be found in department stores, furniture houses, or music stores as in the United States (and New Zealand).

GUIDE TO AIRMEN

NEW RADIO DEVICE.

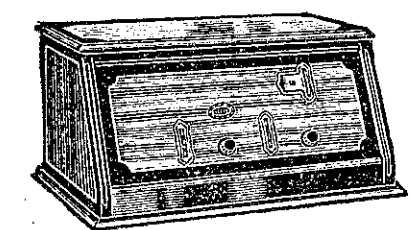
A lighthouse of the ether to guide aeroplanes by visual radio had its first public exhibition recently at College Park, Md., outside Washington, U.S.A., and William P. McCracken, Jr., Assistant Secretary of Commerce for Aeronautics, and others, after trial flights, declared it marked a new and important advance in making aviation safe.

The device is mounted on an aeroplane lighthouse to receive signals telling whether the aeroplane is on its course. Dr. J. H. Dalling, who, with Harridan Pratt and P. W. Dunmore, of the Government Bureau of Standards, have developed the instrument which is the outcome of about eight years' experiments, announced later that the Pitcairn and National Air Transport Companies were installing machines to be in operation on the New York-Atlanta, and Cleveland-New York route by May 1.

To Be Installed Elsewhere.

The signal system, they said, will eventually be installed along all federal air routes. Officials witnessing the experiment declared they were delighted with results, explaining that the instrument marks an invisible but infallible course along which aviators can fly in rain, hail, snow or fog, despite visibility.

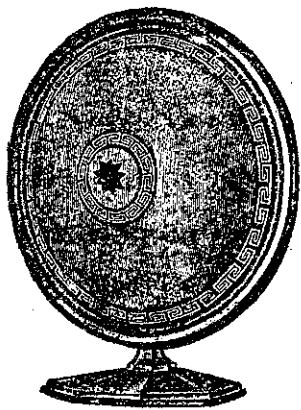
While the 70-foot tower sent out its stream of directional signals by radio a de Havilland aeroplane, piloted by Captain R. L. Meredith and carrying first W. W. Chalmers (R.), Representative from Ohio, and later Mr. McCracken, swept the countryside, during which time twin indicators on the aeroplane's instrument board, housed in a case no larger than a match-box, interpreted the radio waves in terms of visual signals, telling the flyers whether they were on their course and, if not, by how much they were off. The device has a range of 150 miles.



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The Era of Universal Flying

Future Method of Transportation

THANKS to radio and the accuracy thereby given to aerial navigation, we will be able in the future to fly from New Zealand to London in very quick time, is the prediction made by Captain H. Findlay, N.Z.P.A.F., O.C. Wigram Aerodrome, in the course of a very comprehensive and interesting talk given from 3YA. The recent remarkable flight from San Francisco to Australia and the prospective flight of the Southern Cross to New Zealand give a special interest to this talk which is reproduced in our columns in response to a number of requests.

IN to-night's talk on aviation I propose to attempt the difficult, but fascinating task of dipping in to the future. Before the war the great majority of people in the world had never seen an aeroplane, still less did they believe that aeroplanes could be of use to the general public. But the old order has changed and the aeroplane has proved its worth and many people have already flown in them. Consequently one has the advantage of addressing listeners who at any rate agree that flying has a future. It is a curious thing that in transport vehicles there seems to be some relationship between minutes and miles in round figures. Our fastest liners travel at or about two minutes to the mile. A mile a minute seems to be the high water mark for long distance run by train. One hundred and twenty miles an hour or two miles a minute is the aim for the cruising speed of the present day commercial aircraft, and 180 m.p.h. or three miles a minute for the modern single-seater fighters.

In the last Schneider trophy race a speed of 300 m.p.h., or five miles a minute, was attained. Now it is almost an axiom, at any rate in the early days of any method of locomotion that the record speed of to-day is the ordinary travelling speed of to-morrow.

Possible Developments.

BUT this holds good only up to a point for there is obviously a limit of speed which can only be reached by specially built or specially tuned vehicles. For instance no one would imagine that the 200 m.p.h. achieved by Major Seagrave recently will be the ordinary travelling speed of a motor-car. Flying is still so young compared with motoring, that it is quite reasonable to imagine that 300 miles per hour is not anything like, or near the limit of flying speed as 200 m.p.h. is to the limit of motoring speed. In fact, scientists tell us that if we can reach a height of 40,000 or 50,000 feet, the air is so thin that it offers practically no head resistance and almost any speed can be attained. This would entail an airtight compartment fed with oxygen and maintained at atmospheric pressure for pilot and

passengers, and altogether it sounds a most uncomfortable form of locomotion, so that I think most people would be content to travel at a mere five miles a minute within seeing distance of the ground.

Therefore I propose to leave out the possibilities of this purely hypothetical scientific aircraft and confine our prophecies to what we know can actually be done. Mr. Mitchell, the designer of the seaplane which won the Schneider trophy for England, has stated that he can see several ways in which the speed of this machine can be improved. Consequently we may anticipate with every confidence speeds of 360 m.p.h., or six miles a minute, as a quite possible record speed. Anyway, we can look to something around 240 m.p.h. as a reasonable travelling speed for aircraft of the future, whether civil or military. Of course, these calculations are based on the assumption that we shall still be using the ordinary internal combustion engine as we know it to-day, but it is quite feasible that some entirely new form of power plant may be discovered in the future.

An internal combustion turbine is one possibility, and it is possible that there may be a wireless distribution of power, and we could then pick up this power from a central broadcasting station as easily as we pick up the concerts from 3YA.

The Existing Engine.

HOWEVER, again we shall leave out of our discussion these possible developments, and confine ourselves to the use of the existing four or two-stroke engine. When flying began seriously some eighteen years ago, aero engines weighed anything between 4 and 8 lb. per horse-power. To-day they are down to 1 lb. per horse-power, and there appears to be every prospect of getting them down to even less than this. This in itself would greatly facilitate high speed flying. I am not suggesting that within the next few years 240 m.p.h. is going to be the ordinary touring speed of aeroplanes. But we know that if it is worth while we can produce machines which will do 240 m.p.h., and do it with the utmost reliability. Let us consider what

is going to make it worth while. For the past five years an air mail has been operating between New York and San Francisco, a distance of 3000 miles, with about 90 per cent. regularity and averaging just on 100 miles an hour. And this has been done with old machines of war-time design.

Now take the relatively small distance in our own country. The distance from the Bluff to Auckland by air is about 830 miles; so given the 240 m.p.h. machine, this could be accomplished in 3½ hours.



Photo Andrews.

CAPTAIN H. FINDLAY.

Dunedin to Christchurch in 45 minutes, Christchurch to Wellington in well under the hour, and Wellington to Auckland in an hour and a half.

It is not necessary for me to dwell on the countless prospects thus opened up. But striking as this elimination of distance appears in a small country like ours, the results in the larger countries such as Australia and Canada and on the

London in 50 Hours.

WHEREAS here it would mean a saving of hours or even days in these larger areas the saving in time

would amount to weeks compared with the present system of transport. For instance, if we had a proper relay of machines and pilots and an adequately-lighted airway (which will assuredly come) we could reach London in 50 hours, or allowing for meals and changing over of machines, say 2½ days.

Naturally we shall have trans-oceanic air services some day, and this will, of course, be done with big flying-boats. We shall probably come back to quite an old idea in which the wings, engines, and tail of the flying boat will be built as one unit, the hull being a seaworthy motor-boat which is clamped to it. This is quite a feasible engineering proposition, and has the advantage that when the machine reaches the terminal harbour it can alight on the water, moor its wing and tail unit to buoys and the boat hull can then proceed up to the dock to unload and reload passengers and freight.

Future Methods.

THIS, I imagine, will be the future method of transportation between here and Australia, and if our estimated speed of 240 m.p.h. is maintained, the trip will take about five hours, which would bring Sydney closer to Christchurch than, say, Blenheim, is under present conditions. Thus it will be quite possible to leave New Zealand one day, transact business in Sydney, and return the following day. So much for high speeds of the future, but we must have reasonable safety before we can expect people to travel by air as a habit.

In my talk a fortnight ago I endeavoured to show that with the development of multi-engine machines, slotted wings, and a properly-equipped airway, organised commercial flying is at least as safe as motoring, and with continual improvements we shall get greater and greater reliability. This question of the comparative safety of modern flying cannot be stressed too much, as the impression that flying is unduly dangerous is the biggest hurdle which has to be overcome before the aeroplane is accepted as an ordinary vehicle of transport. Having achieved speed and safety, there is really no limit to the future prospects of flying.

The history of all other methods of transport will repeat itself.

Safety will increase the number of people who want to fly, and the increase in the number of people who want to fly will provide the necessary stimulus to produce more machines, and this in turn will reduce the cost of manufacture. The cost of a light aeroplane in England at present is £600, but when there is sufficient demand to warrant mass production they should be produced at £200 or £300 or even cheaper. Then will come the dawn of the era of universal flying.

Possibilities—Not Prophecies.

NOW these are not wild prophecies but actual possibilities which could be achieved within a year or two could sufficient interest be stimulated to warrant the best brains and enough capital being used to this end. That universal flying will come in time is hardly a matter of doubt, but the inevitable prejudices and lethargy which always impedes the development of new ideas will first have to be overcome, and the extraordinary interest displayed in aeronautical matters to-day shows that this is now being done. I think that the next ten years will see such an advance in flying that all our old ideas of transportation will be revolutionised.

In conclusion I will venture to suggest that all city, county and borough councils who would keep ahead of the time and make provision for the future should set aside sites for aerodromes forthwith. If this is not done now it will be difficult to obtain suitable sites for an aerodrome near the towns concerned, as the value of the property will increase and the ground itself will be built over. In the future, cities and towns without an aerodrome will be as handicapped as they would be to-day without railway or shipping facilities.

To Blenheim belongs the honour of having the first municipally owned aerodrome in New Zealand, but I feel sure that other local bodies will soon see the wisdom of this example and thus provide a network of aerodromes throughout the country.

WELLINGTON RADIO SOCIETY

GENERAL MEETING

THE Amateur Radio Society of Wellington held a general meeting in the Dominion Farmers' Institute on Wednesday evening, June 20. Mr. Byron Brown, the newly-elected president, occupied the chair, and there were about two-dozen members present. Mr. J. Ball, editor-announcer for 2YA, Wellington, was in attendance on special invitation. The following donations were acknowledged:—Mr. Byron Brown, 25 ss.; Mr. D. A. Aiken, £2 2s.; Captain C. J. Foster, £1 1s.; Mr. S. George Nathan, £1 1s.

The acting honorary secretary, Mr.

Jones, read a copy of a congratulatory cablegram sent on behalf of the society to Mr. Warner, radio operator on the trans-Pacific aeroplane Southern Cross during the great flight from San Francisco to Sydney.

Interference.

The secretary reported that a good deal of interference was being caused in and around Wellington by at least three people who were practising amateur transmission in Wellington without having first obtained a license. He had been in communication with the Post and Telegraph Department officials on the subject, and the latter, he said, were fully alive to the situation. Drastic action would be taken against amateur transmitters who were operating during New Zealand broadcasting hours.

More 2YA Features.

A letter was received from the Radio Broadcasting Company stating that arrangements were being made to test the possibilities of a relay from a Wellington theatre. The company reported that it had not been able to come to a satisfactory arrangement for the broadcasting of organ music from the Wellington Town Hall.

With regard to the society's request that the Sunday night sessions be extended till 10 o'clock, the Broadcasting Company replied that on such occasions when matter particularly suitable for broadcasting was available arrangements would be made to continue the Sunday night sessions until 10 o'clock. The secretary of the society stated that he had personally urged the use of high-class gramophone items on conclusion of the Sunday night concert relays, one of which on the previous Sunday had concluded at 9.20 o'clock. The meeting passed a resolution renewing the Society's request to the Broadcasting Company that the Sunday night sessions be continued until 10 o'clock.

Inspection of Sets.

The Society lately asked the P. and T. Department to arrange if possible for the inspection of licensees' receiving sets at their homes to ascertain whether neutralised sets are correctly neutralised, with a view to reducing the howling valve nuisance around Wellington. A letter was read from the secretary of the General Post Office stating that the practicability of the suggestion was being investigated, and a report would be furnished in due course. Instances had been reported in the Press in which neutralised sets were definitely, incorrectly neutralised, and were potent instruments of interference with other listeners, and the committee of the Society after careful deliberation, considered that the only practical method of locating such trouble-causers was for radio inspectors to visit the homes of

licensees and test their sets. If a set were found not to be neutralised correctly the owner could be promptly served with a printed warning that unless the set were properly neutralised within a stated period action would be taken under the Government regulations.

Is There Distortion.

A general discussion ensued on the subject of whether there was distortion in the transmission by 2YA, Wellington. Mr. Byron Brown stated that reception of 2YA at his home in Otaki was of excellent tone, free from distortion, and of tremendous volume. Others residing in and around Wellington reported diversely. Some asserted that distortion was only slight and occasional, others alleged it was rather frequent and severe, and some said distortion was apparent only in the case of vocal duets, trios, etc. One member stated that he was informed that there was one good microphone in the studio, and that the others were faulty, and inclined to blast.

Mr. Ball, editor-announcer at 2YA, said that the microphones were not faulty, but differed in characteristics. The differences of the microphones were corrected in the studios by placing the vocalist nearer or further from the microphone, as the case demanded.

The Exponential Horn.

One listener reported to the meeting that he had devoted nine months to careful experimentation in tone reproduction, and had built an exponential horn according to the most approved design. He found that at times there was slight distortion from 2YA occasionally, but his experience led him to believe that 90 per cent. of the complaints regarding distortion were due to the listeners' sets. It was pointed out by one member that distortion in reception could be caused by power-line leakages, X-ray, and violet ray equipment, amateur transmission, battery-chargers of the vibratory type, etc. The overloading of the detector valve was also a cause of distortion.

A Listener's Query.

Uproarious laughter was caused by one member, who resides about one mile and a quarter from 2YA, Wellington, complaining in all seriousness that he had to move his tuning dial "fully half an inch" before he could cut out 2YA. What he wanted to know was "Why, if a station is supposed to be on a certain point on a dial, the dial has to be moved fully half an inch before the station can be cut out. It's not right, and I'd like to know the reason why."

It was explained to the member that owing to his proximity to so powerful a station he was exceedingly fortunate to be able to drop that station in only a half an inch movement of his dial. The field of the station was so power-

ful that owing to its proximity shock excitation and the power of the side bands of the carrier wave always rendered it exceedingly difficult to tune out the station without a wide movement of the tuning dial of a receiving set. In fact, many sets in Wellington would bring in 2YA right around the dials. This disability, however, quickly decreased the further the receiving set was away from 2YA. The breadth of tuning would decrease in exact proportion to the square of the distance the receiving set was away from 2YA.

Concert to be Organised.

A proposal by Mr. R. L. Jones to organise a concert under the auspices of the society for transmission from 2YA, Wellington, was adopted with thanks, provided that all requirements of the Broadcasting Company regarding auditions, etc., are complied with and that any fees required by the performers shall be paid by the company.

The Secretaryship.

The acting-secretary, Mr. Jones, asked to be relieved of his post. No one, however, would undertake the duties of secretaryship, so Mr. Jones agreed to continue as acting-secretary until the next meeting.

The membership roll of the society was reported to stand at about 330.

Short-wave Receivers.

Mr. J. Ball, editor-announcer for 2YA, Wellington, stated that the Broadcasting Company, with the permission of the Harbour Board, was erecting a short-wave receiving station on the board's property on Mount Victoria, for the purpose of picking up and rebroadcasting whatever short-wave transmissions were available from overseas. An endeavour would be made to relay the ringside description or reports of the world's championship fight in New York next month between Tunney and Heeney.

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BR35A

THE NEW ZEALAND Radio Record

PUBLISHED WEEKLY

Printed Tuesdays to permit of effective distribution before the week-end, with full copyrighted programmes for the succeeding week. Nominal date of publication Friday.

SUBSCRIPTION RATES.

Rate of Subscription: Single copies, 3d.; Annual Subscription (if booked), 12/6, post free; normal rate, cash in advance, 10/6, post free.

ADVERTISING RATES.

Schedule of Advertising Rates available from all advertising agents in New Zealand, or write: "Advertising Manager," Box 1032, Wellington.

Advertisements requiring setting should be in hand not later than Friday of each week to ensure publication in succeeding issue. Stereos and blocks, providing space has been arranged beforehand, can be accepted up to midnight Monday. Contract advertisements not changed will be repeated.

No responsibility is accepted for blocks, stereos, etc., remaining unclaimed after last use, beyond a period of three months.

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

P.O. Box 1032.
Dominion Buildings, Mercer Street, Wellington.

WELLINGTON, FRIDAY, JUNE 29, 1928.

NEWSPAPERS AND RADIO.

SOME few weeks ago we drew attention to the tribute paid by United States newspapers to radio as a factor in the remarkable development of their own circulations over the last seven years. Their point of view, after a detailed analysis, was that radio was an educational factor and stimulated an all-round desire for greater knowledge. This greater knowledge could most easily be met through the columns of the daily press, which had accordingly be called upon to expand and enlarge the already fine service it was giving the community. The more far-sighted leaders of the United States have long been noted for their breadth of view in relation to sharing knowledge with what might be regarded as competitive interests. The British view in the past has been one of close secrecy; the modern American view is to share even technical secrets, the reasoning being that for every item given by one individual, scores of points are gained from other members of the same trade or profession. So in the newspaper world there is now no jealousy against radio—no refusal to give news for broadcasting purposes. Some newspapers, in fact, maintain broadcasting stations of their own as a service to their readers, while others take every opportunity of securing credit on the air for important items of news. A notable instance of this nature occurred in connection with the trans-Atlantic flight of the Bremen. The first authentic news of the actual arrival of the aircraft on the American Continent was received by the New York Herald-Tribune at a few minutes after 8 o'clock one evening. The suggestion was immediately made by a member of the staff that the news be broadcast. The idea was adopted, and the suggestion rewarded with a gift of 25 dollars. The result of the broadcasting of the news by the paper was that next day they sold 27,000 extra copies through having their name associated with the first announcement over the air.

Some New Zealand newspapers have not as yet reached this stage of co-operation with radio, and in at least one instance recently refused to inform its readers that the trans-Atlantic flight was to be broadcast. A more tolerant spirit may develop later as the complementary nature of the public news service becomes appreciated. NOW comes the news that American newspaper interests are preparing to take a definite part in the development of short wave telephony as a means of more rapid international communication. Before the Federal Radio Commission on May 14, Press interests fought keenly for the allocation to themselves of 33 frequencies for trans-oceanic radio communication in opposition to the Radio Corporation, which desired to secure the channels for public communications. The argument of the Press was that they, as servants of the public, wished to establish their own news avenues, rather than pay tribute to another channel for the service sought. Press traffic, they submitted, amounted in volume to one-third of the total word traffic of the Continent, and as such was entitled to special consideration. This recognition of the utility value of radio in connection with press work is of moment.

HONORARY LISTENERS

WE have received a number of applications from enthusiastic and experienced listeners for the position of honorary listeners in connection with the Broadcasting Company's scheme. We thank each of these correspondents for their offer, and have to advise having forwarded them all to the general manager of the Broadcasting Company, with whom the selection rests.

MR. J. M. PRENTICE, the original Uncle Jack of 2BL, Sydney, and who was for a few months employed by the Radio Broadcasting Co. of N.Z., has returned to the broadcasting world again to create interest in a number of varied topics which he is discussing from the small Sydney station, 2UW. Listeners are invited to write him should they desire talks on any particular subject.

SPORTING

BOXING AT CHRISTCHURCH

WEEK-END RUGBY.

TUESDAY, JULY 3.—Canterbury Amateur Boxing Championships—3YA. (Announcer, Mr. A. R. Allardice.)

SATURDAY, JULY 7.—Rugby from 1YA, 2YA, and 3YA. Boxing: Description of Leckie-Hughes featherweight contest, 4YA. (Announcer, Mr. Divers.)

SILENT DAY CHANGED

WEDNESDAY PROGRAMME FOR 4YA

Commencing next week, 4YA will be on the air on Wednesday and observe Thursday as a silent day. The change-over will be widely appreciated. Wednesday is, of course, 2YA's silent day, but now, on that night, listeners will have the choice of three stations.

STAFF APPOINTMENT

MR. C. DRUMMOND TO JOIN 2YA.

LISTENERS-IN to 2YA will be interested to learn that they will soon again hear the voice of Mr. Clive A. Drummond, well known as an announcer, and as "Uncle Jasper." The vacancy caused by the transfer of Mr. S. J. Hayden from 2YA to 1YA is to be filled by Mr. Drummond, whose services have now been secured by the Broadcasting Company for 2YA, and



—S. P. Andrew, photo.

MR. C. A. DRUMMOND.

he will, in his new position, undertake the duties of announcing which have been carried out temporarily by the Editor-Announcer, in conjunction with the members of the staff.

With the ever-increasing service that 2YA is called upon to do, involving extra announcing, little time has been left other members of the staff for preparation and organisation work. Extra transmissions, such as additional hours for racing and football relays, Sunday morning All Black announcements, Sunday afternoon and also special Sunday morning church services, not to mention the recent Pacific flight, when the staff was on duty some eighteen hours, all call for overtime work on the part of the regular staff.

3YA CHILDREN'S SESSIONS

APPRECIATION OF WORK DONE

A MEETING of 3YA Children's Service Advisory Committee was held in the studio on Monday, June 18. Those present were: Mr. D. E. Parton (chairman), Mrs. W. Machin, Mrs. S. Parr, Mrs. D. James, Mrs. Norton Francis, Mrs. J. R. Hall, Miss Warren, Mrs. Tomlinson, Miss M. Hall, and Mrs. A. R. Hall, Brother Hendrick, Messrs. D. Dickson, H. M. Bannell, F. A. Clarke, E. J. McEldowney, C. Booth, L. Slade, the Rev. Clyde Carr, Rev. F. Rule, and Major Ashworth.

The resignation of Mr. S. A. Clarke, representative of the Headmasters' Association, who has been transferred to Napier, was accepted with regret.

Mention was also made of the resignation of Mr. E. J. Bell as "Uncle Jack" of 3YA, and the hope was expressed that he would continue to act as a member of the committee, where his advice would be of great value. Tributes were paid to "Uncle Jack" for the work which he had done for the children during the two years he has been on the air at 3YA.

The committee recorded its appreciation of the type of entertainment broadcast during the children's sessions at 3YA. Particular reference was made to the Empire Day and Christchurch diamond jubilee programmes. A letter from Rockdale, Sydney, was read, the writer stating that he had listened-in to the jubilee sessions and heard the addresses given to the children by the old pioneers.

The committee discussed keenly at some length the question of serial stories, and the question was finally left over till next meeting.

Improved Form of "Radio Record"

NUMBER OF PAGES DOUBLED, AND HANDIER SIZE

WE think our readers will be pleased to learn that a change will be made in the near future in the form in which the "Radio Record" is presented. At the time of our commencing publication we were necessarily obliged to use the means available to us mechanically, having regard to the time factor in catching the mails that must be caught to give satisfactory service to subscribers in distant parts, with whose needs we are closely concerned. For these reasons we had to adopt the size we did.

With, however, the transfer of our printers to new premises, and the provision of new machinery, it becomes possible to secure that extra margin of time, which will permit of folding being undertaken. Paper for the new size is now on the water, and on its arrival, change will be made to a size approximately 12 inches by 10—a convenient magazine form—while the number of pages will be doubled. The change will be marked by early publication of a special number, which will be of outstanding interest to all listeners.

2YA CHILDREN'S SESSIONS

ADVISORY COMMITTEE MEETS

THE monthly meeting of the 2YA Children's Session Advisory Committee was held at the studio on Tuesday afternoon, the Rev. Ernest Weeks presiding. An apology for unavoidable absence was received from Mr. W. E. Howe, representative of the Wellington Sunday School Union, who wrote advising that he had brought before his committee the suggestion made at the last meeting, and confirmed by resolution, that the co-operation of the union be sought in the matter of providing from the various Sunday schools choirs for the Studio Sunday Evening Children's Service. His committee had before them the Broadcasting Company's letter relative to this matter, formally conveying the Advisory Committee's request that the Sunday School Union should co-operate in the manner suggested, and pointing out that the choirs for the studio service should comprise about twenty voices. Mr. Howe advised that his committee felt that the children's service as broadcast by 2YA was of great value, especially to those children so isolated that they could not attend church service. "We think it is a fine thing," continued Mr. Howe, "that Sunday schools should supply choirs for such services. We decided to forward to 2YA a list of Sunday schools and the secretaries or executive officers thereof, in the hope that this may be helpful to the officer of 2YA who deals with the matter." It was resolved that the Sunday School Union be thanked for its sympathetic co-operation, and that the children's session organiser be requested to draft a letter to the representatives of the various Sunday schools, conveying the opinion of the Advisory Committee and soliciting their practical help in the provision of choirs, such letter to be forwarded over the signature of the chairman of the committee and the children's session organiser.

At the previous meeting of the committee a suggestion was made that an occasional broadcast from a children's hospital, home, or similar institution might, if practicable, be widely appreciated. This suggestion was discussed at some length, and it was finally resolved that members of the committee be requested to make investigations as to what institutions were available for this purpose, and Mrs. Henry Smith and Brother Phelan undertook to consult the principals of institutions in which they were interested. It was further suggested that the idea might be enlarged by the inclusion of leading scholastic institutions, wherein, it was considered, there was ample material for the provision of suitable broadcast programmes of a desirable standard. In order to finalise the matter, it was resolved that the suggestion of broadcasting from a children's home be tried out, with a view to the periodical inclusion of such broadcasts if found satisfactory. Some time was spent in the helpful discussion of features of the regular children's sessions, and a number of useful suggestions were made.

THE local news broadcast from the Plymouth station now includes weekly information as to the movements of ships connected with that port. The information is obtained by the British Broadcasting Corporation from the Commander-in-Chief of the Naval Forces, Plymouth.

CHURCH BROADCASTS

Referring to the broadcast of the evening service at St. Mary's, Merivale, the vicar, Ven. P. B. Haggitt, M.A., in addressing his parishioners, said:—"Evening on June 24 will be broadcast. There is a difference of opinion regarding the broadcasting of services, some being of the opinion that it militates against church attendance. There are probably some people who stay away from church in order to listen-in at home; but we believe this will not become a habit. For a while they may substitute listening-in for church attendance; but they will soon come to the conclusion that the former is not enough. They will miss the fellowship of the Church, and they will want to take their part in the services. Again, there are some who have given up church-going. We believe that many of these will hear things through the wireless which will make them think and perhaps realise that the preacher of today is not always so far 'behind the times' as they imagined. Some too will be influenced by the singing of the old hymns. Old memories will revive and make them feel they might have been better and stronger and happier if they had not cut themselves off from the Church. And so, it may be, some will be led back to the Church through the wireless. As a matter of fact many have been thus led back."

"Another and the most obvious wireless blessing is the fact that many people who are prevented by illness or infirmity, or distance from a church, from attending services, are able to listen-in and to join in. Quite a number in Merivale are in this case, and will be very glad to have the opportunity on June 24, at 6.30 p.m., and we too shall be glad to have them with us."

"The broadcasting of services has its dangers; but we believe that its advantages are far greater than its disadvantages. It is an innovation, and as such it cannot escape the suspicions of the conservatives; but we believe it is 'of God,' and so we are thankful to the Broadcasting Station for giving us the opportunity of 'enlarging our tent.'"

POWER OF NEW ZEALAND STATIONS

COMPARISON WITH OVERSEAS

CONSIDERABLE interest attaches to the power of the New Zealand stations compared with ones overseas, and much misconception exists owing to the fact that the power of the Australian stations is rated differently from that of the New Zealand stations.

If the power of the New Zealand stations was reckoned on the same basis as that of the Australian, the respective powers would be:

1YA, Auckland	1,200 watts
2YA, Wellington	15,000 "
3YA, Christchurch	1,200 "
4YA, Dunedin	1,100 "

Exide BATTERIES

MEAN DEPENDABILITY.
Installed at 2YA Wellington.

All sizes. From 9/- each.

EXIDE SERVICE STATION

79 Kent Terrace, WELLINGTON.

The DUBILIER

RESISTANCE
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7/-

This method of Amplification gives purest music—Ask for Price List.

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A British Valve and the only valve with the wonderful P.M. Filament. Mullard Radio Valves improve any radio receiver. Obtainable from all Good Radio Dealers.

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Auckland Notes

(By Listener.)

DURING recent evenings the weather conditions have been unkind to those who have tried beyond local stations for reception. Cyclonic conditions have brought an infliction of static in their train, and fading, too, has been peculiarly prevalent. On Sunday last both Wellington and Australian reception fluctuated badly in volume, an annoyance for which no one could blame the transmission.

LOCAL dealers report that the radio trade has been decidedly on the up-grade for some time, and they anticipate that when the next official figures regarding licenses are published Auckland will have made up most if not all of the leeway shown in previous returns.

SCENE: A room in a private hospital. The patient lies abed, but within reach of his hand are the dials of a portable receiver. He was the fortunate possessor of a machine of this type, and as soon as the doctor granted permission, had it transferred from his home to his bedside, where it plays its part in whiling away the long hours of convalescence. It is needless to remark that there are numerous requests from other rooms in the hospital for a loan of the portable.

THE news that the Tasman flight will shortly be attempted by the Southern Cross has given a flip to the learning of Morse. Those who are fortunate enough to be proficient in the telegraphist's art are already being besieged by friends who wish to come along on the fateful evening and ascertain at first hand the progress of the plane.

BY the island boat this week there came to Auckland a radio set in which a transformer had broken down. Accompanying the set was a letter from a lonely South Seas trader who implored that the set be repaired immediately and returned by the same boat, because, since the accident happened, he had only come to realise how lonely life could be away from civilisation when one was deprived of the one means of keeping in regular touch with the news and the entertainment of the outside world.

2YA ranks as a prime favourite with Aucklanders on a Sunday evening. There is something about the Wellington programmes that follow the church services which makes one tune in 2YA. On Sunday last the varied band items, the solos and the selections rendered by the Maoris, provided a most acceptable change from our local radio fare.

THE annual meeting of the Listeners' League, eventuates on Monday evening—our local silent night. Through the courtesy of the Radio Broadcasting Company the meeting is receiving good publicity over the air.

ON Wednesday last the Auckland Town Hall was engaged for a political meeting, and in consequence the regular organ recital relay had to be abandoned. The staff at 1YA rose to the occasion, however, and quite a good programme was broadcast from the studio. Among the contributors were those two favourites Miss Phyllis Hazell and Mr. Frank Sutherland.

THE broadcasting of accounts of football matches is not altogether a pleasant job. On Saturday last at Eden Park the wind, blowing with cyclonic force, was sweeping sheets of rain right up into the members' stand, where Mr. W. J. Meredith at the microphone battled with the elements, as did the players on a sodden field. As he described the incidents of a muddy game he had to wave away raucous-voiced newspaper boys who seem to delight in the privilege of getting on the air at sports gatherings. There were few spectators at the park on the day, but it is safe to say that the absentees were either at their own or their neighbours' receiving sets.

SO successful has been the picking up and relaying the signals of 5SW in South Africa, that quite a boom in broadcasting has resulted in the Cape Town district.

BRITISH RADIO GOODS

A bit better quality;
A bit cheaper;
In short "a job!"
You get them from:

HARTLE & GRAY,
CUSTOMS ST., AUCKLAND.

APPLAUSE FOR 3YA

A CANDID LISTENER WRITES

THE first appearance of the Woolston Band at 3YA on Monday, June 18, aroused great interest, and as the band items were supported by an equally excellent programme, letters of appreciation have been pouring in to the Broadcasting Company. One, whom we will call "Cashmere," thus discourses on things in general:—

"Many thanks for the prompt reply to my letter concerning the Kingsford Smith arrival. Despite one or two defects (no fault on this side) it was splendid and was appreciated by a little group of crystal owners whom I invited along and (needless to say) myself! I wish to add my congratulations to 3YA for the unique service rendered during the Jubilee celebrations. Then, again, praise is due for the inauguration of Sunday afternoon sessions and also the football result session."

"The squealing in the Press regarding organ recitals is really funny, and so is the chief argument of one writer that the license decrease is a result of 3YA's unpopularity because of no organ recitals. In view of the wonderful recovery of Canterbury's total it is obvious that our local station is leading the way in many respects."

"Now for some growls! a real 'gem' on humour, should 'dodge' dramatic stuff. (item) was damn bad! (clever instrumentalist) should be restrained from tin whistle solos. The one on Friday sounded like a murder! So many gasps and gurgles. can perform pretty badly on quite a variety of wind instruments, but the 'sax' is the chief horror. I'm ready to run on Wednesday!"

"Well, now having delivered myself of those nice charitable comments, I will close by saying that in eighteen months of devotion to 3YA I have never heard a better concert than this evening's! Woolston Band—great! And the assisting artists—ditto!"

Another Tribute.

"BEING a listener-in for the last 16 months—first with a crystal set, and, for the last 12 months, a valve set, with an experience of all New Zealand stations, and also Australian stations, it is with pleasure that I desire to acknowledge the very fine concert put out by 3YA on Monday evening, the 18th inst. The Woolston Band was a real treat—harmony good, splendidly in tune all through, whilst the solos, duets, trios and quartets were a sheer delight to listen to. The programme was nicely varied, and every item was particularly good of its class. Being an enthusiast on wireless concerts, I have made many inquiries amongst my friends re the quality of Monday's concert, and they one and all agree with me that, taken as a whole, it was easily the best concert yet put out by 3YA."

A STATION SILENCED

AMERICAN DISCIPLINE

FOR the first time since the United States Government has controlled radio, a broadcasting station has been taken off the air for being off its frequency, or wavelength.

The Government Radio Commission has notified WNBA, Forest Park, Ill., "to discontinue operation until further notice," for "wabbling."

Michael T. Rafferty, of Station WNBA, has been notified that "due to your consistent violation of commission's General Order No. 7 specifying maximum deviation from frequency assignment, you are hereby ordered to discontinue operation until further notice."

While the commission has several times threatened to use "strong arm" methods if stations did not stay within a reasonable distance of their frequency, this is the first instance in which the threat has been carried out, and it may be an indication that similar methods will be used in the future.

Complaints against the station have been coming into the commission for a long time, it is understood. It first went on the air in February, 1927, with a permit to use from 3000 to 5000 watts power. This was later reduced to 500 watts, and on June 15, 1927 it was cut to 200 watts. It operates on 1440 kilocycles.

The radio supervisor at Chicago is said to have cautioned the station several times for being off its wavelength, the deviation having been as much as 500 cycles.

Commissioner Sam Pickard, who is in charge of the Chicago zone, was told that this station was continually "interfering with good programmes."

T'OTHER FROM WHICH

GRAMOPHONE RECORD OR VOICE?

A NOVELTY feature of 3YA's programme on Monday evening was the broadcasting of gramophone reproductions of songs sung by Mr. Percy Nicholls, tenor, and of the same songs sung by him personally in the studio. Listeners were not informed by the announcer as to which was which, but were invited to decide for themselves.

In the case of the first song, "Ave Maria," the record was put on first and electrically reproduced, to be followed



MR. PERCY NICHOLLS.

by Mr. Nicholls's own voice. In the case of the second song, "Vale," Mr. Nicholls sang first.

Numerous people at once rang up the studio and many rang up Mr. Nicholls at his home. Still more have written to the studio. Opinion as to which was the record and which the voice have been fairly evenly divided, and the decisions arrived at have been based on a variety of clues. The test proved a great compliment to the excellence of electrically-reproduced records.

The records in question were made when Mr. Nicholls was recently in Sydney.

Some further interesting experiments in the utilisation of records in co-operation with the human voice can be looked forward to from 3YA.

AVIATORS "ON THE AIR"

THE TRANSATLANTIC FLIGHT

SPEECHES BROADCAST.

UNACCOMPANIED by the uproar of street celebrations and unhurried by welcoming crowds, the crew of the plane Dremen recently told the audiences of WOR, New York, and Columbia Broadcasting System stations about their trip from Baldonnel to Greenly Island. Baron von Huenefeld was the first of the famous trio to speak, and his remarks seemed to concern the financial preparations for the aerial expedition. As on the occasion of the banquet, his words were not easily understood, but his gratitude for the honours accorded him was unmistakable and gracious.

CAPTAIN KOEHL, the second principal in the three-cornered broadcast, told his version of the flight in German. To this unpractised linguist, the captain's description seemed fervent and full of adjectives; though just what was said remains a mystery.

Major Fitzmaurice commenced his tale with the news that he and his German companions had made separate and unsuccessful attempts to fly across the Atlantic last year. After describing the Baldonnel preliminaries to the Bremen flight he took up the detailed account of the actual flight, with data as to altitude and weather coupled effectively to notes on food and feelings. His speech was the longest of the three, as was to be expected, and before it was over his voice was hoarse.

The broadcast, arranged by the sponsors of the Kolster hour, set out to present the first calm radio appearance of the aviators and to let them tell their stories as they would. It achieved its purpose fully and did so with an absence of announcer's hoop-la that was refreshing.

OIL TANKER'S WIRELESS

THE wireless equipment of the Ranja, an oil tanker recently in Wellington, is probably the most complete in any cargo vessel afloat. Besides a wireless direction finder, her apparatus includes a short-wave set, which enables her to keep in touch with Norway from any part of the world. The Ranja, which is owned by a Norwegian firm, keeps in constant communication with the whalers in the Antarctic. Although she does not carry a special wireless operator, the second officer finds time to produce a daily newspaper, and the officers and crew are thus able to read the latest news items from all over the world, during the long and uneventful journeys of the tanker.

WEATHER REPORTS

THE ARRANGEMENTS MADE.

A COUNTRY reader recently wrote suggesting that the weather forecast be broadcast each evening at a definite period. It was stated that on some occasions the hour of 9 o'clock was sometimes anticipated, and country listeners who were depending upon receiving the latest weather information were disappointed. Following on this letter "we have inquired closely into the position, and for the sake of our country readers, would like to explain just what arrangements are possible in connection with the admittedly important distribution of the weather forecast.

In the first place, it is necessary that the information broadcast be authentic. Arrangements are accordingly made with the Post and Telegraph Department, by which the Dominion report as prepared by the Government Meteorologist is telegraphed to different stations at the earliest possible moment in the evening. Owing to the fact, however, that this official report is prepared from data collected from one end of the Dominion to the other, it is not always possible for the report to be telegraphed to the different stations in time for broadcasting through the news session. In point of fact, on the average the report generally comes to hand at stations, somewhere between 8 p.m. and 9 p.m.

In response, however, to several requests that the official report be broadcast during the news session also, the Post and Telegraph recently arranged with the Broadcasting Company that the telegraphing of the reports should be speeded up so as to reach stations before the conclusion of the news session, and on such occasions as they do they are broadcast then in addition to being announced once during the concert session.

It will be obvious to readers that in the circumstances, and having regard to the necessity on occasion of the Meteorological Department requiring more time than another for the preparation of this forecast, and having regard also to the possibility of occasional delays in transmission, it is impossible for the Broadcasting Company to guarantee that the report will be available on every occasion during the news session. For that reason the standard time of 9 p.m. has been fixed.

Since writing the foregoing, the suggestion has reached us from one country reader that one station might broadcast at 9 p.m., and to provide for the possibility of some listeners missing that particular station's broadcast, another station, say, 2YA, should broadcast at a regular hour of, say, ten minutes past nine, so that country listeners to whom the report is of importance, might have the opportunity of a second string to their bow.

PORTABLES ON CONTINENT

GAINING IN FAVOUR.

PORTABLE sets are gaining greatly in favour in France, where this type of receiver has lagged behind considerably in popularity as compared with Great Britain. During the special wireless motor races of last year the manufacturers as well as the public awoke to the special needs of this class of set. The same thing is true, to a large extent, in Germany, where the portable set has been greatly improved, and some new and interesting portable models were shown at the Berlin Exhibition at the beginning of April.



Arrange for a demonstration TO-DAY

F.J. PINNY Ltd. 58 Willis Street, WELLINGTON.

"Repeat" Coupon

Address: 2YA/0, Radio Record, P.O. Box 1032, Wellington.

I desire to nominate the following items for "repeats" next week:—

Monday (Classic)
Tuesday (Operatic)
Friday (Popular)
Saturday (Vaudeville)

Signed

Votes may be recorded for one or for all of the nights mentioned. This selection is made at mid-day for the evening affected. Voting papers receivable till noon. Distant listeners may send forward their Monday's and Tuesday's votes if desired, in order to be in time, and follow later with Friday's and Saturday's wishes. The coupon is inserted for convenience, and may be supplemented in writing.

1YA'S ORCHESTRA

UNEXPECTED DIFFICULTIES

AUCKLAND listeners will have to wait a little longer for the promised orchestra at 1YA. In connection with this, Mr. A. B. Harris, general manager of the Broadcasting Company, advises us as follows:—

"For some weeks now the Broadcasting Company has been endeavouring to organise an orchestra of the calibre recently introduced at station 2YA, Wellington, but has met with unexpected and unprecedented difficulties in securing the desired talent for a complete orchestra, such as is intended for 1YA.

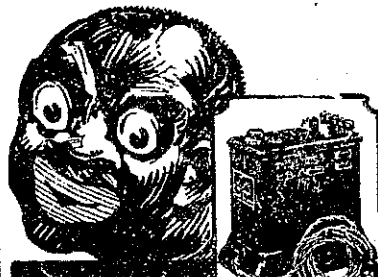
"The service expected of a broadcasting orchestra, while less strenuous than required for a theatre orchestra, makes it necessary that every instrumentalist should be an artist of the highest accomplishment. Several new works are required to be performed every evening, and the instrumentalists must be capable of playing at sight the most difficult items with practically one hundred per cent. technique from the average listeners' point of view. Furthermore, a maximum of four nights per week is the most that can be offered, and as those instrumentalists the company requires are much sought after, the company has not only to compete in a limited field, but has also to compete against the six-day weekly engagements.

"Under the circumstances the Broadcasting Company has not been able, for the time being, to give effect to its intentions in regard to an AI orchestra for 1YA, but listeners can be assured that the proposal will not be lost sight of. In the meantime, the present trio will be augmented with further instruments, and the quality of programmes maintained at the highest possible standard commensurate with the income."

The Radio Depot

165 Manchester St., Christchurch.

E. G. SHIPLEY.
RADIO SPECIALIST.
Phone 4770.



HEARD The Story about the White Horses?

Everybody knows it, so there's no need to repeat it here. We can tell you, however, the story about your radio dry batteries. They're simply wasting money for you. Put in an Emmco Battery Eliminator, and start to save now. Gets you better reception, too.

Emmco Eliminators.
From £10/10/- up



N.Z. Distributors:
Abel Smeeton, Auckland;
Thomas Ballinger, Wellington; L. B. Scott, Christchurch.

From the Woman's Point of View.

By VERITY.

TO-DAY AND TO-MORROW

"At Home" in the Art Gallery.

A WIND that wailed and rain of the most devastating were the weather conditions last Friday evening, and they were lucky who could sport a Rolls-Royce, a Ford, or the indispensable Black and White, when faring forth to the Art Gallery to a reception given by the chairman of the Wellington branch of the New Zealand Institute of Architects, Mr. W. M. Page, and Mrs. Page. A pleasant party indeed, with a welcome that radiated kindness, and the hall looking charming as it rapidly filled with a softly moving crowd of fair women and brave men; all made the more interesting because opportunity was taken to present the Institute's gold medal to Mr. Fearn, for his design of the Booth Memorial College. Mr. Moody, of Auckland, president of the Institute, in giving the medal, mentioned that it was the first time the honour had been awarded; Mr. Fearn's few words of acknowledgment included graceful and feeling reference to his late partner, Mr. Austin Quick; and, after the Mayor's short and genial comments, there was strident music of merit, much gay chatter, and time for leisurely wandering and discursive argument as to the best and worst pictures in the gallery.

Beauteous garments were exploited, in particular the chic of the shawl; for, though few can gracefully wear its slippery loveliness, everyone tries nowadays. Coats and cloaks of ring velvet held charm and seductiveness on the coldest night of the year; while a notable woman artist wore trailing black draperies that suited well her stately bearing and shingled grey hair. Gay girls trailed fringed and scarf-like embroideries over flaming gowns; one of the Very Young looking particularly attractive in crisp silken frocklet of a delectable shade of pink very beguiling on her slim blondeness. A shawl of prim Paisley pattern was quaintly decorative, and another of rose-magenta a gorgeous note of colour on the brunette who wore it so well. A Chinese happy jacket looking at home in surroundings so artistic, and very successful was a bridge coat of covetable blue brocade.

A few of the new pendants were worn, gleaming on long slim chains, and proving a graceful and feminine adornment; and admirable was a closely-woven rope of garnets clinging closely to the throat, and full of fascination for lovers of this alluring stone.

A gay and cheery party, and a prized interlude amid grey and bustling wintry days.

The Royal Academy.

AMONG the most prominent pictures at this year's exhibition is a very youthful-looking portrait of his Majesty King George V. by Sir Arthur S. Cope, R.A., and a true-to-life, and therefore beautiful portrait of "Our Queen Mary," by A. T. Nowell. Another picture of interest is "Sisters," by Harold Knight, A.R.A.. Mr. Knight has recently been made an Associate of the Royal Academy, a few months after his wife, Mrs. Laura Knight, was elected. Only once before has it happened that a husband and wife were both A.R.A.'s.

Some New Books.

THE Battle of the Horizons is the title of Miss Sylvia Thompson's new book, for which we have been eagerly watching and waiting ever since its forthcoming (and title) was mooted some months ago. It deals with the effect England has upon a sensitive American girl, married to an Englishman, and living in a strange world. The book is considered by its publishers to be one of the most important "new novels." John Brophy's first novel is a remarkable study of adolescence. "The Bitter End" portrays the effects of the brutalities and profundities of life in war-time upon the mind of a boy who enlists under age. An excellent little book of sound advice to youth, from the pen of Dr. Elizabeth Sloan Chesser, has been published recently. "Youth" is written primarily for women, and is very truthfully outspoken on the physiological aspects of human life.

A Woman's Mission.

AS an aid to public speakers, Commandant Allen, of the Women's Auxiliary Service, is loud in her praise of aeroplane travel. She has just returned from a seven days' air trip to Hungary and Czechoslovakia, where she has been speaking on women police. The Commandant thinks it is the easiest method of travel, and she intends never to go by train again. She was astonished to find that nowhere were they ever a minute late, although travelling by five different air lines. Commandant Allen was invited to Budapest by the National Council of Women, and spoke at three crowded meetings. Hungary, like Czechoslovakia, has extremely difficult social problems to solve. So far Hungary has no women attached to its police force, but Czechoslovakia has women in its welfare branch, in the same way that Germany originally had. From Budapest Commandant Allen went to Prague, speaking at two meetings, one for the Czech section, and one for the German, the same evening that she arrived.

OUTLAWED!

Under the cherry trees I lie
That paint the noonday pink;
'Neath a heaven of cloudless sky,
A breeze that seems softer than a sigh,
Like a girl's warm breath on the cheek, I think.
Like a woman's whisper and soft caress,
When to a loved one she answers yes!
Under the cherry trees a man
May dream all day in far Japan!

Only the birds share the trees with me;
Gay-clad creatures that come and go,
Born of the Eastern summer sun,
Purple and golden every one,
Coming when summer breezes blow,
Singing the song of the joy of life.
The folly of care and the sin of strife.
Under the cherry trees one can
Almost be happy in far Japan!

How far the London life I led
Seems now in the dim and distant past!
How far the nights and days up West,
The turf, the stage, and all the rest,
Here at sight of the sun they've fled.
And I'm miles away from ocean and lands,
From sound of voices and touch of hands.
Under the cherry trees a man
Forgets the past in far Japan!

THE SYBARITE.

WOMAN AND HER HOME

Flowered Brooches.

NEW hats demand new brooches for decoration, and jewellers have revived the flower designs which were so popular last year, though this year's creations are sufficiently different to make the purchase of a new one essential.

Enamel work, which has now been so popular for some time, is being used in place of brilliants to make realistic blooms with a few precious stones to give the necessary sparkle.

A cyclamen of white enamel has delicate stamens of green with drops of tiny pearls, and in the same shop was shown a big pansy brooch of lapis lazuli with a centre of amethysts. In deep blue enamel a cornflower was made, and the variety of blooms seen endless, so that a brooch can be varied to match the colour of the toilette.

With a severe black and white toilette the cyclamen mentioned would be ideal, or, with an appealing summer frock of flowered chiffon, a bunch of forget-me-nots would add a charming finish to the brim of an accompanying crinoline straw hat.

Young Carrots.

LIKE cats, carrots are most pleasing when quite young. Indeed, when old I have not much use for them—the carrots, I mean; except their foliage, which is beautiful. So much so that in the days of dismal James I., when they were costly, and, therefore, valued, dames of high degree wore plumes of carrot in their hats! Young carrots should be treated tenderly and simply. One best way is to stew them slowly in butter, peppered and salted. At the last add some cream, a trifle of sugar, and some chopped parsley. This way they deserve a course all to themselves. When very tiny they can be fried whole; when they are growing up they must be cut into halves or quarters lengthways, the tapering ends cut off; and off with their heads, of course! Dip the wholes or the pieces into beaten white of egg; then into fine breadcrumbs; then fry deep in hot butter or oil. Serve them with a sprinkling of finely chopped and fried parsley, and, say I, two, or three drops on each of Worcestershire sauce. I have a pot of carrots growing in my garden; many friends ask me for the name of this lovely fern, and will not believe me when I tell it to them. Hard is the way of the truthful man!

W. Teignmouth Shore.

"FAVOURITE NOVELS" COMPETITION

MONTHLY PRIZES FOR WOMEN READERS

TO most women there is some book of especial attraction. It may be they find the story of enthralling interest, or perhaps the country in which the scenes are laid holds peculiar fascination. Again, the literary style may have a unique appeal, or some picturesque period in a historical romance.

For our Competition this month we invite readers to send the name of their "Favourite Novel," with the author's name, and a short summary, not exceeding 200 words, of the reason, or reasons, that it holds first place in the affections. A brief and interesting paragraph should be aimed at, conveying as far as possible the charm the book holds for you.

"The Radio Record" offers a prize of half-a-guinea for the best paragraph. The right is reserved to publish the whole or any part of any entry sufficiently original or striking (apart from the prizewinner) on payment of space rates. Entries must be written in ink, on one side of the paper only, and the name and address of the competitor should be written on the back of each entry.

The decision of the editor is final. A non-de-plume may be used if desired.

The "Favourite Novels" competition closes July 20, and the result will be announced on the women's page on July 27.

All entries to be addressed "Verity," C/o "Radio Record," Box 1032, Wellington.

The Letters of Annabel Lee

MY dear Elisabeth:

Interesting and cordial was the official opening of the G.F.S. Hostel, Wellington, and the crowd so great that, by ill fortune, many were unable to hear the speech of the Bishop, Mr. Coates, and others. Greatly to be admired are those who have steadily and successfully forged ahead for the sake of working girls; and in particular much kudos and appreciation are due to Mrs. Sprott for noble and generous effort for the cause. Standing on what is to be the roof garden of the building, aware of beautiful expanse and wide horizon, as the setting sun turned cumulous clouds to flame, one felt a benediction upon liberality and largesse so willingly outpoured. A great place this, to revel in the winds of the world, although in the meantime only a few wistful sprigs of geranium, sprouting in a tub that has seen better days, represent the glory of the garden that is to be.

IN one corridor of the Hostel is a group of photographs of sweet women of a bygone day, who formed the first committee of this most friendly society. Kindness is depicted, and caps of another age; and a serene dignity denied to the hustling and bustling world of the present. On another landing hangs the portrait of a very lovely lady indeed, inquiry elucidating that she is the enchanting wife of a former Governor of our lucky isles, who for a short space walked among us wrapped in beauty, chinchilla and other lovely habilaments.

Painted China.

MARCEL GOUPY, the French artist whose painted glass has made him famous, has been painting dinner services. Each has a different design, and most are floral effects in bold, bright colours. The china is of a pastel shade or ivory-tinted.

We admired the nice small bedrooms, with names of donors on the lintel, and furnished in the sparse and pleasant modern way; while numerous bath-rooms charmed, and a pleasant living-room clamoured for camaraderie. Kitchen, cupboards, airiness, and wise planning of this homely palace of peace, reflect utmost credit on Mr. Coleridge, for ability, vision and forethought, and Mr. Templeton, for carrying out the plans of the architect to such notable termination.

AMONG those who helped to dispense acceptable tea, one noticed a picturesque coiffure of white hair, of the aureole variety, parted in the centre with a naive delightfulness, and coiled low on the neck; almost persuading, in its sweetness of simplicity, to renouncement of ubiquitous shingle. Old men and maidens were represented at the gathering, among the latter very noticeable being a lovely dark-eyed girl in gown of purple hue, which at best is a ravishing setting for beauty, and at worst so entirely devastating.

OF sorry stuff does illusion sometimes consist. Under a spreading chestnut hat lately put forward to gladden the eye of mere man, and worn by a dainty damsel with plenty of hair of her own, were attached what closely resembled nice little, tight little, wiry curls, which closer observation revealed to be composed of horse-hair, apparently intended as part of the decorative scheme, and certainly achieving novelty.

INTERESTING, and not surprising, to hear that Mr. John Drinkwater's comedy, "Bird in Hand," is having a successful run in London. A modern and amusing rendering, this, of Cophetua and his beggar maid. Squire's son and junkie's daughter, to be exact, between whom there once yawned a social gulf of the most impassable, but in these days of the democrat it would seem that all things are possible. Clever characterisation and dialogue that sparkles are to be expected, with that sense of the theatre which is an attribute of this acute and brilliant critic; all allied to very excellent fooling, particularly the guileless chat of an imitable traveller in sardines, who wanders in to the country inn where this most mirthful play is staged.

A SOPHISTICATED young man is Mr. Alec Waugh, who a few years ago electrified his world by writing a novel, at the age of seventeen, on that perennially engrossing topic, life in an English public school, and discoursing on certain of its aspects and eccentricities with a frankness unprecedented. Then came essays from this versatile and iconoclastic youth, more or less biographical in character; and some stories that contained much cabaret and cocktails and very little incident. Now there is published "Chukka," a volume of short tales of more than average merit, particularly when the author leaves his London and wanders forth to the fair land of Provence for a background to his clever characterisations.

Your

ANNABEL LEE.

Rose Sauce.

THIS is a delightful sauce, which will keep, if bottled. It looks pretty round a white shape or steamed pudding, and can be used to colour anything pink. Take one beetroot, one small lemon, one pint water, one pound sugar, one half-teaspoonful vanilla essence. Peel the raw beet, slice very thinly, and put in an enameled saucepan with the water, and very thinly pared rind of the lemon; boil for half an hour, strain, add sugar and strained lemon juice boil five minutes. When cold add the vanilla, put in small bottles, cork and seal.

Delicious Scotch Savoury.

SELECT a nice thick smoked blue cod or other salt fish. Pour boiling water over the first and let stand for five minutes. Remove skin and bones. Put the fish into a mortar and pound it. Then add a teaspoonful of lemon juice, a dash of pepper and a little salt, a generous lump of butter, and, last of all, when well mixed, a table-spoonful of cream. Heat all in a saucepan about 10 minutes. Pour mixture over freshly buttered squares of toast, garnish with parsley and lemon quarters.

Re-covering Deck Chairs.

WHEN new canvas for a deck chair is required it is a good plan to allow sufficient length to make up like a roller towel.

Although the initial cost is more, there is a double advantage—the cover can be shifted to equalise the wear and the use of nails is avoided. These eventually tear away the canvas, as well as rotting it by rust after exposure to rain.

Bermuda Pudding.

TAKE 2oz. best arrowroot, 2oz. powdered sugar, 2 teacups milk, 1oz. butter, some dried cherries, and ratafias.

Method: Mix arrowroot until quite smooth with a little milk and boil together with sugar and butter. Put a little into mould; put in some cherries next, then more pudding, then some ratafias and pudding till the mould is filled. Turn out when cold, and serve with custard round it.

When your throat pricks
take
Pulmonas
FOR COUGHS AND COLDS

Better Beetroot.

BOIL the root as usual and peel, then put a layer in glass dish and sprinkle with castor or granulated sugar and a squeeze of lemon juice; repeat with each layer of beet. This takes off any earthy taste there may be.

Tonking's Linseed Emulsion
is a Certain Cure for Coughs and Colds

Some Features of Next Week's Programmes

"FAUST" AT 1YA

A STRONG cast of five singers, headed by Madame Irene Ainsley, will present Gounod's famous work, "Faust," on Monday evening. The production will comprise all the most noted songs of the great opera. As well as the operatic excerpts, a number of selected ballads will be sung by the members of Madame Ainsley's party. Orchestral music from the majestic and selections by the Auckland Trio are also on the programme. Mr. A. B. Chappell will continue his talks on "Old New Zealand." This time he will speak on Charles Darwin's visit.

THE municipal organ recital, with Mr. Maughan Barnett at the keys, will be broadcast by 1YA on Wednesday evening. From the studio, Miss Phyllis Hazell and Mr. Frank Sutherland will contribute songs, and Miss Lynda Murphy will give elocutionary items. One of Miss Hazell's songs will be the "Habanera" (from "Carmen") and Mr. Sutherland will sing the song of the "Toreador."

On Wednesday evening Mr. Norman Kerr will continue his lectures on "Physical Culture." On Thursday at 7.15 p.m. Mr. N. M. Richardson, B.A., will talk on "World History To-day"

THE programme for Thursday evening contains many varied and outstanding items. Mr. Barry Coney's Quartet will contribute a number of solos and concerted pieces. Among the latter will be "Annie Laurie," Mr. Barry Coney will himself sing "A Memory" and "Death of Nelson." The contralto solos of Miss Martha Williamson include "Love's Whisper" and the soprano solos of Miss Dorothy Yound will be "Lilies of Lorraine" and "Hindoo Song." Mr. G. C. Queen, tenor, will make his second appearance. His items will be "I Hear You Calling Me" and the old favourite, "Tom Bowling."

On the instrumental side of Thursday's programme at 1YA will be heard the Auckland Trio, a cornet duo (Messrs. Salthouse and Davies), Miss Ina Bosworth (violin), Ingall's Hawaiians and two trumpet selections (electrical reproductions). On the programme to be given by the Hawaiians appear "Colonel Bogey" and "The Lost Chord."

Mr. Fred Barker will present on Thursday evening another instalment of his wayside philosophising with a friend. This time it will be on effective salesmanship. Mr. Barker will also give the humorous item, "A Song of Sixpence," and the station announcer will give his talk on Great Authors.

CONTRIBUTING to Friday evening's programme will be Madame Mary Towsey's Quartet, their items including a wide selection of Irish ballads, in solo and quartet form. The evening's entertainment will be of an Irish character and the melodies of the Emerald Isle, instrumental as well as vocal, will give widespread pleasure. Even the elocutionary items by Mr. J. F. Montague will be of an Irish character, these being "Shannon Bells," "The Little Irish Mother" and "Father Phil's Subscription List." The instrumentalists for the evening will be the Auckland Trio, Miss Molly Wright (cello) and Mr. Eustace Tregilgas (cornet). The finishing touch to an all-Irish programme is provided by a harp selection (electrical reproduction).

SATURDAY will be largely a night of light musical comedy. Excerpts from "The Cingalee," "A Country Girl," "Belle of New York" and "La Mascotte" will be sung. New

vocalists will appear this evening—Mrs. Daisy Basham (soprano) and Mr. A. Briggs (baritone). They will sing solos and duets. Also on the programme will be the Griffiths Duo who will give humorous sketches. Afterwards will follow a dance session.

NOTES FROM 2YA

CONTINUING their Monday evening radio recitals, the Ariel Singers will be heard in a miscellaneous programme on July 2. Outstanding items of interest thereon are Mrs. Kennedy-Fraser's arrangement of the Hebridean folk song, "The Road to the Isles," the Italian "Sognai" ("Dreaming"), by Schira, sung with cello obbligato, Schumann's "Her Voice," and the well-known "Serenade" of Schubert. Further favourite solo and concerted numbers complete a programme which should be well up to the high standard attained by the Ariel Singers.

On Monday evening additional interest will be imparted to the vocal side of the programme by the appearance of Mr. John Prouse, baritone, the quality of whose work is familiar to music lovers throughout the Dominion. Mr. A. Stanley Warwick will again be heard in elocutionary numbers.

AMONG the numbers to be presented by the Orpheus Quartet on Tuesday are "When Evening's Twilight" and "A Song of the Sea," also "Beauty's Eyes," an arrangement of Tosti's famous song. Mrs. Alice Harris will sing "Rosebud" and Miss Lily Mackie "Unmindful of the Roses." The two ladies will sing "Violets" as a duet. Mr. Arthur Coe will sing "Beloved, it is Morn," and Mr. Len Barnes "The Carpet," "A Song of the Open," and "Credo" (from Verdi's opera "Otello"). This famous number is given by Iago in Shakespeare's play. He admits that he is cruel, vain, cynical, and evil, and for this he blames his Creator. He cares nothing for his evil doing, for death will end all things, and heaven is an ancient lie. Elocutionary numbers of a humorous nature will be given by Mr. Cedric Gardiner, and there will be a relay of organ music from Taranaki Street Methodist Church, the organist being Mr. H. T. White.

THE Mellow Fellows will submit another programme on Thursday, which contains, as usual, numbers to please each and every taste. There are few more dainty and delightful little songs than Charles Wakefield Cadman's "I Hear a Thrush at Eve," and this charming item is in the hands of one of the Fellows who has long reckoned it as one of his best renderings. It is being sung in response to a special request from a listener to 1YA. "The Drum Major's Song," with special effects, should be another good item. The baritone and tenor Fellows can be relied upon for good interpretations of "Young Tom" and "Morning," and the old "Tenor and Baritone" duet is ever welcome. The concerted items are both given by request, and will consist of "I'm Telling the Birds" and "Cause I'd Nothin' Else to Do." Altogether an excellent offering, to which will be added the very pleasing vocal numbers which are to be contributed by Miss Nita Hopkins (soprano). The instrumental music for the evening will be provided by the Central Mission Band.

ON Saturday evening the Melodie Four will again be heard in an interesting collection of concerted and solo numbers. In addition to three unaccompanied quartets, in which this talented combination excels, the members of the quartet—Messrs. S. Duncan, F. Bryant, R. S. Allwright, and

W. W. Marshall—will sing solos, The performances of the Melodie Four have hitherto been exceptionally good, and the fare provided for this occasion is of a high standard. In addition to the entertainment provided by the Melodie Four, Mr. Geo. Titchener will provide humorous items, Mr. Tad Haywood mandolin solos, and the Glad Idlers will be heard in the latest light vocal numbers.



Photo Bartlett and Andrew.

MRS. DAISY BASHAM.

Mrs. Daisy Basham, who is to sing at 1YA on Saturday, July 7, is well-known in musical circles throughout the North Island. She has fulfilled engagements with the Wellington Royal Choral Union, the Palmerston North Orchestral Society, the Feilding, Wanganui, Hastings, New Plymouth, Stratford, and Hamilton Choral Societies, besides concert engagements in Napier, Dannevirke, Eltham and elsewhere. She has been associated with such artists as Mr. Robert Parker, that veteran pioneer of music in Wellington, Mr. John Prouse, Mr. Frank Graham, Mr. Hamilton Hodges, Mr. Sydney Buller, Mr. Hubert Carter, Mr. Edwin Dennis, Mr. Gordon Short, Madame Emily Briggs, Miss Constance Leatham, and Mr. Temple White. Mrs. Basham was most successful as the conductor of St. Mary's Choir, Waipukurau, which did some very fine work, and of ladies' glee and comedy clubs in that town and in Waipawa, while her entertainments during the early post-war years, at the Pukeora Sanatorium, will be remembered by ex-patients all over New Zealand.

3YA JOTTINGS

SOME of the experiences and information concerning the work of a district nurse will be relayed on Monday evening. The lecture should be a very interesting one.

The programme which will support that of the Band of the First Canterbury Regiment, on Monday, will be of a bright and popular type. Contributing artists will be Messrs Chas. Lawrence and Leslie Stewart, vocal solos, duets, and a sketch; Mr. J. J. Frewlyn in humorous recitations; Mrs. P. S. Lawrence and Miss Agnes Richardson in soprano and contralto songs respectively.

The sketch which Messrs Lawrence and Stewart will perform on Monday evening will be "On Board the Nancy Lee," a composition arranged by Mr. Lawrence.

ONE of the items on Wednesday afternoon will be a lecturette by a nurse of the Plunket Society. "Kissing Time" is the next musical comedy to be submitted for radio presentations by the Radiolian Quartet singers—Mrs. Claris Shaw, Miss Mildred Russell, Mr. Gregory Russell, and Mr. W. J. Richards. Especially well appreciated are these light and amusing melodies from the music halls. "Kissing Time" will be produced in 3YA studio on Wednesday evening, and will occupy practically the whole of the first half of the programme. The second half of the programme will be devoted to a relay of the concert to be given by the Christchurch Orchestral Society.

Also on Wednesday evening's programme will be Miss Aileen Warren (pianiste), Mr. T. H. Amos (flautist), and the ever-popular humorous entertainer, Mr. H. Instone.

SOMEWHAT out of the ordinary will be the programme for Thursday evening. Instrumental items will predominate—violin duets, flugel horn and euphonium solos by Mr. R. C. Brundall—but a feature of the evening also will be the songs by old English composers. Some of these songs rank among the most popular of present day ballads, but even those that are not so well known will appeal to all by their pleasing melodies. The vocalists will be Madame Gower-Burns, Mrs. Ann Harper, Miss Adela Innes, and Mr. Harold Prescott. Elocutionary items will be given by Miss Naare Hooper.

It is interesting to note that some of the songs to be sung on Thursday evening are by Thos. Arne (1710-1788), a maker of good tunes, as "Where the Bee Sucks," and "Rule Britannia" bear witness to-day. He was a personal friend of Handel, who was 21 years his senior.

A Schumann vocal programme has been chosen by the Melodious Four for presentation on Friday evening. A choice selection of gems from the works of the great master has been made, and many popular favourites have been included. Interspersing these vocal items will be contributions by Mr. Harold Beck (cellist), Mr. Alfred Tohill (exponent of the mouth organ), the Studio Trio, Mr. Alec Cowhan, who plays jazz novelties on the piano, and Mr. J. P. Darragh, whose items this week will be two of a humorous nature in which a Jew and a London coster respectively will figure.

THOSE popular male singers, the Avonian Minstrels, are appearing again at 3YA on Saturday. They will sing more plantation songs, choruses, as well as solos. The singers will add much to the enjoyment of Saturday evening's radio vaudeville, their items being all of the popular type. Others contributing to the programme will be Miss Phyllis Leighton (mezzo-soprano), Miss Elaine Moody's Hawaiian

Sailing" are two old favourites, which will be sung by Mr. Bert Rawlinson. Bass solos will be rendered by Mr. F. C. Cooper. Mrs. D. Carty (soprano) will sing, "I Passed by Your Window," "I'll be Home," and "Mona." Humorous recitations will be given by Miss Anita Winkel and by Mr. Lester Moller.

Pastor W. D. More is on the programme for another of his humorous addresses.

COMMENCING this week, there will be an entertainment on Wednesday instead of Thursday, Thursday in future being the silent day. The programme arranged will be bright and mostly humorous. Light baritone solos will be sung by Mr. J. B. McConnell and Mr. Ron Clarke, light soprano solos by Miss Thelma Blackman, and light mezzo-soprano solos by Miss Betty Roberts. Popular numbers will be played by Dunedin's Banjo Trio, and humour will be supplied by Miss Hilda Scurr and Mr. Carl Moller.

FRIDAY'S studio concert until 9 o'clock (after which will follow a dance session) will be contributed by Miss Mollie Vickers, Mr. L. M. Cachemaille, Mr. George Christie (cornetist), and Miss Sheila Neilson (elocutioniste).

THE NEWSON TRIO.

These talented young artists have been performing during the children's session at 3YA. Noel Newson, A.T.C.L., is 16 years of age. At the recent Christchurch Competitions he gained the Bristol Scholarship. Competing with others much older than himself, he gained three first prizes in the piano-forte section, and two first prizes in the monologue section. Geoffrey is a 'cellist, and Keith plays the violin.



—Steffano Webb, photo.

Trio, the Studio Trio, and Mr. Ken Tullock (banjo soloist), and Messrs W. H. Moses and G. Soutar, who will stage two humorous sketches.

SUNDAY afternoon's session will be devoted to sacred cantata, which will be relayed from East Belt Methodist Church. The soloists will be Mrs. Bessie Stewart, Mrs. J. W. Palk, Mr. L. C. Guane, and Mr. A. S. Bell. In the evening the service from the same church will be relayed.

4YA NOTES

A POPULAR vocal concert will support the programme to be given by the St. Kilda Band, under Mr. J. Dixon, on Tuesday evening. "Father O'Flynn" and "Three Fishers Went

SATURDAY'S programme will be one of a high standard. Miss Roma Buss, Miss Mollie Andrews, Mr. C. C. Scott, and Mr. F. M. Tuohy will contribute solo items, and quartets will be sung by the 4YA Harmonists. There will be a good variety of instrumental items—flute, violin, and piano—instrumental trios will be played also. Elocutionary recitals will be given by Mr. Allan Young.

A NEWTOWN beginner informs me that a loudspeaker he purchased does not sound half as well on his set as it did on the trader's demonstration set, and seeks an explanation. To get the best results from a loudspeaker, its windings should match as closely as possible the impedance of his last audio amplifying valve.

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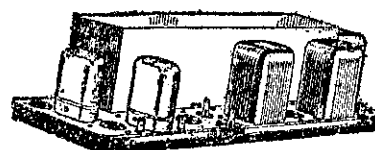
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NOTES AND COMMENTS

(By "Switch.")

IT is of interest to note that the popularity of broadcasting is of assistance to the gramophone industry. Evidences in this direction are constantly to be found, such as the following letter written recently by a listener at Homebush: "I was charmed with Miss Shirley Cooke's rendering over the air of the song 'It All Depends on You.' Has she given it on a gramophone record? If so I will secure one, so I may enjoy it many times in the future." In passing it might amuse readers to know that a gentleman living in the bush recently wrote to station 2FC, Sydney, asking where he could buy records for his radio set!

HOW can I tell when my receiver is oscillating? you ask. If you experience any whistling while tuning, leave the reaction control untouched and turn the aerial tuning condenser dial; if the whistle varies in pitch or tone, it is your own receiver that is oscillating. If the tone is not affected your receiver is not causing the whistle. This can be eliminated by burning the valves just bright enough to be consistent with tone and volume, by adding a stage of radio frequency amplification and using the absolute minimum of reaction.

SCIENTISTS have advanced the theory that daylight reception does not equal that of night owing to the expansion during the daytime of the heavy-side layer. Either waves would then, in the daytime, have a greater distance to travel before being reflected back to earth, and more power would be necessary owing to the power that would be spent by the time the signals reached a receiver. In the night time, the heavy-side layer contracts, and the ether waves have not so far to travel before they are reflected back. It is quite likely that this also has a lot to do with fading.

AN Australian writer says:—The closing down of all broadcasting stations on the outbreak of war would have the same calamitous effect upon the nation as the general stoppage of newspapers. Rumours of disaster, treason, and official corruption and incompetence would spread fear and demoralisation. The government would, at the same time, be deprived of the most effective means of keeping in touch with the people, and of steadying and encouraging the nation. Probably, therefore, no attempt will be made to stop wireless broadcasting, although transmission by unauthorised persons will, of course, be rigidly suppressed. Full use will be made of the broadcasting system to maintain the public spirit and solidarity of the nation. Simultaneously, an effort will be made to keep out enemy propaganda.

AS an experiment short private messages were broadcast from the Radio-Bern (Switzerland) station during a recent celebration programme, the price being 5 francs each. It was so successful that the authorities are said to be considering the introduction of a regular service on these lines.

"VOLTAGE" (Palmerston North) informs me that he added an extra 22½ volts block to his dry batteries, which had dropped considerably in voltage, but he found very little gain, and increased noises in his set. This is the common experience of those who do this sort of thing. Once a 45-volt "B" battery drops to about 36 volts the only thing to do is to present it to the dustman.

A listener who operates a crystal set within three-quarters of a mile of the Government morse station at Wellington, V.L.W., tells me that he is bothered by interference from that station. My informant should have the circuit of his set altered, for by a sharper tuning arrangement he could cut V.L.W. Many circuits which should meet his case are available.

THE new screened-grid valve is without comparison as a radio-frequency amplifier, but the correct shielding is imperative if the best results are to be obtained. "Switch" knows of a case where one of these valves installed in a short-wave set has increased its efficiency nearly 300 per cent., but the valve is splendidly shielded, and the makers' instructions have been followed in the minutest detail.

THE new Sunday afternoon sessions by 2YA, Wellington are meeting with general appreciation. While the of the average listener. Thank goodness music is "good" it is not above the head the average listener. Thank goodness we have one session entirely free from the "cheap" jingle which appeals to only a few, but is tolerated by a fair proportion as a necessary evil.

I hear that one of America's oldest valve-manufacturing companies will shortly be on the market with a new series of valves for battery-operated sets. Shipments will arrive in New Zealand in about a couple of months' time.

Sunday, July 1

1YA AUCKLAND (333 METRES)—SUNDAY, JULY 1.

- 11 a.m.: Relay of service from Auckland Unitarian Church. Preacher, Rev. Albert Thornhill.
12.30: Close down.
3 p.m.: Afternoon session—selected studio items.
4.0: Literary selection by the Announcer.
4.8: Selected studio items.
4.30: Close down.
6.0: Children's song service, conducted by Uncle Leo, assisted by Cousins from Beresford Street Sunday School.
6.55: Relay of service from St. Matthew's Church—preacher, Rev. Canon C. H. Grant-Cowen; organist, Mr. J. H. Phillpot.
8.30: Relay of Municipal Organ Recital from Town Hall—Organist, Mr. Maughan Barnett. Grand organ selections.
9.30: God Save the King.

2YA WELLINGTON (420 METRES)—SUNDAY, JULY 1.

- 9 a.m.: Results of "All Blacks" tour to hand—selected gramophone items.
9.15: Close down.
6 p.m.: Children's song service, conducted by Uncle Ernest, assisted by St. Aidan's Sunday School Choir, Miramar.
6.55: Relay of evening service from Church of Christ, Vivian Street; preacher, Pastor W. G. Carpenter; organist, Miss Iris Mason; choirmaster, Mr. W. J. Mason.
8.15 (approx.): Relay of band recital of the Wellington Municipal Tramways Band from His Majesty's Theatre; conductor, Mr. T. Goodall.
Close down.

3YA CHRISTCHURCH (306 METRES)—SUNDAY, JULY 1.

- 9 a.m.: Results of Rugby match in South Africa.
11 a.m.: Relay of service from Church of the Holy Trinity (Anglican), Avonside—Preacher, Rev. O. Fitzgerald.
3 p.m.: Afternoon session—selected studio items.
4.30: Close down.
5.30: Children's song service—Uncle Sam—hymns will be sung by the scholars of the Presbyterian Sunday School.
6.30: Relay of service from St. Andrew's Presbyterian Church—preacher, Rev. George Gibb (locum tenens); choirmaster, Mr. J. Maclean; organist, Mr. Robt. E. Lake.
7.45: After-church concert from 3YA studio.
8.15 (approx.): Rebroadcast of 2YA Wellington (relay of concert of Municipal Tramways Band, from His Majesty's Theatre, Wellington).
Close down.

4YA DUNEDIN (463 METRES)—SUNDAY, JULY 1.

- 5.30 p.m.: Results to hand of All Blacks' tour.
5.31: Children's song service, conducted by Big Brother Bill, assisted by children from Knox Church Sunday School.
6.30: Relay of service from St. Andrew's Street Church of Christ—preacher, Pastor W. D. More; choirmaster, Mr. W. Hickey.
8.0: Studio concert.
9.15: Close down.

Monday, July 2

1YA, AUCKLAND (333 METRES), MONDAY, JULY 2.

SILENT DAY.

2YA, WELLINGTON (420 METRES), MONDAY, JULY 2.

- 3 p.m.: Chimes of the G.P.O. clock.
3.1: Selected gramophone items.
4.30 and 4.55: Sporting results to hand.
5.0: Close down.
6.0: Children's session—Aunt Gwen and Uncle Jeff, assisted by pupils of Mrs. Isobel Halligan.
7.0: News session, market reports, and sports results.
8.0: Chimes of the G.P.O. clock.
8.1: Overture—The Orchestra, "Overture in C" (Mendelssohn).
8.10: Mezzo-contralto solo—Miss Ngaire Coster, "Thank God for a Garden" (Del Riego).
8.14: Vocal quartet—Ariel Singers, "Tell Me, Where Is Fancy Bred?" (Bartholomew).
8.19: Instrumental trio—Symons-Ellwood-Short Trio, "Trio" (Mare).
8.29: Baritone solos—Mr. John Prouse, (a) "Pilgrim Song" (Tchaikovsky); (b) "When I Awake" (Wright).
8.35: Symphony—The Orchestra, "Jupiter" (Mozart).
8.45: Soprano solo—Miss Jeanette Briggs, L.A.B., "Signal" (Schira).
8.49: Elocutionary—Mr. A. Stanley Warwick, "The Hill" (Brougham).
8.54: Tenor solo—Mr. Roy Hill, (a) "Her Voice" (Schumann); (b) "Grenade" (Schubert).

- 9.0: Weather forecast.
9.2: Request numbers—The Orchestra.
9.10: Baritone solos—Mr. John Prouse, (a) "A Queen of Comemara" (Needham); (b) "Here's a Health" (traditional).
9.16: Vocal duet—Miss J. Briggs and Mr. Roy Hill, "A Night in Venice" (Lucantoni).
9.21: Instrumental—The Orchestra, "Chant Elegiaque" (Tchaikovsky).
9.28: Bass solos—Mr. J. M. Caldwell, (a) "The Sailor's Grave" (Richards); (b) "The Pride of Tipperary" (Lockhead).
9.36: Elocutionary—Mr. A. Stanley Warwick, "The Advantages of Being Dumb" (Caine).
9.41: Pianoforte solos—Mr. Gordon Short, (a) "Nocturne in A Flat" (Chopin); (b) "Waltz in A Flat" (Chopin).
9.47: Mezzo-contralto solo—Miss Ngaire Coster, "Till I Awake" (Woodforde-Finden).
9.51: Vocal quartet—Ariel Singers, "The Lass of Richmond Hill" (arr. Crampton).
9.55: Instrumental—The Orchestra, "Petite Suite" (Coleridge-Taylor).
10.5: God Save the King.

3YA, CHRISTCHURCH (306 METRES), MONDAY, JULY 2.

- 3 p.m.: Afternoon session—Selected studio items.
4.25: Sports results.
4.30: Close down.
6.0: Children's session—Stories and birthday greetings by "Scatterjoy." Zither solos by Cousin Gwen. Songs by Cousin Phyllis.
7.15: News session.
7.30: Talk by one of the District Nurses on "The Work of the Nurse Maude Nursing Association."
8.0: Chimes and relay of orchestral music from the Strand Theatre Orchestra.
Band concert programme by Band of First Canterbury Regiment Infantry, assisted by 3YA artists.
8.10: Vocal solo—Mr. Chas. Lawrence, "Too Many Parties" (Prisk).
8.14: March—Band, "Kneller Hall" (Greenwood).
8.18: Popular song—Mrs. P. S. Lawrence, "I'm Away from the World When I'm Away from You" (Pollock).
8.22: Overture—Band, "Crimson Star" (Greenwood).
8.30: Sketch—Messrs. Leslie Stewart and Chas. Lawrence, "On Board the Nancy Lee" (arr. Lawrence).
8.35: March—Band, "Nutgrove" (Hart).
8.39: Humorous recital—Mr. J. J. Flewellyn, "Borrowing a Match" (Leacock).
8.43: Popular song—Mr. Leslie Stewart, "Tears of an Irish Mother" (Hart).
8.46: Band selection—"H.M.S. Pinafore" (Sullivan).
8.56: Contralto solos—Miss Agnes Richardson, (a) "My Heart's Desire" (C. Clarke); (b) "On the Way Home" (Liddle).
9.0: Weather forecast.
9.1: Relay of orchestral music from Strand Theatre.
9.10: Harmony duet—Messrs. Leslie Stewart and Chas. Lawrence, "Kalua" (Berli).
9.14: Waltz—Band, "River of Pearls" (Rimmer).
9.20: Soprano solos—Mrs. P. S. Lawrence, (a) "The Song Is Ended, but the Melody Lingers On" (Berlin); (b) "After the Rain—the Sunshine" (Boris).
9.24: Vocal solo—Mr. Leslie Stewart, "Happiness" (Onslow).
9.28: Selection—Band, "The Geisha" (Jones).
9.38: Contralto solos—Miss Agnes Guy, (a) "Look Up, O Heart" (Del Riego); (b) "Down the Shallow River" (C. Clarke).
9.42: Humorous recital—Mr. J. J. Flewellyn, "The Conjurer's Revenge" (Leacock).
9.46: Valse militaire—Band, "The Grenadiers" (Rimmer).
9.52: Humour at the piano—Mr. Chas. Lawrence, selected.
9.56: March—Band, "Duty's Call" (Gilbourne).
God Save the King.

4YA, DUNEDIN (463 METRES), MONDAY, JULY 2.

SILENT DAY.

Tuesday, July 3

1YA, AUCKLAND (333 METRES)—TUESDAY, JULY 3.

- 3 p.m.: Afternoon session—Selected studio items.
4.0: Literary selection by the announcer.
4.8: Studio items.
4.25: Sports results.
4.30: Close down.
6.0: Children's session—Uncle George. Pianoforte duet, Cousins Isobel and Brian, "Tunes for Tiny Tots." Recitation, Cousin Valda, "Freddie's Boast." Song, Cousin Doreen, "Ruff-a-Fluff-Fluff." Letters and birthdays. Pianoforte solo, Cousin Brian, "Goblin's Frolic." Musical sketch, Cousin Valda, "Touching Fingers." Song, Cousin Doreen, "Little Yaller Dog" (Gallatly). Story-time.
7.15: Lecture—Mr. Geo. H. Ambler, "Poultry: Selection and Mating."
7.30: News and market reports.
8.0: Chimes.
8.1: Relay of orchestral overture from Majestic Theatre Orchestra, under the direction of Mr. J. Whitford-Waugh.
8.11: Soprano solo—Miss Marjorie Fair, "Slave Song" (Del Riego).
8.15: Instrumental trio—Auckland Trio, "Scherzo From Trio in B Flat" (Schubert).
8.24: Baritone solo—Mr. Frank Sutherland, "Four Jolly Sailors" (German).
8.28: Piccolo solos—Record, (a) "De Liesst Mir in Herzen" (Boehn); (b) "Concertino" (Draper).
8.36: Contralto solo—Madame Irene Ainsley, "Land of Hope and Glory" (Elgar).
8.40: Relay of orchestral entracte from Majestic Theatre.
8.48: Tenor solo—Mr. Robert Peter, "Mother o' Mine" (Tours).

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- 8.1: Relay of orchestral overture from Strand Theatre Orchestra, under the conductorship of Eve Bentley.
- 8.11: Vocal quartet—Mr. Barry Coney's Quartet, "Annie Laurie" (Bantock).
- 8.15: Cornet duo—Messrs. Salthouse and Davies, "Friendly Rivals" (Godfrey).
- 8.20: Contralto solo—Miss Martha Williamson, "Love's Whisper" (Welleby).
- 8.25: Instrumental trio—Auckland Trio, "First Movement—Trio No. 9" (Haydn).
- 8.34: Baritone solo—Mr. Barry Coney, "A Memory" (Goring-Thomas).
- 8.38: Trumpet solo—Record, "Trumpet Blues" (Lindley).
- 8.42: Novelty—Mr. F. W. Barker, "A Wayside Philosopher to His Friend—Effective Salesmanship."
- 8.52: Instrumental—Ingall's Hawaiian Orchestra, (a) "Colonel Bogey" (Alford); (b) "The Lost Chord" (Sullivan).
- 8.58: Soprano solo—Miss Dorothy Yould, "Lilies of Lorraine" (Connor).
- 9.2: Evening forecast.
- 9.3: Relay of orchestral entr'acte from Strand Theatre.
- 9.8: Talk—Mr. Culford Bell, "Great Authors."
- 9.18: Violin solo—Miss Ina Bosworth, "Cherry Ripe" (Scott).
- 9.22: Tenor solos—Mr. G. C. Queen, (a) "I Hear You Calling Me" (Marshall); (b) "Tom Bowling" (Dibdin).
- 9.27: Trumpet solo—Record, "Sweet Stuff" (Lindley).
- 9.30: Contralto solo—Miss Martha Williamson, "Rose in the Bud" (Foster).
- 9.34: Cornet duos—Messrs. Salthouse and Davies, (a) "Genevieve" (Foster); (b) "Down the Vale" (Hart).
- 9.37: Humour—Mr. F. W. Barker, "Sing a Song of Sixpence" (Anon.).
- 9.40: Baritone solos—Mr. Barry Coney, "Death of Nelson" (Braham).
- 9.48: Instrumental—Ingall's Hawaiian Orchestra, (a) "Aloha-o-oe" (Lilikalini); (b) "Hula Medley" (MS.); (c) "Sweet Hawaiian Girl of Mine" (Perry).
- 9.51: Soprano solo—Miss Dorothy Yould, "Hindoo Song" (Korsakov).
- 9.54: Instrumental trio—Auckland Trio, "Serenade" from "Les Millions D'Arlequin" (Drigo).
- 10.2: Vocal quartet—Mr. Barry Coney's Quartet, "Though and Crow" (Bishop).
- 10.6: God Save the King.

2YA, WELLINGTON (420 METRES)—THURSDAY, JULY 5.

- 3 p.m.: Chimes of the G.P.O. clock.
- 3.1: Selected gramophone items.
- 4.20 and 4.55: Sporting results to hand.
- 5.0: Close down.
- 6.0: Children's session—Aunt Gwen, assisted by Hataitai School Orpheus Society. Songs, recitations, stories and birthday greetings.
- 7.0: News session, market reports and sports results.
- 7.40: Lecturette—Miss Margaret O'Connor, "Doings and Dancing in Other Lands."
- 8.0: Chimes of the G.P.O. clock.
- Studio concert by the Central Mission Band, under the conductorship of Mr. H. Baker, and assisting artists.
- 8.1: March—Band, "Famous Fragments" (Hawkins).
- 8.8: Harmony—The Mellow Fellows, "I'm Telling the Birds" (Johnson).
- 8.12: Cornet solo with band accompaniment, Bandsman L. Baker, "Sweet Spirit, Hear My Prayer" (Wallace).
- 8.17: The old, old story—The Baritone Fellow, "Young Tom o' Devon" (Russell).
- 8.21: Selection—Band, "Operatic Beauties" (Greenwood).
- 8.31: Duet—Two Little Fellows, "Tenor and Baritone" (Wilson).
- 8.35: Waltz—Band, "Queen of Enrols" (Greenwood).
- 8.41: Comedy duo—Ronnie and Monty, "Fifty Million Frenchmen Can't be Wrong" (Rose and Fisher).
- 8.46: March—Band, "Capricious" (Pette) (by request).
- 8.51: Mezzo-soprano solo—Miss Nita Hopkins, "Fair Iadha" (Logan).
- 8.56: Drill—The Other Fellow, "The Drum Major" (Weatherly).
- 9.0: Weather forecast.
- 9.2: Humour—The Two Fellows, "The Man Hunt" (Foy) (by request).
- 9.7: Selection—Band, "La Sonnambula" (Rimmer).
- 9.17: A Double Event—The Bass Fellow, (a) "I Hear a Thrush at Eve" (Cadman); (b) "The Ringers" (Lohr).
- 9.24: Anthem—Band, "Jerusalem" (Round).
- 9.29: Song—One of the Fellows, "Morning" (Speaks).
- 9.33: Comedy Duo—Ronnie and Monty, "Everything at Home" (Wood).
- 9.38: Selection—Band, "The Magic Flute" (Mozart).
- 9.47: Mezzo-soprano solo—Miss Nita Hopkins, "The Bailiff's Daughter of Islington" (Traditional).
- 9.51: Remarks—The Funny Fellow, "Some Stories" (Original).
- 9.56: Tit for Tat—The Mellow Fellows, "Nothin' Else to Do" (Parks).
- 10.0: March—Band, "The Contemptibles" (Stanley).
- God Save the King.

3YA, CHRISTCHURCH (306 METRES)—THURSDAY, JULY 5.

- 8 p.m.: Afternoon session—Selected studio items.
- 4.25: Sports results.
- 4.30: Close down.
- 6.0: Children's session—Chuckie and Aunt Pat—Stories for the little ones by Aunt Pat; Choruses and part-songs by the New Brighton School Choir; Stories and birthday greetings by Chuckie; Music by the New Brighton School Drum and Pipe Band.
- 7.15: News session.
- 7.30: Talk by Mr. Crompton on "Popular Electricity."
- 8.0: Chimes and overture.
- Programme of Old English Composers.
- 8.5: Soprano and tenor duo—Madame Gower-Burns and Mr. Harold Prescott, "O That We Two Were Maying" (Smith).
- 8.9: Duet for two violins—Misses Irene Morris and Thelma Cusack, "Vivace" from "Concerto for Two Violins" (Bach).
- 8.13: Contralto solos—Mrs. Ann Harper, (a) "The Three Ravens" (Old English); (b) "When Love is Kind."
- 8.16: Flugel horn and cornet duo—Messrs. S. N. Trenberth and S. Creagh, "Tasmania" (Lithgow).
- 8.21: Soprano solos—Miss Adela Innes, (a) "The Lass with the Delicate Air" (Arne); (b) "Have You Seen but a White Lily Grow" (Unknown).
- 8.28: Instrumental trio—Christchurch Broadcasting Trio, "Prelude and Minuet" (Parker).
- 8.36: Recital—Miss Naare Hooper, "The Freckle-Faced Girl" (Anon.).
- 8.41: Euphonium solo—Mr. R. C. Brundall, "Wendoree" (Code).
- 8.45: Soprano and contralto duo—Grand Opera Duo, "Nymphs and Shepherds" (Purcell, arrgd. by Newton).
- 8.50: Weather forecast.

HEARD a discussion the other day on the 2YA orchestra. There were five "old hands" involved. Agreed unanimously that the orchestra had no equal in Australia or New Zealand. It was contended, however, that the orchestra should not be described in the published programmes as merely "The Orchestra" but should have its distinctive designation, "The 2YA Studio Orchestra." The same applies to the announcements through the microphone. "Take Melbourne, for instance," quoth one gentleman. "The 3LO station orchestra" is the style of the announcements regarding that excellent combination. The Yanks have already told us New Zealanders that we don't know how to boost.

IN my last week's "Notes" I queried "Are we all D-X chasers?" I am afraid I have since yielded to the intriguing novelty of listening to the 5000-miles away Japanese stations. Well, it does not seem like D-X work when the Japs shout at one from the loudspeaker. I have studied the Jap items, and I confess to a certain amount of sympathy for the European residing in Japan who endeavours to get some entertainment from his radio set. Down here in New Zealand the novelty of listening to a Japanese programme occasionally is right enough, for we can always tune them out and get the home-brew programmes ranging from jazz to grand opera. But oh, that Jap stuff!

NEW ZEALANDERS who have recently heard the Japanese broadcast programmes will recall some of the items I am about to refer to. A Jap Caruso with a tremolo tenor voice gave us either a funeral dirge or a Jap serenade (I'm not sure which) accompanied on a sort of guitar. The item threatened, like Tennyson's brook to go on for ever. There were something like 180 odd verses. The guitar was not permitted to spoil the singer's vocal efforts, but was twanged dismally after each eight bars, while the tenor gentleman was recovering his breath. His voice was, in radio parlance, somewhat overmodulated, and the strain began to tell on it somewhere about the hundredth verse. My guests did not enter into the spirit of the song, for they laughed inmoderately at the performer's vocal gymnastics.

TAKE the Japanese station JOHK which can now be heard any evening just below the wavelength of 4QG, Brisbane. It is loud enough in Wellington for fair loudspeaker reception on any multivalve set which is equipped with a good aerial and earth, and is favourably situated. I must stress the desirability of a good locality because in some Wellington areas the Japanese stations do not come in at all well. On several occasions lately I have heard a Japanese lady acting as announcer at JOHK. She has a mellow voice, but like a male announcer at that station, she cannot pronounce the "H" in JOHK. The "H" as pronounced by them, sounds somewhat like "Ate-ter." Some European listener in Japan should assist these announcers in getting hold of the correct pronunciation.

A friend has asked me to publish the locality of each of the Japanese stations. JOAK is in Tokio, the capital city; JOHK is in Sindai; JOBK is in Osaka; JOIK is in Sapporo, JOGK is in Kumamoto; and JOFK in Kiroshima. It was announced a few months ago that as from May-June this year, the six Japanese stations were to operate with a power of 10,000 watts. Seemingly JOAK and JOHK are now on their increased power.

SO the Radio Broadcasting Co. of N.Z. has announced that while Kingsford Smith's trans-Tasman flight is in progress, the stations controlled by the company will be transmitting practically continuously. Such occasions as these are calculated to make the man next door, who hasn't got a wireless set, feel that he is behind the times. We listeners are looking forward to the great event with pleasant anticipation. The Broadcasting Company, with splendid enterprise, also propose to give us a relay description of the arrival of the Southern Cross at the Wigram Aerodrome, in the event of the aeroplane landing there. As 3YA, Christchurch, is proverbially successful with relays, an attractive event is on the cards.

THE trans-Tasman flight should arouse the enthusiasm of all New Zealand. It marks another important step in the progress of inter-Empire communication and transport. Radio, too, will again play an important role in aviation, in fact aviation and radio are now growing to be inseparably linked together.

FIFTY wireless manufacturers exhibited at the British Industries Fair at White City, Shepherd's Bush, London, held recently, the number easily constituting a record.

- 8.52: Overture.
- 9.0: Contralto solos—Mrs. Ann Harper, (a) "The Banks of Allan Water" (Horn); (b) "Good-Morrow, Gossip Joan" (Old English).
- 9.7: Duet for two violins—Misses Irene Morris and Thelma Cusack, "Duet for Two Violins" (Moszkowski).
- 9.13: Soprano solos—Miss Adela Innes, (a) "Should He Upbraid" (Bishop); (b) "By Dimpling Brook" (Arne).
- 9.20: Flugel horn and cornet duo—Messrs. S. Creagh and E. N. Trenberth, "Excelsior" (Balfe).
- 9.25: Vocal trio (soprano, contralto, and tenor)—Grand Opera Trio (selected).
- 9.29: Instrumental trios—Christchurch Broadcasting Trio, (a) "Slow Waltz" (Carse); (b) "Bohemian Dance" (Donofowski).
- 9.39: Recitals—Miss Naare Hooper, (a) "Peter" (Scott Gatty); (b) "When the Minister Comes to Tea" (Anon.).
- 9.46: Euphonium solo—Mr. R. C. Brundall, "Good-Night, Farewell" (Kucken).
- 9.53: Soprano and contralto duo—Grand Opera Duo, "The Elfin's Call" (Glover).
- God Save the King.

4YA, DUNEDIN (463 METRES)—THURSDAY, JULY 5.

SILENT DAY.

Friday, July 6

1YA, AUCKLAND (333 METRES)—FRIDAY, JULY 6.

- 3 p.m.: Afternoon session—Selected studio items.
- 4.0: Literary selection by the Announcer.
- 4.8: Selected studio items.
- 4.25: Sports results.
- 4.30: Close down.
- 6.0: Children's session—Nod—Pianoforte solo, Cousin Ronald (selected); Story for Tiny Tots; Letters and birthdays; Duet, Nod and Cinderella, "The King's Breakfast" (Milne); Playette, Seven Cousins, "Princess Tenderheart"; Stories.
- 7.15: Talk—Mr. George Campbell, "Motoring."
- 7.30: Rugby Review by Mr. J. K. Moloney, member of Christchurch Rugby Union.
- 8.0: Chimes. Presentation of Irish Songs and Melodies.
- 8.1: Orchestral selection—Record, "Irish Suite".
- 8.9: Vocal quartet—Madame Mary Towsey's Quartet, "Choral Fantasia on Irish Airs," Part 1 (Lewis).
- 8.14: Cornet solo—Mr. Eustace Tregilgas, "The Farewell" (Hartman).
- 8.19: Baritone solo—Mr. John Bree, "The Mountains o' Mourne" (Collinson).
- 8.24: Instrumental trio—Auckland Trio, "The Shamrock" (Middleton) (Crouch).
- 8.32: Soprano solo—Madame Mary Towsey, "Kathleen Mayoureen" (Crouch).
- 8.36: Elocutionary—Mr. J. F. Montague, (a) "Shandon Bells" (Prout); (b) "The Little Irish Mother" (Anon.).
- 8.18: Tenor solo—Mr. John McDougall, "She is Far from the Land" (Lambert).
- 8.52: Harp solo—Record, "Believe Me If All Those Endearing Young Charms" (Old Irish).
- 8.56: Contralto solo—Miss Gwenth Evans, "The Dear Little Shamrock" (Jackson).
- 9.0: Baritone solo—Mr. Leo O'Malley, "The Wearing of the Green" (arrgd. Moffat).
- 9.1: Weather forecast.
- 9.5: Orchestral selection—Record, "Irish Melodies" (arrgd. Sammons).
- 9.12: Soprano solo—Madame Mary Towsey, "The Irish Emigrant" (Barker).
- 9.17: Cornet solos—Mr. E. Tregilgas, (a) "Killarney" (Balfe); (b) "Mother Machree."
- 9.25: Baritone solos—Mr. J. Bree, "For the Green" (Lohr).
- 9.29: Instrumental trio—Auckland Trio, "Londonderry Air" (arrgd. by O'Connor Morris).
- 9.37: Humour—Mr. J. F. Montague, "Father Phil's Subscription List" (Lover).
- 9.43: Cello solo—Miss Molly Wright, "Keltic Lament" (Foulds).
- 9.48: Tenor solo—Mr. J. McDougall, "Off in the Still Night."
- 9.52: Harp solo—Record, "Come Back to Erin" (Claribel).
- 9.56: Vocal Quartet—Madame Mary Towsey's Quartet, "Choral Fantasia on Irish Airs," Part 2 (Lewis).
- 10.1: God Save the King.

2YA, WELLINGTON (420 METRES)—FRIDAY, JULY 6.

- 7.19: Lecturette—"The Sport of Big Game Hunting in the Northern waters of New Zealand"—Colonel F. Burton Mabin.
- 3 p.m.: Chimes of the G.P.O. clock.
- 3.1: Selected gramophone items.
- 4.20 and 4.55: Sports results to hand.
- 5.0: Close down.
- 6.0: Children's session—Uncle Ernest, assisted by pupils of Miss Agnes Wright—Piano solos, stories, and greetings.
- 7.0: News session—Market reports and sports results.
- 8.0: Chimes of the G.P.O. clock.
- 8.1: Overture—The Orchestra, "Comrades in Arms" (Gruenwald).
- 8.11: Vocal quartet—Philharmonic Quartet, "I Love a Little Cottage" (O'Hara).
- 8.15: Contralto solos—Miss Madge Freeman, (a) "Because" (D'Hardelot); (b) "Betty's Garden" (Sanderson).
- 8.22: Instrumental trio—Symons-Ellwood-Short Trio, "Waltzes" (Schutt).
- 8.32: Humour—Madame Eugenie Dennis, "Annette's Pleading" (Anon.).
- 8.37: Instrumental—Mrs. Mildred Kenny's Steel Guitar Trio, (a) "Mellow Moon" (Hall); (b) "Cheerle Beerie Be" (Wayne).
- 8.44: Bass solo—Mr. C. Bryden, (a) "Pearl"; (b) "You in a Gondola" (C. Clarke).
- 8.51: Vocal duo—Miss Madge Freeman and Mr. Edwin Dennis, "Beyond" (St. Quentin).
- 8.55: Trombone solo with orchestral accompaniment—Mr. H. Oakes, "O Star of Eve" ("Tannhauser"—Wagner).
- 9.1: Weather forecast.
- 9.3: Soprano solo—Mrs. Ellison Porter, "My Mother Bids Me Bind My Hair" (Haydn).
- 9.7: Request numbers—The Orchestra.
- 9.15: Vocal quartet—Philharmonic Quartet, "Tell Me, Flora" (Pinsuti).
- 9.19: Instrumental—Mrs. Mildred Kenny's Steel Guitar Trio, (a) "Londonderry Air" (Traditional); (b) "Monana" (Traditional).
- 9.33: Selection—The Orchestra, "Yeoman of the Guard."
- 9.43: Humour—Madame Eugenie Dennis, "Thinking of You" (Weston).

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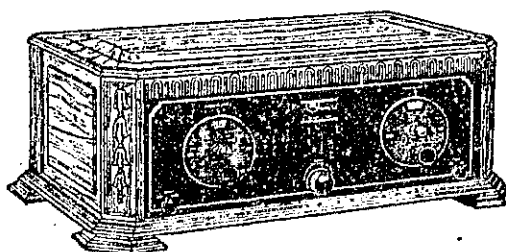
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Programmes Continued

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9.48: Vocal quartet—Philharmonic Quartet, "Aloha Oe" (Sawyer).
9.52: Instrumental—The Orchestra, Latest Dance Novelties.
10.2: God Save the King.

3YA, CHRISTCHURCH (306 METRES)—FRIDAY, JULY 6.

3 p.m.: Afternoon session—Selected studio items.
4.25: Sports results.
4.30: Close down.
6.0: Children's session—Big Brother—Stories and birthday greetings by Big Brother; Mouth-organ trio music by Cousins Harold, Stan, and Frank; Health games by "The Captain"; Songs and choruses by "The Singers."
7.15: News session.
7.30: Sports review.
8.0: Overture. Robert Schumann Vocal Programme.
8.5: Vocal quartet—Melodious Quartet, "Ladybird" (Schumann).
8.9: Mouth-organ solo—Mr. Alfred Tohill, "The West, a Nest, and You, Dec." (S.).
8.13: Soprano solos—Miss Frances Hamerton, (a) "Lorelei" (Schumann), (b) "Spring's Arrival" (Schumann).
8.19: Cello solo—Mr. Harold Beck, "Abendlied" (Schumann).
8.23: Bass solo—Mr. T. D. Williams, "My Abode" (Schumann).
8.27: Instrumental trio—Christchurch Broadcasting Trio, "Scherzo" (Schumann).
8.31: Contralto solo—Miss Belle Renaut, "I Will Not Chide" (Schumann).
8.39: Musical jazz on piano—Mr. Alec Cowhan, "Give Me the Stars" (Jover).
8.41: Soprano and tenor duet—Melodious Duo, "Tragedy" (Schumann).
8.48: Humorous recital—Mr. J. P. Darragh, "Cohen Phones His Tailor" (M.S.).
8.54: Vocal quartet—Melodious Four, "Red, Red Rose" (Schumann).
9.0: Overture.
9.5: Contralto solo—Miss Belle Renaut, "The Nut Tree" (Schumann).
9.9: Mouth-organ solos—Mr. Alfred Tohill, (a) "The Prisoner's Song" (own arrangement), (b) "It's a Long, Long Way to Tipperary" (own arrangement).
9.15: Bass solo—Mr. T. D. Williams, "The Two Grenadiers" (Schumann).
9.19: Cello solo—Mr. Harold Beck, "Second Movement from Concerto" (Schumann).
9.24: Vocal quartet—Melodious Four, "A Flower to Me Thou Seemest" (Schumann).
9.28: Instrumental trio—Christchurch Broadcasting Trio, "Tranmere" (Schumann).
9.36: Soprano solos—Miss Frances Hamerton, (a) "Tis He" (Schumann), (b) "Guardian Angels" (Schumann).
9.42: Jazz novelties on the piano—Mr. Alec Cowhan, (a) "Me Too" (Woods), (b) "I Wonder How I Look When I'm Asleep" (Brown and Henderson).
9.48: Humorous recital—Mr. J. P. Darragh, "The Huntsman" (poster's day out on the hunting field) (M.S.).
9.55: Vocal quartet—Melodious Four, "Fold Song" (Schumann).
God Save the King.

4YA, DUNEDIN (463 METRES)—FRIDAY, JULY 6.

8 p.m.: Town Hall chimes.
8.1: Gramophone recital.
8.15: Address on "The History of Cloth" by Miss Bueclench, of the D.S.A., Ltd.
8.30: Relay of afternoon-tea music from the Savoy.
8.45: Studio items.
9.0: Music from the Savoy.
9.15: Gramophone items.
9.25: Sports results.
9.30: Close down.
6.0: Town Hall chimes.
6.1: Children's session conducted by Aunt Sheila and Big Brother Hill—Happy Folks' Anthem. (The programme for this session is being arranged and contributed personally by Miss Hilda Scarr, who will contribute specially-prepared children's numbers from A. A. Milne).
7.15: News session.
7.30: Address on "The Latest Books" by Mr. H. Greenwood, of the Dunedin Athenaeum.
8.0: Town Hall chimes.
8.1: Orchestral overture.
8.10: Mezzo-soprano solos—Miss Molly Vickers, (a) "At Dawning" (Cadman), (b) "The Spinning-Wheel" (Thomson).
8.15: Cornet solo—Mr. George Christie, "Zelda" (Code).
8.23: Baritone solos—Mr. L. M. Cachemaille, "Cradle Song" (Wallace).
8.27: Recitals—Miss Sheila Neilson, (a) "The Journey" (Fisk), (b) "Lynette".
8.36: Mezzo-soprano solo—Miss Molly Vickers, "The Bird with the Broken Wing" (Golson).
8.39: Cornet solos—Mr. George Christie, (a) "The Trumpeter" (Dix), (b) "I Hear You Calling Me" (Marshall).
8.49: Baritone solos—Mr. L. M. Cachemaille, (a) "She is Far From the Land" (Lambert), (b) "Lolita" (Buzzi-Pecchia).
8.55: Recital—Miss Sheila Neilson, "Ballad of East and West" (Kipling).
9.0: Weather forecast.
9.2: An hour of dance music relayed from the Savoy (Alf. Carey and his Orchestra).
10.2: God Save the King.

Saturday July 7

1YA, AUCKLAND (333 METRES)—SATURDAY, JULY 7.

2.45 p.m.: Relay description of Rugby football match from Eden Park.
4.30: Close down.
6.0: Children's session—Cinderella—Vocal solo, Cousin Pat, "Rising Sun" (Torjussen); Song, Cousin Ngaire, "Maori Songs"; Letters and birthdays: Duet, Cousins Pat and Pat, "Rosamunde" Selections; Song, Cousin Ngaire, "Peter Pan" (Henderson); Story-time; Song, Cinderella, "Good-Night Lullaby".
7.15: News, sports results, and market reports.
8.0: Chimes.
8.1: Relay of orchestral overture from Prince Edward Theatre Orchestra under the direction of Mr. E. Beacham.
8.10: Baritone solos—Mr. Arthur Briggs, (a) "Under the Deodar," (b) "Yo Ho, Little Girl, Yo Ho!" (Monckton) (from "A Country Girl") (Jones).
8.17: Instrumental—Hawaiian Quartet (record), "Broken-hearted Melody" (Jones).
8.21: Soprano solos—Mrs. Daisy Basham, (a) "Sloe Eyes" (from "The Singalee") (Monckton), (b) "Molly the Marchioness" (from "A Country Girl") (Monckton).
8.28: Humorous sketch—Griffiths Duo, "A Lesson in Proposing" (Anon.).
8.33: Saxophone solo (record), "I Love the Moon" (Rubens).
8.37: Vocal duos—Mrs. D. Basham and Mr. A. Briggs, (a) "When We Are Married" (from "Belle of New York") (Kerker) (b) "Two Little Chicks" (from "A Country Girl") (Monckton).
8.44: Relay of orchestral entracte from Prince Edward Theatre.
8.49: Baritone solos—Mr. A. Briggs, (a) "Coo" (from "A Country Girl") (Monckton), (b) "Vanity" (Hall).
8.56: Instrumental—Hawaiian Quartet (record), "Hula Hula Rose" (Awan).
9.0: Weather forecast.

IT is a worthy endeavour of the Amateur Radio Society to reduce the howling valve nuisance by the neat instructional announcement kindly broadcast by 2YA, Wellington. I have not observed any difference in the numbers of howls nightly. In fact, the "pack" seem to make night more hideous than ever around Wellington. There are listeners who regard these broadcast announcements as thoroughly Don Quixotic, and quite incapable of reducing any material improvement in conditions which are becoming a serious menace to the popularity of broadcast listening. They suggest the abandonment of these blank cartridge shots and the substitution of official inspection of the sets in operation in various areas where the trouble is intense.

IF one cares to take the trouble he can identify some howling valves which never cease howling during any evening. I have followed one gentleman in particular who howls up and down the scale without a second's interval throughout the evening. His dismal wail is there all the time, and he should be a "sitting shot" for the radio inspector with his trouble-finding loop-receiving set in the motor-van. One could take a half a dozen bearings on this howler and then another half a dozen bearings and he would still be howling. I should imagine that this offender is no schoolboy for he continues till too late an hour for the average youth to be out of bed.

THERE is another beautiful "howler" in Wellington who squats down on the wavelength of 3YA, Christchurch, and he has his valve just oscillating sufficiently to produce a continuous deep-pitched groan. This party neglects to take the precaution to ascertain whether he is occasioning interference, or else I would hear him tap his aerial terminal with a mistened finger. Possibly he has not heard 2YA's broadcast instruction on this method of ascertaining whether one is creating interference. If this meets his eye he could not do better than follow the instruction—it may save him a prosecution.

"BEDFORD" (Masterton) sends this question: "Why have the American radio manufacturers captured the New Zealand market with multi-valve sets? What about our enterprising Britishers?" There are various reasons for the popularity of the American sets and their almost complete monopoly of the New Zealand market. The British trade was operating at high pressure to cope with Home demands, while the American invaded New Zealand. The American sets, too, are exactly suitable to New Zealand conditions, particular with regard to the matter of wavelength tuning, for here and there the stations we seek are well within 550 metres and 200 metres. This condition greatly favoured the popularity of the American neutrodyne and the Browning-Drake circuit. Much more space could be devoted to the subject.

TO announcers in general I would say endeavour to infuse as much of your personality as you can into your work. There is nothing so monotonous as a mere talking machine. There is one distant announcer I hear regularly who speaks in a dull monotone, and one wonders how he contrives to make his work so utterly colourless.

A "DUD" transformer occasioned a friend of mine much waste of time recently in his endeavour to locate the seat of trouble in his set. While the set operated OK with rather weak dry B batteries it went "dud" when connected up with powerful wet batteries. Eventually it was discovered that one of the transformers had broken down.

"WHAT time should I be able to pick up the American stations?" asks "Theo" (Masterton). Owing to the difference in time between America and New Zealand, and the effect of daylight, the American stations can be heard here only when darkness commences and few are on the air after 7.30 p.m. New Zealand time, although KRON, Longbeach (California 242 metres) has been heard much later. Daylight reception of the Yankee broadcast stations has been frequently recorded in places well away from the N.Z. cities but these cases must be regarded as exceptional.

THE Wellington Sunday night broadcast concerts are exceptionally popular with those who listen to 2YA, Wellington. "N.S.H." (Palmerston North) has dropped me a line to say that these Sunday night concerts have made a big hit around Palmerston.

THE capacity of the average broadcast listener's aerial used for receiving broadcasting is between .0002 and .0003 mfd.

9.1: Soprano solo—Mrs. Daisy Basham, "All Etella Confidente" (Bogbandi).
9.5: Comedietta—Griffiths Duo, "The Stranger" (Frost).
9.10: Saxophone solo (record), "Lanette" (Henton).
9.14: Vocal duos—Mrs. D. Basham and Mr. A. Briggs, (a) "Glow-Glow" ("La Mascotte" (Audran), (b) "Nocturne" (Denza).
9.21: Relay of dance music from Dixieland Cabaret by The Internationals under Mr. Clyde Howley.
11.0: God Save the King.

2YA, WELLINGTON (420 METRES)—SATURDAY, JULY 7.

3 p.m.: Chimes of the G.P.O. clock.
3.1: Relay description of Rugby football match from Athletic Park.
6.0: Children's session—Auntie Gwen and Uncle Toby—Trip to Rotorua; Maori songs; Stories and greetings.
7.0: News session, market reports and sports results.
8.0: Chimes of the G.P.O. clock.
8.1: Overture—The Orchestra, "Hungarian Lustspiel" (Keler Bela).
8.11: Vocal quartet—Melodie Four, "The Trumpeter" (Dix).
8.15: Italian mandolin solos—Mr. Lad Haywood, (a) "My Blue Heaven" (Donaldson), (b) "Funiculi Funicula" (Denza).
8.22: Hits and harmonies—The Glad Idlers, "Together We Two" (Berlin).
8.27: Jazz piano solo—"A Dram of the Opera" (Waltz).
8.32: Humour—Mr. Geo. Titchener, "My Inquisitive Kiddy".
8.37: Tenor solo—Mr. Frank Bryant, "I Don't Know How I'm Going to Wait till Sunday" (Pointon).
8.41: Instrumental—The Orchestra, (a) "Serenade" (Widor, arrgd. by Bellingham), (b) "Waltz" (Chopin).
8.50: Bass solo—Mr. W. H. Farshall, "Blue Bonnets over the Border" (Traditional).
8.54: Vocal quartet—Melodie Four, "Please Won't You Be My H'm" (Dore).
8.58: Weather forecast.
9.0: Request numbers—The Orchestra.
9.8: Humour—Mr. Geo. Titchener, Odds and Ends" (Original).
9.18: Tenor solo—Mr. S. Dundan, "Shy Mignomette" (Brahme).
9.22: Instrumental—The Orchestra, Ballet Music from Carmen" (Bizet).
9.32: Hits and harmonies—The Glad Idlers, "You Can't Walk Back from an Aeroplane" (Bibo and Friedlander).
9.37: Italian mandolin solos—Mr. Lad Haywood, (a) "Sunshine" (Berlin), (b) "Just a Memory" (Robinson).
9.44: Baritone solos—Mr. R. S. Allwright, (a) "Geraldine," (b) "The Garden Where My Soul Was Born" (Clarke).
9.51: Instrumental—The Orchestra, novelty arrangement of "Il Trovatore".
9.56: Vocal quartet: Melodie Four, "Old Folks at Home" (M.S.).
10.0: Dance programme—Vocal choruses by the Glad Idlers.
11.0: Close down.

3YA, CHRISTCHURCH (306 METRES)—SATURDAY, JULY 7.

2.45 p.m.: Relay description of Rugby football match from Lancaster Park.
6.0: Children's session—Uncle Sam and Aunt May—Stories and birthday greetings by Uncle Sam; Music and songs by Aunt May.
7.15: News session.
7.30: Sports results.
8.0: Chimes and overture.
8.5: Plantation chorus—Avonion Minstrels, "Dance and Song" (Scott-Gatty).
8.9: Banjo solo—Mr. Ken Tullock, "Breeze" (Hanley).
8.14: Tenor solo—Mr. Ernest Rogers, "Madelina" (James).
8.18: Hawaiian steel guitar and ukulele trios and solo—Miss Elaine Moody's Hawaiian Instrumental Trio, (a) "Sweet Hawaiian Moonlight" (M.S.), (b) "Stay Out of the South" (M.S.), (c) "Dreamy Night in Honolulu" (ukulele solo, Miss Elaine Moody) (M.S.).
8.26: Mezzo-soprano solos—Miss Phyllis Leighton, (a) "Love's Spring-time" (Knight and Logan), (b) "It is the Merry Month of May" (German).
8.32: Instrumental trio—Christchurch Broadcasting Trio, "Adagio and Scherzando" (Gurlitt).
8.40: Bass solo—Mr. J. Filer, "The Lighthouse Bell" (Petrie).
8.44: Humorous sketch—Messrs. W. H. Moses and G. Soutar, "Dunn's Umbrella" (Anon.).
9.0: Plantation chorus—Avonion Minstrels, "Pompey's Ball" (Scott-Gatty).
9.3: Weather forecast and late news.
9.5: Overture.
9.10: Negri song—Mr. Doug. Clapperton, "The Banjo Song" (Homer).
9.13: Banjo solos—Mr. Ken Tullock, (a) "Beat As You Go" (Grimsbaw), (b) "Listen too This" (Grimsbaw).
9.18: Unaccompanied vocal quartet—Avonion Minstrels, "Eve" (Jones).
9.21: Hawaiian steel guitars and ukulele trios—Miss Elaine Moody's Hawaiian Instrumental Trio, (a) "Underneath Hawaiian Skies" (own arrangement), (b) "Honolulu Sunshine," (c) "Hawaiian Twilight".
9.29: Mezzo-soprano solo—Miss Phyllis Leighton, "The Pipes of Pan" (Monckton).
9.34: Instrumental trios—Christchurch Broadcasting Trio, (a) "The Old Refrain" (arranged by Kreisler), (b) "Serenade" (Herbert).
9.44: Soldier's song—Mr. Frank Olds, "The Blue Dragons" (Russell).
9.48: Tenor and bass duet—Messrs. E. Rogers and J. Filer, "Always Friends" (Bonheur).
9.52: Humorous sketch—Messrs. W. H. Moses and G. Soutar, "Making a Game of It" (Anon.).
9.58: Plantation chorus—Avonion Minstrels, "Dat's Berry Queer" (Scott-Gatty).
Dance music until 11 p.m.
God Save the King.

4YA, DUNEDIN (463 METRES)—SATURDAY, JULY 7.

2.45 p.m.: Relay description of Rugby football from Carisbrook Ground.
5.0: Close down.
7.15: News session.
7.30: Address by Miss Baron, of Otago University—"French Literature" (under the auspices of the Workers' Educational Association).
8.0: Town Hall chimes.
8.1: Relay of orchestral music from the Empire Theatre.
8.15: Soprano solo—Miss Roma Buss, "Believe Me if all those Endearing Young Charms" (Moore).
8.19: Flute solo—Mr. J. W. Stewart, "Mazurka No. 2" (Chopin).
8.25: Vocal quartet—4YA Harmonists, "The Hunt" (Coward).
8.29: Pianoforte solo—Mrs. Ernest Drake, "Liebestraume" No. 3 (Liszt).
8.33: Baritone solos—Mr. F. M. Tuohy, (a) "My Prayer" (Squire), (b) "Harvesters' Night Song" (Power).
8.38: Violin solo—Mr. A. R. Watson, "The Dawn" (Nevin).
8.42: Mezzo-soprano solo—Miss Mollie Andrews, "Spreading the News" (Oliver).
8.45: Instrumental trios (violin, flute, and piano)—(a) "Simple Avue" (Thomas), (b) "Humoresque" (Dvorak).
8.52: Recital—Mr. Allan Young (selected).
8.58: Tenor solo—Mr. C. C. Scott, "Annie Laurie" (Traditional).
9.2: Weather forecast.
9.4: Relay of orchestral music from the Empire Theatre.
9.18: Soprano solo—Miss Roma Buss, "Summer Begins" (Drummond).
(Continued on page 14.)

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Glossary of Wireless Terms

UNDER this heading we will give regularly sections of the glossary of wireless terms which is a prominent feature of the N.Z. Radio Listeners' Guide. In that book, although set in the smallest type, it occupies some 13 pages, and is definitely in our opinion the most comprehensive and complete glossary on modern lines which has been made available in the Dominion. For the benefit of our readers the glossary will be reprinted in our columns.

BRUSH DISCHARGE.—A discharge of high-tension electricity, which takes the form of a luminous glow, accompanied by a crackling sound. A brush discharge occurs when the voltage is almost high enough to produce a spark or arc.

BULB RECTIFIER.—In battery charging appliances, a bulb rectifier consisting of a filament and a plate in a glass bulb having a low vacuum or specltl gas is used for the purpose of converting alternating current into impulsive direct current by cutting off the flow of those impulses or currents which flow in the wrong direction.

BUSBAR.—Copper wire, often tinned, used in wiring the circuits of wireless sets. It is manufactured round (diagonally) and square. The object of its use is to enable insulation to be dispensed with as the wires stay where put and will not fall together like flexible leads. The wiring of a radio set must be spaced correctly to achieve the best results, and stiff wire facilitates this. Often insulation (known as spaghetti) is used on the wires as well.

BUZZER.—An instrument consisting of a coil of wire round a soft-iron core, near which is placed a steel reed or armature. Currents flowing in the coil from a small battery magnetise the core and attract the armature, which automatically breaks the circuit, allowing the armature to return to its normal position. This action again closes the circuit, and once more the armature is attracted, and the vibratory action continues as long as the battery is connected in the circuit. The vibration of the armature sets up sound waves, which are heard as a musical note. In wireless it is used for testing crystal detectors, the buzzer being allowed to function while the crystal is being adjusted. When the buzzer sounds at its loudest in the phones the crystal is ready for reception.

"C" BATTERY.—See "Bias."

CAPACITY.—Is the property of a device, or body, to store energy in electrostatic form. It is the property which a condenser has of receiving and storing a charge of electricity. It depends upon the size of plates, the distance between them, and the nature of the substance filling the spaces. Generally referred to in terms of microfarads. Capacity is measured by the quantity of electricity that can be forced into a device, or body, by a pressure of one volt. The unit of capacity is termed a "farad."

CARBORUNDUM.—A carborundum crystal detector has the advantage of great stability, but it is generally recommended that to obtain the best results a small 44 volt battery and potentiometer should be used with it.

CARRIER WAVE.—See "Continuous Waves" and "Modulation."

CATHODE.—Sometimes spelt "Kathode." The filament or source of the electron supply in a valve. (The negative electrode.) See "Anode."

CATWHISKER.—Is a fine piece of wire, which may be of various kinds of metal, usually in the form of a spiral coil, used in conjunction with a detector crystal, upon which it rests when in operation.

CELL.—One of the units of a battery of either wet or dry variety.

CHARGE.—Applied to the recharging of an accumulator, and also to the charging up of the plates of a condenser; in the latter application the plates charge and discharge in sympathy with the frequency of the oscillators when inserted in a high-frequency circuit.

CHARGER BATTERY.—See "Rectifier."

CHEMICAL RECTIFIER.—Another name for an electrolytic rectifier.

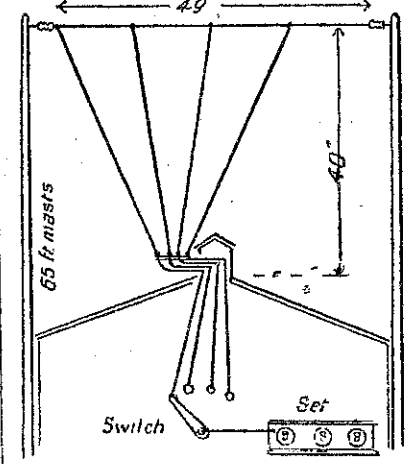
A NOVEL AERIAL SYSTEM

PERMITS RAPID CHANGE-OVER

A DESCRIPTION of a novel aerial system, which has been called the "fan aerial," is sent in by Messrs Gyde and Barringer, of Hawera, and as it will probably interest many experimenters and others, particulars are here reproduced.

It is stated that very great differences are noticeable in reception when the different positions are used on a given station. The letter states that "sometimes, say, 2YA works beautifully on the 'T' tapping, then another time it works better on a 1/2 'L' or full 'L,' and so on with other stations. The letter also claims that this aerial with the 'fan' earth is ideal. Presumably the 'fan' earth, is several earths joined radially at equal distances.

It will scarcely be necessary to adhere to measurements, as the aerial



will be erected to suit available space. The diagram shows the aerial divided into four equal parts with four separate lead-in wires connected respectively at one end, and at the centre end, and at the centre and quarter and three-quarter positions. These are all led, insulated in proper manner, to 4 contacts of a switch, the arm of which is connected to the aerial terminal of the set. This gives a means of rapidly changing over from one style of aerial to the other, and should provide some interesting facts for experimenters. The aerial in question is erected on 65-foot iron poles above a building, giving 40 feet clear above the roof, the lead-ins being brought to insulators and through a ventilator in the roof.

QUERIES BY CORRESPONDENCE.

- 1. Every communication enclosing queries is to be addressed to "Meg-ohm," Box 1032, Wellington, and must be accompanied by a stamped addressed envelope for reply by post.
- 2. Questions must be written so that a space is left in which the reply may be added.
- 3. No charge is made for replies.

HEATING POWER-VALVE FILAMENTS

WITH ALTERNATING CURRENT

IT is quite a practicable proposition to heat the filament of the last power-valve with unrectified alternating current of the correct voltage, such as may be obtained from the filament or low-tension winding of an eliminator transformer. In using an ordinary valve in this way, the only important condition is that the filament must be of a thick type rather than a thin one. Thickness of filament is fairly well shown by the amperes taken, so that valves taking less than 25 (1/2) amp. could well be ruled out for the purpose.

Bearing this in mind, we find that in the six-volt class the suitable valves are 112, 171, PM256, de Forest DV7 and DL14, and also the UX210, which latter carries exceptional volume, but in order to obtain full benefit from it, more A and B power is required than is available in the average radio installation. In the four-volt class the same conditions would apply.

The writer has run the last power valve in this way for many months, and no harm has been introduced into the receiver on that account, although the grid-bias of 22-volts has been applied in the ordinary way.

BUT there are circumstances connected with a.c. heating of filaments that may cause the appearance of hum until steps are taken to remove the cause. When operating on direct current the negative end of the filament is considered as zero voltage as far as grid and plate are concerned, and if the grid is connected to the negative leg of the filament, it may be said that the grid is positive to no part of the filament. That being so, no grid current will flow. It may here be explained that grid current is an unwanted current set up between grid and filament when the grid becomes positive, and it is such current that causes distortion. If the grid is connected to the positive end of the filament, grid current will flow.

IT is, therefore, seen that the negative end of the filament, which is connected to the grid, must be kept

RADIO DIRECTORY

What to Buy and Where

- ATWATER-KENT RADIO .. Frank Wiseman, Ltd. 170-172 Queen Street.
- ALTONA & HAMMARLUND-ROBERTS SETS. Johns, Ltd. Chancery Street.
- AMPLION LOUDSPEAKERS . All Radio Dealers.
- BREMER-TULLY RADIO Superadio, Ltd., 147 Queen Street.
- BURGESS RADIO BATTERIES, All Radio Dealers.
- CE-CO VALVES All Radio Dealers.
- CROSLY ELECTRICAL AND The Forrest-Crosley Radio Co., Ltd. Cuba Street, Palmerston North.
- BATTERY MODELS D. A. Morrison and Co. The Avenue, Wanganui.
- CROSLY RADIO SALES AND SERVICE Radio Supplies, 251 Symonds Street.
- FADA RADIO J. B. McEwan and Co., Ltd., New Plymouth.
- FEDERAL AND AIR PATROL RADIO Federal Radio House, 3 Dalry Street.
- GAROD, CROSLY, RADIO AND ACCESSORIES The Hector Jones Electrical Co., King and Queen Streets, Hastings.
- GILFILLAN AND KELLOGG . Harrington's, Ltd., 138-140 Queen Street.
- GREBE RADIO Howie's, Dilworth Building, Custom St. E.
- GRETE, CROSLY AND RADIOLA SERVICE E. Dixon and Co., Ltd., Hawera.
- MARCONI ECONOMY VALVES All Radio Dealers.
- MULLARD VALVES All Radio Dealers.
- RADIOLA RECEIVERS Farmers' Trading Co., Ltd., Hobson Street.
- RADIOLA DEALER AND SERVICE G. C. Carrad, 140 The Avenue, Wanganui.
- RADIOTRON VALVES All Radio Dealers.
- RELIANCE BATTERIES Reliance Battery Mfg. Co., Ltd., 90 Albert Street.
- PHILIPS VALVES AND APPARATUS All Good Radio Dealers,

Construction Continued

lars will be found in the description of the short-wave receiver construction in the "Listeners' Guide."

The coil coupling is varied by means of a knob on the left-hand end of the spindle, which projects through a slot cut in the lower edge of the cover. A brake on the other end of the spindle makes the coil "stay put."

FOR clearness also, the grid-bias cell is not shown, but its position is indicated. One small round cell can be used, laid on its side. The accompanying .006 fixed condenser should be kept on the coil side of the screen, and may be above the bias cell.

Note that where the filament terminals come up from under the base-board, the negative is connected to an .006, and to the secondary coil via the grid battery (if used). The positive is connected to the shield. At A and B are washers screwed to the base, and under these connecting wires to the shield are held to obviate soldering to the shield, not always an easy operation with a small iron. Filament connections to the 625 are made with a small valve socket on each lead.

The two .006 by-pass condensers are shown without supports, but must be so arranged as not to come in contact with the shield.

If the 222 valve is to be used, the two filament leads will go to the valve socket in the usual way. Some types of UX holder will take the plate and screen grid end of a 625 quite well, so if a suitable holder is used it will take either type of valve.

The small internal copper screen is not shown, but its position is indicated

by a dotted line. Sufficient room is left at the sides to give free space for leads to get round. The screen is secured to the base by two screws at the side nearest to the coils.

THE connection to the control grid for either valve is made by means of a small battery clip on the end of the wire. For the 625 it is a good plan to put a small piece of adhesive tape on the clip to present possible contact with a filament prong.

The lead from the screen grid (ordinary grid connection in holder) goes under the board as B45 volts, and above the board is connected through the by-pass condenser to the shield.

Dimensions not already given are baseboard 12 x 6 1/2 x 3-8 and panel 8 x 6 1/2.

PARTS AND MATERIALS REQUIRED.

	s.	d.
Variable condenser	15	0
Vernier Dial, high ratio	9	0
2 Fixed condensers .006, mica	7	6
1 fixed condenser, .002,	2	0
UX valve socket	2	3
Copper sheet, 28's	6	0
Rheostat, 30 ohms	3	0
Grid bias cell for S625	0	9
Wire, screws, terminals, bolts, etc.	4	6
	£2	10 0

In addition, there is the UX222, 42s., or the S625, 30s. A shipment of the latter has just been landed, so they will be easily procurable.

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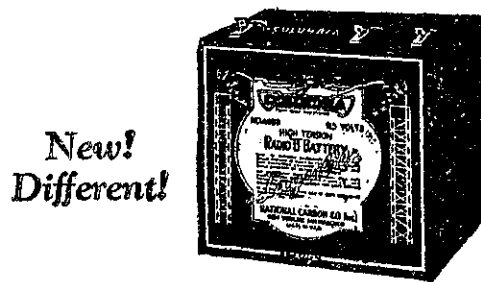
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Programmes Continued

(Continued from page 11.)

- 9.21: Pianoforte solos—Mrs. Ernest Drake, (a) "Irish Air from County Derry" (arr. Grainger), (b) "Country Gardens" (arr. Grainger).
9.24: Tenor solo—Mr. C. C. Scott, "Like Stars Above" (Squire).
9.28: Violin solo—Mr. A. R. Watson, "Hebridean Melody."
9.32: Vocal quartets—4YA Harmonists, (a) "They Know Not My Heart" (Stanford), (b) "Good-Night, Beloved" (Pinsuti).
9.38: Humorous stories—Mr. Allan Young.
9.48: Relay of orchestral music from the Empire Theatre.
10.0 God Save the King.

The above programme is subject to alteration, as, during the evening there will be broadcast a description of the featherweight boxing contest between Johnnie Leckie (New Zealand) and Archie Hughes (Australia). Announcer, Mr. Divers.

Sunday, July 8

1YA, AUCKLAND (333 METRES)—SUNDAY, JULY 8.

- 3 p.m.: Afternoon session—Selected studio items.
4.0: Literary selection by the Announcer.
4.8: Selected studio items.
4.30: Close down.
6.0: Children's Song Service conducted by Uncle Leo, assisted by Cousins from St. Stephen's Presbyterian Sunday School.
6.55: Relay of service from St. James's Church—Preacher, Rev. E. R. Harries, organist, Mr. Walter Impett.
8.30: Relay of Auckland Municipal Band recital under the conductorship of Mr. Christopher Smith—Military Band selections.
9.30: Close down.

2YA, WELLINGTON (420 METRES)—SUNDAY, JULY 8.

- 9 a.m.: Results of "All Blacks" match to hand.
9.15: Close down.
6 p.m.: Children's session—Sunday service conducted by Uncle Ernest, assisted by children of St. John's Presbyterian Church Choir.
6.55: Relay of evening service from Terrace Congregational Church—Preacher, Rev. Ernest R. Weeks; organist-choir master, Mr. H. Crusey.
8.15 (approx.): Relay of band recital of the Port Nicholson Silver Band under the conductorship of Mr. J. J. Drew, from the Grand Opera House.
God Save the King.

3YA, CHRISTCHURCH (306 METRES)—SUNDAY, JULY 8.

- 9 a.m.: Results of Rugby match in South Africa.
9.45: Relay of sacred cantata "Faith" from East Belt Methodist Church, Fitzgerald Avenue—Soloists: Soprano, Mrs. Bessie Stewart; contralto, Mrs. J. W. Palk; tenor, Mr. L. C. Quinn; baritone, Mr. A. S. Bell. Organist, Mr. A. M. Owen; choirmaster, Mr. J. Chaplin.
5.30: Children's song service conducted by Uncle Sam—Hymns by scholars from the Clarence Road Methodist Sunday School.
6.30: Relay of evening service from East Belt Methodist Church, Fitzgerald Avenue—Preacher, Rev. W. Greenslade; organist, Mr. A. M. Owen; choirmaster, Mr. J. Chaplin.
The church service will be followed by a sacred concert from the above church.
8.15: Rebroadcast of miscellaneous concert programme by the Port Nicholson Band and assisting artists from Grand Opera House, Wellington.
God Save the King.

4YA, DUNEDIN (463 METRES)—SUNDAY, JULY 8.

- 5.30 p.m.: Results of "All Blacks" match.
5.31: Children's song service conducted by Big Brother Bill, assisted by a choir of young people.
Close down.
6.30: Musical service by the International Bible Students Association from the Studio. Address by Mr. V. G. Canty.
8.0: Relay of concert by the Kaikohe Band, under the conductorship of Mr. E. Franklin, from His Majesty's Theatre.
9.15: Close down.

Our Mail Bag

A Great Evening's Work.

A FEW answers to "Youthful Enthusiast's" inquiries in this week's "Record." The station midway between 2BL and 3LO is a Yankee—KFWB. This station is owned by Warner Bros. Studios, at Hollywood, Los Angeles, and operates on 361 metres, with a power of only 500 watts. I had him on speaker every night last week, and particularly well last night, when he was relaying a fight. The one just below 1YA is KNX, Los Angeles, wave 337, power 500w. Have had him on often, not very good, and lost as soon as 1YA takes the air. The station on 2YA's wavelength is KPO, San Francisco. Wave 422 metres. Power 1000 watts. Often heard when 2YA is off the air. The next one on 236 metres is probably KFWB, Oakland, California, on 236 metres, power 500 watts. The station midway between 3DB and 4ZB is probably KFWB, or KGEF, on 268 and 263 metres respectively. These are both on 500 watts, and both in California.

I trust that this is what "Youthful Enthusiast" is after, and that it will also be of use to other DX listeners. These stations have all been heard during the last two weeks, as DX conditions have been particularly good on a few evenings.

My log now contains 51 stations on broadcast wave. Fifteen New Zealand, 20 Australian, 12 American, four Japanese. New stations heard since sending list include, 2ZM, Gisborne, JOHK and JOBK, Japan, 3BY and 3EF, Australia, and several others.

Sunday, June 10 was the best radio night I have had this year. There was no static, and the stations poured in. Between 5 p.m. and midnight I was fortunate enough to log 31 stations. Needless to say, we wish we could

strike more nights like this. 2UE Sydney deserves particular note, as he comes in at full speaker strength. Readers should send for his card, as they will also receive a very useful chart for entering their stations on. This was my experience last week. Try it, readers.

Another thing to try is this. For experiment, I rigged up an aerial of stranded copper wire, in the radio den, about two feet below the ceiling, and let it cross the room three times, making a length of about 50 feet. On connecting to the aerial terminal, KFON, who I could hear only moderately on the speaker, roared out so loud that it could be heard several hundred yards away. The tuning on the first condenser was altered a few points, and the other two condensers require very careful adjustment to keep it at this strength, or howling will take place. Curiously enough, 2YA, who can always be heard about quarter of a mile away on the outside aerial was reduced to only fair speaker strength. Worth trying. Good luck to the Broadcasting Company. (Cheerio, E. J. Crabbe, Napier.)

Programmes Appreciated.

BOTH of your publications—the "Record" and the "New Zealand Listeners' Guide"—are fine works, and should be invaluable to any interested in radio. With regard to programmes, I would like to express our appreciation of the very fine programmes put on the air by the four New Zealand stations. We have a five valve set and hear both New Zealand and Australian broadcasts practically every night, and can safely say that our New Zealand stations are equal to any of the Australians. The programmes are well-

balanced, and with a choice of four stations, or should I say three, allowing for a silent night, one can easily select an evening's entertainment to suit his particular taste. It would be interesting to know if the dissatisfied listeners are valve set owners or crystal set owners. We are a musical family, and both my wife and myself have been on the stage in amateur theatricals. We play the piano, violin, mandolin, and banjo, so I think we are able to judge a good programme.

With regard to the children's hour, my children switch off when the birthday days come on. They enjoy the musical items, recitations, and stories, but want to know why so many want to hear their names over the air.

What is going to happen to this session when more children join the radio family—there will be no time left for other items?

The suggestion re publishing list of names of license-holders is, I think, a good one, and would probably help in shaking up the "pirates," provided, of course, that the cost of publication is within reasonable bounds.

A query: On the assumption that 2YA's wavelength is exactly a quarter of a mile, would reception be better on a receiver situated on the crest of a wave, i.e., an exact number of quarter miles from the station, or would reception be just as good at any other point? Say 240 1/8 miles versus 240 3/4 miles?—H. W. Y. (Herekino, N. Auckland).

Cheerio, Auckland!

TO-NIGHT we are having a very good and varied entertainment from our long-suffering station, 1YA, and I really could not let it pass without commenting on its programme. The relay from the Majestic Theatre was almost perfect. Items from the studio were also good. The Maori Party, with their various items, musical and otherwise, were enjoyed very much by us all. I am sure that if station 1YA were able to get a relay from great artists who so often appear in different theatres in Auckland, such as the great pianist, Mr. Benno Moiseiwitsch, not many would object to paying a license fee, especially the country folk who have no possible chance to go to the city these hard times. So cheerio, Auckland, and good luck. We won't turn you down.—C. J. Nordstrand (Oneraki).

Constructive Suggestions.

I AM glad to notice that the Broadcasting Company is coming in for more praise and less kicks than formerly, and certainly they deserve it. I should like to suggest one or two ideas that are constructive and I feel sure would result in further popularity for broadcasting if carried out. I would like first to represent the case of the back-block settler. He has to have a powerful set and therefore can receive either of the 1, 2 or 3YA stations at will after, say, 5.30 or 6 p.m., at this time of year. He usually retires at an early hour or, rather, would like to, and the consequence is that with programmes commencing at 8 p.m. he either has to sit up later or do without his evening's entertainment. More often he does without a radio set for this reason. Now my idea, I am sure, would result in an increase of licenses and it is that at least one station each night should commence a good programme (personally I do not care whether it is gramophone or real) at 6 p.m. or even earlier. We have heard that dinner music is to be put on shortly. Presumably this would be for half an hour or so, but I would say—extend it and make it continuous from, say, 5.30 onwards. Those who wish the market reports, children's amusements, news, etc., can go on to other stations.

The other suggestion I would like to make is—how about a class for morse for, say, two half-hours per week from one of the stations, commencing, of course, very slow single letters repeated and gradually working the speed up. Thanking you for your valuable space.—"N.D.B." (Patca).

Japanese Stations.

AS I am interested in the Japanese stations at present being discussed in the "Record," I would like to tell of my experience last night (Sunday, June 17). I first picked up JOAK at 9.50 p.m., getting the call sign at 10.10 p.m., JOHK at 10.20 p.m., JOBK about 10.33 p.m., JOIK about 10.50 p.m., and JOGK about 11.35 p.m. All five were received on the loudspeaker, and came through in good volume, but weaker about midnight. Speech, singing, and music were heard.—John MacKenzie (Mangamahoe).

2ZM Gisborne.

I NOTICE in your last number that a correspondent has picked up the Gisborne station 2ZM on a wavelength of 278 metres, and asks if anyone else has had the same experience. I picked them up last Thursday night at about half-past ten, broadcasting gramophone items. The music was very clear, although fading occurred pretty frequently. At twenty minutes past eleven the station was still going strong, with every word coming in very plainly. I use a home-constructed three-valve receiver.—D. S. B. (Wellington).

Body as Aerial.

READING of the fact 2YA fades badly in Hawke's Bay, we, being situated in Poverty Bay, about thirty miles from Gisborne, elevated at eight hundred feet, would like to say we receive 2YA with almost no fading at all. The volume is tremendous, and I can receive the station by making an aerial of my own body, which was insulated, and I had my finger on aerial terminal

of set. The station 2YA is very clear, with modulation excellent. Station 1YA with modulation excellent. Stations 1YA and 3YA are also very clear, and good afternoon reception.

We are using a five-valve neodyne set which also gives us good Australian reception. The new orchestra is very good, and as a whole the programmes are excellent, especially the guitar trios and items by mandolins. Wishing the Broadcasting Company all success.—A. Delahunty (Otoko, Gisborne).

Effect of Locality.

A LOT has been written lately about location, etc. I think my own experience gives a fair idea as to how location can affect reception. Until about a month ago, I was living about eight or ten miles air-line from my present address, and 1YA was a station of horrors, distortion, fading, etc. made it a station to be well left alone. 2YA, 3YA, and 4YA used to come in at good speaker strength. Now, strange to say, 1YA is perfect and the poor station is 4YA. In fact, this station takes some holding when I am lucky enough to get it. This is the first time I have ever written to you, so I will take the opportunity of expressing my appreciation of the "Record" and the good it has done for listeners.—A. O. Hayward (Otorohanga).

"Can't Sing—But Willing."

IN the current issue of the "Radio Record" there is a comment on the most cheerful announcer, and it is a toss-up between 2BL and 2GB. Well, in my opinion, both are good, but Christchurch, New Zealand, takes the palm, especially when he is on at the children's session on Thursdays. Some time ago he used to sing his opening announcements after the clock had finished. Certainly he cannot sing, but he is willing—like some of our paid artists in Wellington. But for a cheerful announcer he is out on his own, and what is more, nothing seems too much trouble, as I have known him sit until the small hours trying to get foreign stations to rebroadcast. He is worth a great deal to the company, and is well worth hearing.—J. K.

APPRECIATION.

A NELSON correspondent writes concerning 1YA:—

"I wish to congratulate the Comedy Players on their powerful presentation of the one-act play, 'Campbell of Kilmohr.' Mr. Montague's handling of the name-part was masterly and realistic, and most convincing, with just the right amount of restraint. How often a splendid part is spoiled by over-acting! The Highland mother was very well done, indeed and the whole effect very satisfying. At the same time, I hope these fine artists will choose another play from this collection that is not so desperately tragic next time—may it be soon!"

"I am hopeful that this will mark a new era in broadcasting in the Dominion, and wish to register my strong approval. I have listened to many radio plays produced in Australia, but mostly feeble in the extreme. On the same evening of June 1, the St. Andrew's Quartet put on "Our Pantomime" very attractively. I would especially like to congratulate the contralto who sang the Fairy Queen's song."

"I note a lot of grumbling in the radio magazines, and I could easily supply some myself if I wanted to swell the list. I believe in giving praise wherever possible, and I cannot miss this opportunity of expressing great appreciation of the very delightful contributions to the Auckland programmes provided by Madame Ainsley and her party."

OLD MOTOR-CAR BATTERIES

AVAILABLE FOR RADIO.

MOTOR-CAR accumulators are usually made heavier than those designed for radio work. The car battery receives severe usage, and is usually discarded when it fails to turn the starter over snappily. The discarded battery will often be found to be suitable for the radio set, since radio service is less exhausting.

Most cars use either a 6-volt or a 12-volt battery. Usually 6-volt batteries are used for radio. The voltage of the accumulator can be determined by counting the vent gaps—one to a cell. Each cell yields two volts, and they are connected in series to add up to six volts. If the battery is of 12 volts, a tap will have to be made at the centre and half used at a time.

Be sure about the polarity; if you haven't a voltmeter to check it, remember the positive is always the dirtiest terminal. Mark the polarity by scratching plus and minus signs on the wax coating.

Clean the battery thoroughly—a good wash with soap and water and scrubbing brush outdoors will do the job. To make contact with the terminals it is advisable to use regular battery clips.

You won't be able to charge the old car battery fully, but you will get a year or more of service out of it.

New Radio Terms

DEFINED IN U.S.A.

RECEIVING SET NOMENCLATURE

TO improve advertising and merchandising of radio receiving sets, and to aid the public in its purchases by official definitions of "electric," "socket powered," and other receiving sets, the United States Radio Manufacturers' Association, in co-operation with other radio trades associations, is presenting a radio receiver nomenclature.

The definitions of different types of receiving sets are designed as a guide not only to the 300 principal radio manufacturers belonging to the R.M.A., but also to advertising and business interests, as well as the public. Use of the official receiving set definitions in manufacturers' advertising, and also in that of jobbers and dealers handling R.M.A. products, will be requested. Advertising and merchandising agencies, including better business bureaus, also will be advised of the definitions agreed upon, designed to avoid misinformation to the public of the different varieties of receiving sets.

Expect General Adoption.

The receiving set definitions were developed by the R.M.A. engineering division, of which H. B. Richmond, of Cambridge, Mass., is director, with the assistance of technical committees of other organisations. The definitions were adopted and approved unanimously by the R.M.A. board of directors at their meeting at Buffalo, and are expected to receive the official approval of other radio trades associations, so that the definitions may be generally adopted in manufacturers' literature and advertising during the coming season.

In an effort to improve merchandising practices and keep the radio buying public from being misled in the use of terms applied to receiving sets, the R.M.A. engineering division and the board of directors recently adopted definitions for "socket powered," and other radio operation. These were designed more as engineering definitions rather than for guidance of the public and use in the merchandising of radio. The new and official radio merchandising definitions are as follow:—

BATTERY OPERATED SET—A radio receiver designed to operate from primary cells or storage batteries, shall be known as a "Battery Operated Set."

SOCKET-POWERED SET—A radio receiver of the "Battery Operated" type, when connected to a power unit operating from the electric light line, supplying both filament and plate potentials to the tubes of the receiver, shall be known as a "Socket-Powered Set."

ELECTRIC SET—A radio receiver operating from the electric light line, without using batteries, shall be known as an "Electric Set."

A. C. TUBE ELECTRIC SET—A radio receiver employing tubes which obtain their filament or heater currents from an alternating current electric light line without the use of rectifying devices, and with a built-in tube rectifier for the plate and grid biasing potentials, shall be known as an "A. C. Tube Electric Set."

D. C. TUBE ELECTRIC SET—A radio receiver employing tubes which obtain their filament or heater currents from a direct current electric light line without the use of rectifying devices, and with a built-in power plant for the plate and grid biasing potentials, shall be known as a "D. C. Tube Electric Set."

AUSTRALIA HEARD IN A CAR

SEVERAL people sitting in Lincoln's Inn Fields, London, in a saloon car fitted as a wireless receiving station on a recent evening heard Melbourne City clock striking 6 o'clock (Monday morning) just after the London clocks had chimed 9 o'clock (summer time).

A six-valve super-sonic receiver was placed in the car with an aerial of about 8ft. of copper trolley-wire used by electric trams, rigged to the top of the car. The earth wire was connected to a grease nipple on the motor-car frame.

Mendelssohn's "Spring Song" and Handel's "Largo" were heard at full loudspeaker strength within the saloon with practically no atmospheric interference, and the whole of the news announcements came through perfectly.

S-O-S

TRAVEL IN COMFORT BY CAR

WELLINGTON—PALMERSTON
NEW PLYMOUTH.
Use Our Booking Offices in Advance.
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LARGEST STOCKS OF RADIO ACCESSORIES IN SOUTH CANTERBURY.

COMPLETE INSTALLATIONS A SPECIALTY.

BREHAUT BROS.,
TIMARU AND GERALDINE.



If you haven't a Good Radio—Half the World

is Passing you by!

KING 5-VALVE NEUTRODYNE SETS, complete with Speaker, Batteries, Aerial Wire, etc. . . From £36/10/-
BROWNING-DRAKE SETS, made to order. Amplifiers, Crystal Sets, Speakers, in large variety.

SEND FOR CATALOGUE.

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ADDRESS

Our Short Wave Corner

MR. SELLENS writes:—

I received a very interesting letter full of radio news from Mr. Marvin H. Thoreau, Vancouver, B.C. He says the "Radio Record" is appreciated over there. The engineers of CNRV first, and then several other DX fans, have the loan of it, after that they are sent for future reference. The short-wave stations heard there are in many cases received at better strength than in New Zealand.

The orchestra that is often heard from 2XAF reported by myself as "Ralph's," is "B. A. Rolfe's" and the conductor "Rolfe" is the solo cornetist. This orchestra is on Broadway, New York City, and is broadcast by the eastern chain of National Broadcasting Company over probably twenty stations and using thousands of miles of 'phone wires.

Sometimes WGY hooks up with WMAK, Buffalo; WBBL, Syracuse; WILAM, Rochester; all these cities being in New York State. After dark KDKA on 63 metres is often stronger than any station (in Vancouver) in the broadcast band except locals. 2XAF is usually speaker strength from 5 p.m. and has wonderful quality.

KGO, Oakland, has permission to use 10 kw. on 33 metres, but is not operating yet (May 27, 1928). There are not any short-wave stations on the Pacific coast except a few low-power ones.

Mr. Thoreau has not heard 2XAD or KDKA on 27 metres for several weeks (the latter station has been missed of late in New Zealand on that wavelength).

Saturday, June 16.

SSW was fair speaker strength just before 8 a.m., when an announcement was heard stating that they would relay the speech by — from — University dinner. Lord Balfour was to have been the speaker, but he was unfortunately indisposed. The person who spoke referred to the absence of Lord Balfour, etc. This talk was about 50 per cent. intelligible, surging being the cause.

PCJJ put on their regular Australian and New Zealand programme from 3.30 p.m. till 6.30 p.m. Reception, although not quite as strong as last Saturday, was readable till the finish. During the afternoon the announcer congratulated Australia on the Pacific flight by Kingsford Smith, and hoped that he would continue to New Zealand and round the world in safety, etc.

At RFM late in the evening they were having a gay time. A talk was heard first which appeared to amuse his audience as there was a lot of hearty laughing at times. After this there were some enjoyable musical items which were well applauded by the people in the place of origin.

Sunday, June 17.

2XAF on 31.4 metres were relaying the Isle of Blues Orchestra from — Hotel. This programme was broadcast by WGY, WBBL and WMAK. This station was spoilt before 3 p.m. by a howler. Several amateurs were heard.

Monday, June 18.

31.0 commenced their weekly transmission for reception in Britain on 32 metres at 6 a.m. The volume was very good, but fading was intense. They were using a new type of aerial and asked for reports, comparing reception with this and the old aerial. To me they appeared about the same.

RFM was heard giving their market reports during the evening. It would cause a big howl if as much talk was put on here as the poor Russians have to put up with.

Tuesday, June 19.

Big Ben was heard through 5SW at 6.30 a.m., followed by a violin solo. Reception was better than usual at this hour. A lady was talking from RFM during the evening.

Wednesday, June 20.

PCJJ gave their usual gramophone recital. Reception was good 'phone at 5.30 a.m. and rapidly gained good speaker strength.

An announcement should soon be heard from Philips in reference to the relay of the Olympic sports at Amsterdam, which they have promised to relay.

A lecture through 5SW at 6 a.m. was readable (about 90 per cent.) from the loudspeaker. It was about motor-car engines, describing in detail the various parts. "Daventry Calling"

was heard at 6.15 a.m., followed by a comic song and "Levensky at the Wedding." After this the programme was continued from London.

During the evening 2BO, 2AW, 2GA and 2AH, all of Wellington, were testing on telephony.

Thursday, June 21.

A Japanese on about 61 metres was heard giving a typical Jap item, a string instrument, with chanting. A call was not heard, but as JHBB has been experimenting on different wavelengths it was probably them.

RFM was the only other station heard, when a lady was again at the "mike."

Friday, June 22.

From about 5.15 a.m. on 24.5 metres the station which caused a lot of interest last week was heard. A call was not heard, but often "Allo, Allo—" The voice appeared to be the same as used to call "An Japanese," but this was not heard this time. Strength was fair 'phone and very steady. This station went off some time before 6 a.m.

Seven o'clock was heard striking from Big Ben at 5.30 a.m., but the talk that followed was not audible.

PCJJ was fair 'phone at 5.30 a.m., with slight fading, volume increasing later.

The following may be of interest in the broadcast section, being extracts from M. Thoreau's letter:—

"I note several New Zealanders have received 2XAF, about 280 metres, General Electric, crystal controlled, 50,000 watts output, at Downers Grove (near Chicago), Illinois. This station often comes into Vancouver (2000 miles away) as loud as a local station. (I had it almost as loud as 2YA, but static and other noises were fearful.—F.W.S.) 3XN, Whippany, New Jersey (Western Electric Co., 50,000 watts, crystal control), is often heard with good strength on about 405 metres.

"Stations in Canada and United States with calls beginning with figures instead of the usual C, W, or K, are experimental or new stations which are not operating regularly yet.

"I note that many New Zealanders complain of distortion from their stations. I can honestly say I have never heard the slightest distortion or over-modulation from 1YA, 2YA, or 3YA; they are very steady and any fading is slow and regular.

"Something that must be confusing to foreign listeners when they hear one of our stations around Vancouver or Cincinnati, and then when reference is made to station lists the call denotes Lulu Island or Harrison. The explanation is that nearly all the large stations are located about 15 to 30 miles from the city studios, and the lists give the suburban address of the transmitter."

A Short-Wave Schedule.

SHORT-WAVE station KDKA, of Pennsylvania, U.S.A., made an announcement for overseas listeners which may be of interest to some of your readers. They announced that in future they would broadcast every Monday and Thursday afternoon between 2 p.m. and 4 p.m. These times are Pennsylvania. I have not attempted to give the corresponding New Zealand time, as I do not know whether daylight saving is in operation in that State. [Yes—throughout the States.—Ed.] I tuned them in on the speaker at 3 p.m. yesterday afternoon, Thursday, June 14, and as they closed down at 3.4 p.m. there was little time. They came in at very fair speaker strength with one stage of radio detector and two of audio. The wave-length is, as near as I can judge, about 26½ metres. While on the subject it may be of interest to some to know that a stage of radio frequency before an ordinary adaptor or short-wave set makes short-wave reception a pleasure indeed. The shield grid tube has certainly given us a simple means of efficient amplification in the short-wave band. The radio frequency amplifier used by the writer is practically the same circuit as that described in a recent issue of the "Radio Record." The only difference is that I use magnetic instead of electro-static coupling between the aerial and the set and also a slightly different arrangement for obtaining grid bias. These are very minor points, and the circuit as described in "Radio Record" should not give the least trouble. There are two very marked advantages apart from the added amplification, and these are quietness of reception and a very noticeable absence of body capacity. Tuning is very much easier despite the one extra control.—J. R. Howard (Marton).

MR. STOUT'S LETTER

Reply to Comment.

I WAS very much surprised to read in the last issue of the "Radio Record" the uncalled for criticism of the "Short-Wave Corner" (of which I have been the chief, and often the only contributor) by Mr. Olaf E. Stout, who, because he was lucky enough to hear Hoover's nomination, appears to think that other reports of reception are to use his own expression, "the bunk."

After all, there is nothing very smart in picking up 2XAF; plenty of us do it every afternoon that they are on the air, and are at home to tune in. Of course, it is admitted that it was an interesting event to hear, and Mr. Stout was lucky to have been on the job at the right time.

As regards my contributions to the "Short-Wave Corner," it was never intended to be only a list of real good reception, but stations heard from time to time, reception conditions, and other items which might interest other short-wave listeners throughout New Zealand. That these weekly notes have been appreciated by a large number of readers is proved by the numerous letters which I have received from all over the country, and one from Vancouver, asking questions in reference to identity of stations heard, and many items peculiar to short-wave reception. The beginner also finds the notes handy to compare reception at different times which, of course, vary considerably.

Never at any time has any claim been made by any contributor to be a champion listener, neither do I remember reading of any correspondent "attempting to elicit the sympathy of the community by exposing their abominations."

I am surprised at the publication of these remarks without any comment, considering the time and trouble I have taken for nearly twelve months in writing up these notes from week to week, and in replying to the correspondence which is the natural outcome of anything interesting to short-wave listeners. To say the least, it is not at all encouraging.—F. W. SELLENS.

Remarks Unfortunate.

IN the "Radio Record" of June 22 appeared a letter written by one Olaf E. Stout, some of whose remarks appear to be somewhat unfortunate. Mr. Stout's letter is either an attempt to belittle Mr. Sellens's endeavours to assist the short-wave listener, or a somewhat absurd means of obtaining a larger audience for a recital of Mr. Stout's own extremely remarkable performance. It is, to say the least of it, a trifle inconsistent for Mr. Stout to object so strongly to the publication of Mr. Sellens's records of reception, and almost in the same clip of his pen to descend from his fine criticism to indulge in a much less complete, and much more self-congratulatory record. One miserable example of short-wave reception, and five long paragraphs about it! Dear me, Mr. Stout!

Seriously, though, Mr. Sellens's reception records are much appreciated by listeners. It is an easy matter, given these lists, to check up on performances of one's receiver, and in addition one always knows what stations can be expected on short waves. I am by no means alone in suggesting that Mr. Stout's attack on Mr. Sellens's conduct of the short-wave corner will be very keenly resented by the many listeners who make use of his notes.—W. G. Young, 30 Ascot Street, Wellington.

The Notes Appreciated.

WE read in last week's "Radio Record" of the wonderful S.W. reception of the Republican Convention in Kansas City, America, broadcast by 2XAF, Schenectady, New York. Your correspondent, describing this reception, made some uncalled-for remarks regarding S.W. listeners who send reports for your S.W. corner. Summing it up, these so-called "dial twiddlers" are the ones that pave the way for those individuals who sit back and throw the dirt. Just what happens is this: The "twiddler" will search the air for one of those mysterious S.W. stations, anywhere from 10 metres to 100 metres wave-length, log one, perhaps, on 33.7 metres, and send in the best possible report to the "Radio Record." Lazybones will have a look through the S.W. corner, says to himself, "Hullo, another S.W. station logged" (more bunk, I suppose); he looks for the time received, and notices it is 5 a.m. or 12.30 a.m.; lazybones will stretch himself, and say to himself, "No good to me"; it is too early or too late, as the case may be, and goes to bed wishing more stations would increase their power, because picking up 2XAF nowadays is as easy as stealing wheat from a blind fowl. Perhaps we may hear of someone logging a 250-watt S.W. station, such as WLW, Cincinnati (8XAL on tests), 52.05 metres, and send in a full programme report, but, of course, you must be an expert dial twiddler to pick a station like this out.

I think myself it is a boon to radio that there are a few of these so-called "dial twiddlers" about, because most of the S.W. distant stations ask for reports on their transmissions, power, modulation, and so on. So carry on, twiddlers. Regarding the champion S.W. listener of New Zealand, I do not know of anyone so far who claims that distinction, but may I suggest the medal or cup be presented to the rightful owner, and not a "dial twiddler" reading this, will feel cold or feel hot I will conclude, trusting no one, after under the collar.—One of the "Dial Twiddlers."

Editorial Comment.

WE do not know of any subject which occasions greater variety of opinion than radio on practically all points, technical and otherwise, connected with it. For that reason, we have since the inception of the "Record" given readers very great latitude in the expression of their views and feelings both as regards criticism of the Broadcasting Company and ourselves and all matters connected with radio. In the case in question we allowed Mr. Stout's observations to pass, recognising him to be entitled to his viewpoint. We did not take his comment as being personal but as reflecting a desire for "newsiness" in the short-wave notes, rather than undue formality. That the short-wave notes as given by Mr. Sellens regularly are greatly appreciated we already knew and are pleased to have the confirmation in this issue of others. The value we see in them is a record of new stations (if any), an indication of the standard of reception and a regular stimulus to others to go after short-wave reception by his record of results secured. That his regular notes are of value is proved by correspondence not only from New Zealand listeners but from Vancouver, and we ourselves drew the attention of the short-wave section of the B.B.C. to the check available on transmissions by these weekly notes. He is certainly deserving of all thanks for his skill and patience. On the other hand, we did not take from Mr. Stout's letter any desire to acclaim his experience as an unusual feat in reception. The opportunity was there and the conditions right, and he had the pleasure of listening-in in New Zealand to an historic event and recorded it for the interest of others. Perhaps undue importance has been attached to a facetious form of expression.—Editor.

GENEVA ON THE AIR

AS from Wednesday, May 16, station PCCL, Kootwijk, working on a wave-length of 18.4 metres, and a power of 25 kilowatt, has been experimentally broadcasting information on behalf of the Information Section of the League of Nations. This is an effort to reach non-European countries. The secretariat at Geneva would be glad of any reports of reception.

SHORT-WAVE TRANSMISSION

STATION IN CHRISTCHURCH.

IT is understood that a short-wave transmission station is to be installed in Christchurch by 3ZC, and that it will operate on a wave-length of 50 metres. It is stated that weekly programmes will be broadcast for overseas listeners.

A short-wave listening station is being installed in Wellington by the Radio Broadcasting Company at Mt. Victoria, to facilitate the reception of overseas short-wave broadcasts, with a view to their re-broadcast by 2YA when conditions are favourable.

RADIO IN POLITICS

A YANKEE PREDICTION

A NEW era of political campaigning by means of radio broadcasting and the talking motion picture is dawning, Dr. A. N. Goldsmith, president of the U.S.A. Institute of Radio Engineers, declared recently in New York, in commenting on the announcement that Secretary of Commerce Herbert Hoover will use both in his campaign for the Presidency if he is nominated by the Republican Party.

"Democracy, for its successful operation, depends upon intimate contact between candidates for office and the electorate body," he said. "In the past such contacts were extremely limited because large audiences had to be assembled to see the candidate and the candidate himself had to travel over many thousands of miles. Secretary Hoover, as an engineer, has seen the great advantages to be gained through the wide use of radio and motion picture facilities.

"Through recently developed means of communication the candidate need not travel around to effect direct contact because his voice and appearance can reach audiences in large theatres or halls or radio listeners in the home. In effect the homes and theatres are transformed into vast auditoriums. The talking motion picture and radio broadcasts, even in the vast countries of today, restore that intimate contact of the ancient Roman forum, where all the people gathered to hear all the candidates. In the very near future we may also add the wonders of television to the facilities at the command of the political campaigner."

A representative of the National Broadcasting Company said no arrangements had been made as yet for political broadcasts over its facilities, but declared that an announcement would probably be made in the near future.

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Radio In Canada

NEWS FROM MR. J. H. OWEN

EXPERIENCE OF EX-PRESIDENT OF WELLINGTON RADIO SOCIETY

A FEW weeks ago Mr. J. H. Owen, ex-president of the Amateur Radio Society of Wellington, left New Zealand, with Mrs. Owen, on a visit to England. Mr. R. L. Jones, acting-secretary of the society, has received the following interesting letter from Mr. Owen, written in Toronto, Canada, on May 25:—

I SUCCEEDED, after a little trouble, in securing a wireless set, which I hired for a fortnight at 5 dollars (£1) a week, plus cost of installing. It was a six-valve Bosch, and with a 50ft. coil of wire around the ceiling I managed to get quite good results. I must have logged well over a score of stations, including the following:—CKGW, 5000 W. Canada's Cheerio Station; CKCL, Every Ready Battery Company; WJZ, N.Y.; WGY, Schenectady, 500 W.; CFCA, 500 W. Star Publishing Company; KDKA, New York; CKOW, Toronto, Nestle's Food; WOR, N.J., 3500 W.; WTAM, Cleveland; WEAF, N.Y.; WMAK, Buffalo, N.Y., 1000 W.; WKBW, Buffalo, N.Y.; WTTT, Washington, D.C.

Choked with Waves.

THE atmosphere here is choked with waves, and as you revolve the dial, station jostles with station and whistles indicate further distant stations. It is perhaps as well that my aerial was not an outdoor one, for the mush was quite bad enough as it was. The part of the city where my hotel was located was not the best from a reception point of view. Too much induction from machinery and plant of every description, to say nothing of the enormous quantity of power lines due to the proximity of Niagara. I understand that a few miles out that conditions are very much better, but all my reception was accompanied by a constant grating noise which resembled static. The modulation generally is quite good, and much of the music is excellent, but there is a large percentage of mechanical music due to the number of stations and the frequent programmes. There is a dollar license collected by the Post Office, but they are not strict. In Toronto, some five stations using separate call letters are in reality only three stations, two of them using two call names each, for example, CKCL, 516, CKNC 516 metres. This station is alternatively worked by two battery companies. During periods of the day all these stations give concerts varying from 30 minutes to one hour, in the interests of various advertisers. For example, Applethorn, the Hatters', provide an hour's music with their own staff artists, whom they call the "Mad Hatters." Many of the firms do likewise. Almost every trade you can think of is represented. I need hardly say I consider the principle a bad one. It gives a fairly full service, but somewhat erratic and patchy, and without any co-ordination. I think our own system is immeasurably superior.

The Friendly Announcer.

ON Thursday, May 17, at 8 p.m., only one station was on the air giving a talk on golf. At 8.30, market report, vegetables, grain, etc.; 8.45, speech from the secretary of the National Dairy Company; 8.50, organ recital came in from Montreal. Thus compared with our system you see the irregularity of this. The announcing is clear and precise, but a good deal more latitude is allowed here than with us. The announcer not infrequently makes remarks concerning singers and items, and intersperses the concert with specimens of his own native wit and humour. Example: "We start our next session at 11 a.m. to-morrow with the usual splogage." The audience are addressed at times as "folks," "friends," and "boys." There is rather an abundance of songs of the sentimental melodramatic order, such as "What can I say dear, after I say that I am sorry?" The general trend both here and in the States is towards higher-powered stations to the exclusion of the smaller ones, which in course of time will improve matters, no doubt.

I send kindest regards to every member of our committee. I am just off to Niagara for the week-end, and sail from Montreal on June 1.

Yours very sincerely,

JOHN H. OWEN.

We have received from Messrs. Johns, Limited, Chancery Street, Auckland, a catalogue and price list of radio sets and accessories. This publication covers a wide range of radio equipment and is of value and assistance to all constructors in the selection of parts. Copies will be sent post free on application.

ALL the distortion sometimes experienced when very loud passages are being reproduced is not due to the loudspeaker. It is more often to be located in the set itself, and is usually due to the overloading of the last or last-but-one stage of audio amplification.

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