

THE OFFICIAL ORGAN OF THE B.B.C.

Vol. 1. No. 11

[G.P.O. as a Newspaper.]

EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES

THE BRITISH
BROADCASTING
COMPANY.

For the Week Commencing SUNDAY, DECEMBER 9th.

LONDON ABERDEEN CARDIFF

ABERDEEN

GLASGOW

BIRMINGHAM MANCHESTER
BOURNEMOUTH NEWCASTLE

SPECIAL CONTENTS:

LOOK TO THE FUTURE!
By P. P. Eckersley, Chief Engineer of the
B.B.C.

MY MICROPHONIC DEBUT. By John Henry.

COMETS AND THEIR STORY. By Dr. A. C. C. Crommelin, F.R.A.S.

THE STORY OF "SCOTS WHA HAE."

THE CHILDREN'S CORNER. Conducted by Uncle Caractacus.

LETTERS FROM LISTENERS.

WHAT'S IN THE AIR?

By J. C. W. REITH, Managing Director of the B.B.C.

WIRELESS Receiving Sets are apparently to be a popular form of Christmas present this year. Frequently of late I have been asked which make of set I can recommend for such a purpose. The question is an embarrassing one. It cannot be answered by the B.B.C. As private individuals most of us probably have preferences, but as officials—no views.

Even at the risk of being thought to give a highly partisan opinion. I might say that few gifts would appear to have greater acceptability or utility. As with the gramophone, the donor is in regular remembrance, and a present which can be used every evening of the year, to bring entertainment and information, commends itself.

As people unconsciously judge a corporate body or company by such members of it as they come in contact with, I was pleased to hear the other day that our telephone operators have been specially commended by the Exchange Superintendent for their satisfactory and courteous service. I am told that, coming unsought from such a source, this is high praise indeed.

It was a difficult matter, during the Election weeks, to satisfy everybody that the news bulletins were really not intended to be party propaganda on the quiet. But as allegiance to each party in turn was suspected, it was all right. One morning I had three personal letters complaining that there had lately been undue preponderance of extracts from the speeches of one party. Incidentally, I also had two others asking why that same party had received so little attention.

One heard of many Election Night wireless parties having been arranged. There should certainly have been more comfort than usually attends these nights in clubs or elsewhere, where the number of the faithful and interested diminishes gradually, and one is obsessed all the evening with the thought of the weary trek home.

The first international broadcast has now been arranged. M. Poincaré has consented to broadcast a message of greeting on New Year's Day. The French Prime Minister will speak from Paris and will be broadcast from all B.B.C. Stations, His words will be carried from Paris to London on telephone wires.

There are great possibilities disclosed by this preliminary venture. The effect on international sentiment created by the people of one nation being able to listen, not only to their own leaders, but to those of other countries, may be profound. One can imagine the impression which would have been made by an address from Mr. Asquith to the people of France in August, 1914.

By the way, is it realized that if, say, a Prime Minister suddenly conceived the necessity of delivering a personal message of vital urgency to the people of this country, at any reasonable hour after six p.m., he could have an audience of roughly two million by giving us five minutes' notice? "I wish to speak to the British Isles," And this without leaving his own study. With longer warning a much greater audience would be able to collect to hear him.

Advisory Committees form an important adjunct to our system of organization. Already we have musical, educational, and ecclesiastical advisory committees in active participation, and now final arrangements are being completed for the establishment of two committees to advise us on the construction of our programmes for the Women's and Children's Hours respectively.

(Continued overleaf in column 3.)

My Microphonic Début.

By John Henry, the Popular Entertainer.



MR. JOHN HENRY.

IT all started some months ago. I was sitting peacefully at home—that is, as peacefully as a married man can expect to sit—when my wife, who had been unaccountably quiet for some time, said: "John Henry."

BENEZE SEL

I said, "What ?"

She said: "I see by the paper that the B.B.C. are engaging artistes to entertain the

unseen hosts. Here's a chance for you," she said. "Your audience won't be able to see you and your appearance won't be against you. Here's your opportunity," she said, "and you'll go after it with all the chic and embonpoint of which you're capable when I'm behind you. 'And every night you'd better bring your wages home to me, For Heaven will Protect the Working Girl,' she sang, and her gladsome laugh rippled on the balmy air like the sound of water dripping into a rusty pan.

So I wrote to the B.B.C. and I got an appointment for an audition. At the time appointed I went to the office and I interviewed the Commissionaire, and I think he must have liked me, because I noticed he couldn't keep his eyes off me, and he told me to wait, and presently a young lady came out. I didn't know then, but I found out after, it was Auntie Sophie, and she looked at me and she said: "Good heavens! What do you want?"

Interviewing an Uncle.

I said: "I want to warble," and she turned round, and I think she must have had some secret sorrow, because I could see her shoulders heaving; but she took me into another room, and there was a gentleman there and he said: "Go ahead! Show me what you can do."

So I said my piece, and there were tears in his eyes when I'd finished. "John Henry," he said, "you're both versatile and ambidextrous, if I may be allowed the use of an expression far above my station in life. Go forth! Go forth! You'll hear from me," And he covered his face with his hands and pushed me down the lift shaft.

I found out afterwards this was Uncle Jeff, and he says I've put years on him.

However, I went home and waited, and eventually I got a note to say that next Wednesday I was to make my début before the microphone. So on the Wednesday I went up to the Studio, all complete with pianist, and after lingering shivering on the brink for some time, we were finally ushered into the presence of the microphone.

A Hopeless Moment.

I didn't notice the room at all. I was placed before a shrouded form on legs, with a metal plate on top, and I was vaguely conscious of a rattling noise somewhere in the vicinity, and it gradually dawned on me that it was my knees knocking together, and I remember wishing I'd been a better man and lived a nobler and purer life.

Now, I've had some bad moments in my time. I've been First Turn in a music hall in that Yorkshire city that's known as the Grave of Comedians. I've offered my seat in a 'bus to a lady who has refused it very audibly, and I've gone home to the wife short of half a crown that I couldn't give any satisfactory explanation of, but I've never before experienced anything quite so hopeless as I did at that moment,

Explorers have written of the ghastly loneliness of the desert and the Arctic regions. Castaways on uninhabited islands have chronicled the appalling solitude of existence under such conditions. But no explorer or castaway ever experienced such a forsaken feeling as crept over me when the announcer opened the switch and made the statement that: "John Henry will now entertain you."

Familiar, but Not Funny.

Icy waves of horror overcame me. My mouth seemed to fill with dry, fleecy, sticky wool. Cold tremors ran over my frame, and I thought of the thousands of listeners getting ready to put down the ear-pieces; but after a convulsive gulp, I heard a voice that I didn't recognize as mine, and which I noticed appeared to be having difficulty in pronouncing the letter "s," repeating lines that seemed vaguely familiar, but not at all funny, and after an eternity, I found myself out in the night air with a badly-shaken pianist and no clear recollection of what had happened, but with a horrible feeling that "the bird" had been liberally administered.

And now, when I hear the young fellows swanking and telling their adventures and expatiating upon the many thrills that this life affords, I sit back and watch the blue smoke curling out of my pipe, and in a vision I see myself once again coming safely out of that most awesome of all ordeals—my début before the microphone.

What's in the Air?

(Continued from the previous page.)

These committees will be composed of some of the most prominent people in the country who are interested in these particular spheres of activity.

It has been decided to try yet another experiment. This time we are going to broadcast a complete Church Service—this without prejudice to any other religious denomination. If the result is satisfactory, we shall be guided by our representative Sunday Committee in the matter of further broadcasts of a similar character.

Recently, a certain theatrical journal issued a red-typed "Warning," addressed to all theatrical managers, in which extracts from informal speeches by the Postmaster-General and myself were quoted, without regard to the context. This is liable to give an entirely erroneous impression of our attitude to the question. We have abstained from hostile propaganda on the subject, and everything that has been written or said by us to the Entertainments Protection Committee, or elsewhere, shows that the Broadcasting Company has sought every means in its power to reach an amicable understanding. We have said that if there is any chance of the entertaining industry being prejudiced by broadcasting activities, the B.B.C. is still willing to assist in averting such an unfortunate result, whether by means already suggested by them or by the consideration of any proposal which may be put forward.

Inspired by a Thunderstorm.

The Story of "Scots Wha Hae." By A. B. Cooper.

ROBERT BURNS is the prince of song writers, and it is his songs mainly which keep his memory so green. When we think of the world-wide vogue of such songs as "Auld Lang Syne," "Ye Banks and Braes," and "O Wert Thou in the Cauld Blast," we cannot wonder that Burns holds a place so warm and secure in the heart of the whole English-speaking race.

He wrote love-songs galore, but, as far as I can recall, he wrote but one war song. It was sufficient. Had Burns written nothing else except the ode he entitled: "Bannock-Burn: Robert Bruce's Address to his Army," it would have been sufficient to ensure him immortality, for it is the greatest war ode, probably, in the world. Certainly, as literature, it is infinitely finer than the Marseillaise, although the great French National Anthem excels it in the romance of its history and influence.

A Human Barometer.

Most great war sougs have been the product of a revolutionary period, when the passions of men were fired to fever heat, and although it might be thought that the song universally known as "Scots Wha Hae"—although that phrase standing by itself is quite meaningless—was an exception to this rule, it was, at any rate, the child of storm and tempest.

Burns, like all great poets, was temperamental to an extreme degree. Everything affected him; and thus he responded like a human barometer to weather conditions. On one occasion, towards the close of his short life, and during his residence in Dumfries, he accompanied a Mr. Syme on a tour through Galloway, riding on a grey Highland shelty.

This gentleman, in writing to a friend, says:

"We left Kenmore, and went to Gatehouse. I took him (Burns) by the moor-road, where savage and desolate regions extend wide around. The sky was sympathetic with the wretchedness of the soil; it became lowering and dark. The hollow winds sighed, the lightnings gleamed, the thunder rolled.

"The poet enjoyed the awful scene—he spoke not a word, but seemed rapt in meditation. In a little while the rain began to fall; it poured in floods upon us. For three hours the wild elements rumbled upon our defenceless heads. We got utterly wet."

A Setting for Tragedy.

In a succeeding letter, Mr. Syme gives the sequel to this storm on the moors of Galloway. He says: "I told you that, in the midst of the storm, on the wilds of Kenmore, Burns was rapt in meditation. What do you think he was about? He was charging the English army, along with Bruce, at Bannockburn. He was engaged in the same way on our ride home from St. Mary's Isle, and I did not disturb him. Next day he produced me the following address of Bruce to his troops."

It is not often one is favoured with the exact local colour of an occasion of inspiration, but here we have it to perfection: the thunderstorm in the night on a wild moor! That, surely, is the setting for tragedy, and it fired within the heart of Burns, at a time when misfortune and neglect, coupled with his own wilful and headstrong nature and irregular habits, had robbed him of the cheerful optimism of his earlier years, all the material of revolt that had always lain there, ready to catch fire, and spring into sudden and devastating flame.

At Home With My Spiders.

A Talk from London, by Edward C. Ash,

THERE are spiders of all kinds, they vary in size from those you can hardly see to great big fellows. Some are clumsy and ugly; others beautifully built, as lithe as greyhounds. A few go about like lizards, close to the ground, and some walk sideways. Some go along by leaps and bounds and others leave a line wherever they go. Some make webs. Most don't!

Spiders are most difficult. You have to learn to know them and to understand them before things go well.

The trouble really is the domestic arrangements—their meals.

Not long ago, on one of the heaths near London, I found a huge web, composed of such large meshes that I knew it was the property of one of the largest Epeira spiders. Close by was its house, made of closely-woven silk, into which heaps of grass seeds had been arranged, and as there was no grass of this kind within eight feet, it meant that the spider must have carried the seeds that distance.

A Difficult Customer.

Projecting from this house I saw a couple of long and strong legs, so Madam, as I guessed it was, was there in residence. There was her nest, too. We went home together. Then I tried to feed her-nothing doing! I tried again the next day; I spent hours trying to make her take notice! Raw meat; cooked meat, dead flies! She did not see these things or notice them. She just walked on top of them; and as to flies! Well, I put a dead fly near her. Madam Spider felt it, drew back, struck at it wildly and fell headlong out of her web, terrified. I put that fly near her again, and she just ran for her life, bolted as if she were being chased by some fearsome dragon. I tried a living flyeach time they met, the spider turned and ran

the other way. The fly walked between her legs; the spider, as far as that fly went, did not exist.

A Long Fast.

More days passed. She was getting smaller and slept all day in a deep sleep. I tried flies. I put one near her. She woke with a jerk, and fell on to her back and recovered her feet and tried to hide. It began to get serious now, for fourteen days had passed and she had eaten nothing. Then one day one of the flies I gave her buzzed and the spider at once woke up and leapt on to it and very soon had caten it. I understood then, and she now eats five flies a day, but they must buzz, or nothing doing.

But you bring a buzzy fly near to a wolf spider, and you are wrong again. To a wolf spider a buzzy fly is just as abnormal as a non-buzzer is to the Epeira spiders. That is half the fun in keeping spiders—one has to know just how to dish their breakfast up; if you do not, they just die.

If you are interested in speed, the Linyphia spiders are the boys to keep. They are the ones which sit under a sheet of very fine web. Whilst the Epcira are nearly blind, these speed merchants have good sight, and once they are on the move, it takes all your wits to stop them.

One day I was feeding one of these spiders and tried to drop a midget into her web. The midget went in, the spider went out. She was under special observation. She lives in an umbrella now, hung on a curtain pole. But I caught her a week later. She was engaged in a sort of musical comedy without music all on her own—a very serious business for her, a very difficult one, too.

Afraid of Her Shadow.

At first, I could neither make head nor tail of it. I saw something drop from the ceiling and whirl round and then climb up, and then at once drop and whirl again. So I climbed up on a chair to see what it was all about. Can you understand? Well, you see, spiders hate strangers, hate their relations, unless they are used to living near them. Baby spiders nestle up like peas in a dish, but "growed ups" don't. Each time the poor thing went up to the ceiling. she met her shadow. As soon as she met it, she dropped at once and whirled round at a terrific pace, so that her enemy (the shadow) would not get her. It is an awful strain for a spider to hang on a line, and nothing hates it more than a Linyphia spider. They always give that job up at once. So up she went again, and once more the dreadful shadow loomed up, and down she came. This went on until I ended the trouble by putting her where there was no shadow, then she was happy. She has

(Author of "British Spiders: Their Lives, Loves and Tragedies.")

changed her skin three times since then. There are three ghosts hanging just above my mantel-piece.

I had an awful fright once; it was not the first or last, either; for, knowing that I am keen on winged and other things, people bring in various creatures such as wasps in boxesmatch-boxes usually-and leave them in my room. I came home one night, saw a matchbox, wished to light my pipe, opened it for a match and dropped it! As I opened it, something leapt out. I chased it. It took books and papers in a stride, it dodged in and out, it tried to take the inkpot, but landed on my sleeve and then fell on the floor. It was night; shadows helped it. All seemed lost and then I breathed on it; it stopped dead and curled up, and I put it back into a match-box. I now tried breathing in my spidery en masse, some fell in heaps, others ran faster, but I accelerated the "breathe" and the lot also ran, also curled up. None escape now.

Becoming Invisible.

If you blow at a Pholeus spider, it is very different. A Pholeus looks rather like a palmkernel on remarkably long legs. If you blow at it, it either meanders off on its two-inch and one-inch legs, or it decides to become invisible.

Hanging upside down, holding on to a fine thread with its feet, it shakes itself so rapidly that you can only see eight black speeks where its feet hold on to the threads. Then gradually you see a mist appear, and then the spider looms up as the pace slows down.

The mother Pholeus, by the way, catries her eggs and her family in her jaws.

I have not much time to tell you something of the love scenes I have seen. I keep my spiders under observation. Some spiders live husband and wife together more or less—more less than

> more. Still, they do not fight, nor does the lady eat her lover, or husband.

Surprised the Landlady.

A few nights ago, some of the children did not like the look of mother, so they crawled out of my spidery. some 300 strong. When my landlady came in next morning, she was surprised. It was worse than any elopementit was awful! You could hardly see her for web: it filled her eves, mouth, ears, it hung in pleated folds over her nose, it decorated her clothing with festoons. It tied my bed to my fountainpen and my boots to my umbrella - long streamers waved from off my typewriter.

By the way, when winter comes, what about the flies? It seems that I am in for a rough time. Five flies per spider per day, when there aren't any, is a bit thick, isn't it?



Tommy (to eminent violinist on a visit to the house): "Do come and look, Mr. Fiddleski.

Harry's making a topping wireless set from your violin."

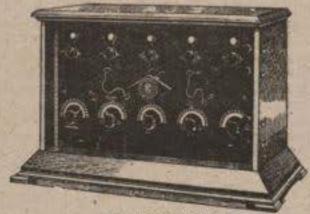


SUPERFIVE

ALL STATIONS ON A LOUD SPEAKER with PERFECT REPRODUCTION, STRENGTH, and SELECTIVITY.

Two H.F., one H.F. Rect., and two L.F. power valves. ANY COMBINATION OR NUMBER OF VALVES.

Send for Superfice Booklet.



The 1924 MODEL

In Lock-up Oak Cabinet as illustrated, including special valves, 120 V. H.T. and coils covering all British Stations, £56 5s.

Other sats of Coils at extra charge.

OFFICES and SHOWROOMS:
92, QUEEN STREET, HAMMERSMITH, LONDON, W.6.
'Phone: Ham 1916. 'Grams: Tingvidar, London.



Don't swot!

No need to think that it is a laborious process to obtain information on Wireless.

Gone are the days when it was necessary to undergo a strenuous course of study, for now there are a number of excellent Radio Press Books which will take you through all the short cuts and make learning a pleasant pastime.

Two Books especially are suitable for the beginner, Wireless for All and Simplified Wireless, both by John Scott-Taggart, F.Inst.P. (Editor of "Modern Wireless" and "Wireless Weekly"). These Books should be read together, as they form a complete course on Wireless, giving electrical explanations which can be understood by anyone. Remember the titles, "Wireless for All" (6d., post free 7½d.) and "Simplified Wireless" (1/-, post free 1/1½d.), and get them by any Bookseller.

RADIO PRESS Ltd., DEVEREUX COURT, STRAND, W.C.2.

RUSSIAN MUSIC EVENING.

Notes on Next Monday's Programme. By Percy A. Scholes.

TCHAIKOVSKY-" ROMEO AND JULIET."



Mr. PERCY A. SCHOLES.

THIS is one of Tchaikovsky's early works (written in 1869, when he was twenty-nine years old). It is called a "Fantasy-Overture," but is really a "Tone Poem," an attempt to reproduce in music some of the emotions of Shakespeare's play.

The opening (clarinet and bassoon) is a sort of church chant, suggesting Friar Lawrence and the

marriage solemnity in his cell. A little later comes some vigorous music suggestive of the fight between the Montagues and Capulets and then a graceful, attractive tune (cor anglais, with accompaniment for muted violas) that obviously represents the element of love.

These are three of the main tunes out of which the piece is made. The composer did not label them, as I have done here, but the interpretations given are reasonable, and will probably be approved by most hearers.

Note that the work does not make any attempt to *lell the story* of the play, but merely strives to represent its spirit.

MOUSSORGSKY-PERSIAN DANCE (from the Opera "Khovantchina").

Prince Ivan Khovansky, sitting at table in his palace, and oppressed with gloomy forebodings, is interrupted by a messenger, who brings him a letter of warning that he is in great danger. He dishelieves the warning, and to drive it from his mind, calls for his troupe of Persian dancers.

TCHAIKOVSKY-PIANO CONCERTO, NO. 1.

Poor Tchaikovsky had a crushing disappointment over this work. He wrote it especially for Nicholas Rubinstein (brother of the more famous Anton Rubinstein, and, like him, a very great player). Then he took it to Rubinstein, on Christmas Eve, 1874, and played it to him:—

I played the first movement. Never a word, never a single remark. . . Oh, for a single word, for friendly abuse, for anything to break the silence! For God's sake say something! But Rubinstein never opened his lips. He was preparing his thunderbolt.

"Well?" I asked, and rose from the piano. Then a torrent broke from Rubinstein's lips. Gentle at first, gathering volume as it proceeded, and finally bursting into the fury of a Jupiter-Tonans. My concerto was worthless, absolutely unplayable; the passages so broken, so disconnected, so unskilfully written, that they could not even be improved; the work itself was bad, trivial, common; here and there I had stolen from other people; only one or two passages were worth anything; all the rest had better be destroyed or entirely re-written. . .

It was a censure delivered in such a form that it cut me to the quick. I left the room without a word and went upstairs. I could not have spoken for anger and agitation. Presently Rubinstein came to me and, seeing how upset I was, called me into another room. There he repeated that my concerto was impossible, pointed out many places where it needed to be completely revised, and said if I would suit the concerto to his requirements, he would bring it out at his concert.

"I shall not alter a single note," I replied, "I shall publish the work precisely as it stands." This intention I actually carried out.

Tchaikovsky then removed from the score the dedication to Rubinstein, and replaced it with that of another great pianist who was more appreciative—von Bülow, who was then about to leave for America, and there the concerto had, at Boston, its first performance.

At a later date Nicholas Rubinstein repented, and played the work in public, and Tchaikovsky repented and re-wrote it very considerably. So all ended well!

There are three "movements" or sections.

I. Quick. It opens with an introduction. Then comes one of the main tunes of the movement: it begins on piano alone, and can be recognized by its curiously broken character (all divided into little groups of two notes at a time); this is a tune Tchaikovsky borrowed from the blind beggars at a fair. After some time a more gentle tune enters, which can be recognized by the fact that at first it is given to wind instruments alone.

These are the chief tunes, out of which the whole movement (more or less) is made.

II. Somewhat slower. This is a brief and very attractive movement, which begins with a graceful tune for flute accompanied by plucked strings. Later appears a quicker passage (beginning on piano alone) which Tchaikovsky took from an old French song, "We must be happy, dance and sing." Lastly, the first tune returns, this time in the piano part accompanied by the strings.

III. Quick and fiery. This movement is made out of three chief tunes, all suggesting the spirit of Russian dances.

TCHAIKOVSKY-NUTCRACKER SUITE.

The suite, which was one of Tchaikovsky's latest works, is taken from a fairy ballet, "The Nutcracker and the Mouse King." It consists of eight pieces—(1) Miniature Overture, (2) March, (3) Dance of the Sugar-Plum Fairy, (4) Trepak (a Russian Dance), (5) Arabian Dance, (6) Chinese Dance, (7) Reed Pipe Dance, (8) Flower Valse.

In the "Dance of the Sugar-Plum Fairy" note the use of the celesta—a sort of tiny piano with metal bars instead of strings. This is its first occurrence in any orchestral score. Tchaikovsky, visiting Paris in 1891, found the instrument (then newly invented), and wrote home to his publishers about it, telling them to keep it a secret, as he meant to be the first to write for it. He certainly found a very happy use for it in this piece,

RIMSKY-KORSAKOF — PRELUDE AND MARCH from "The Golden Cockerel."

"The Golden Cockerel" is a lively, humorous opera, with a good deal of the Oriental both in libretto and music.

King Dodon is in trouble, His enemies attack him on all sides. An astrologer offers him a golden cockerel, which, whenever danger threatens, will warn him by crowing. He promises to reward the astrologer, cats a good supper and goes to sleep. The cock crows, Dodon awakes, sends off the army in charge of his two sons, and goes to sleep again. The cock grows again, Dodon awakes, and decides he must, after all, go himself to the war. And so on!

LISTEN IN AND LEARN TO SPEAK FRENCH

WITH LINGUAPHONE LANGUAGE-TEACHING RECORDS ON YOUR OWN GRAMOPHONE IN YOUR OWN HOME.

Perfectly Simple.
Wonderfully Fascinating.
Entertainment and Instruction Combined.

A French professor gives you personal tuition in French by your own fireside. You hear his voice, get the correct accent, the proper pronunciation, and learn to speak fluently yourself in the shortest possible time.

Every member of your family can receive instruction at the same time without any extra outlay and under the happiest conditions.

Undoubtedly the shortest and most interesting route to a complete mastery of French.

Even if you are studying at present with a teacher, or by correspondence, the Linguaphone Language Records will belp you considerably, especially to think in French, to speak in French, and to understand French.

FREE

Write for booklet and full information, which costs you nothing, to Dept. C.

German, Spanish and Italian. We have a special proposition for those interested. Write for full particulars.

LINGUAPHONE INSTITUTE,

34 & 35, High Holborn, London, W.C.1.

Telephone: Chancery 7638.

Demonstrators required everywhere.



THE NEW FELLOWS LIGHTWEIGHT PHONES

weigh under 6 ozs. and are extremely comfortable. With the special spring adjustment, the earpieces may be moved into any desired position or separated without the use of adjusting nuts. This fitting is specially designed not to tear the hair. Wound to 4,000 ohms, they are very sensitive and are well made with duralumin head bands, stalloy diaphragms, etc.

Advi. Fellows Magneto Co., Ltd., London, N.W. 10.

FELLOWS

Comets and Their Story.

A Talk From London. By Dr. A. C. C. Crommelin, F.R.A.S.

THE most striking feature of the heavenly orbs is the regularity of their movements, permitting us to forecast their positions centuries in advance. There is, however, a notable exception to this power of prediction. From time to time, a brilliant object with a long tail appears, is seen for a few days or weeks to move rapidly across the heavens, and then withdraws again into invisibility.

These apparitions are now received with enthusiasm by astronomers and the public; but this has not always been the case. Formerly, they caused great terror and apprehension; their great size led men to believe that they were very near the earth, probably some sort of pestilential vapour in the upper air; from this it was a natural step to look on them as forerunners of plague, famine, and war.

Newton's Discovery.

There were several stages in the attainment of more accurate knowledge about comets. The great Danish astronomer, Tycho Brahe, compared his cometary observations with those made at a distant observatory, and proved that they are celestial, not terrestrial objects, being much more remote than the moon. Then Sir Isaac Newton discovered the law of gravitation about two and a half centuries ago, and deduced from it that comets travel round the sun in very long oval curves, only becoming visible to us for a small part of their track lying near the

Accurate Predictions.

He was greatly assisted in this work by Halley; who, after much labour, found the paths of all the comets that had been observed in the preceding two centuries, and proved that what appeared to be three of them were really the same body returning at intervals of about seventy-six years.

It now became quite possible to predict the appearance of certain comets; thus Halley's comet came back as predicted in 1759, 1835, and 1910. Most of us remember the last return; the comet presented a grand spectacle, with an immense tail, in more southern countries; but in England the view was marred by its being low down in the twilight. We are able to calculate the returns of this comet both forward and backward; this has been done for a period of two thousand years, and records have been found of the comet's appearance at almost every return.

Taking Us by Surprise.

Besides Halley's comet, there are some sixty others whose return can be predicted; but they are mostly faint, and of little popular interest. It is only the really fine comet that can be announced beforehand; the others, when they come, take us by surprise; their periods are, for the most part, so long that they have not been seen since the dawn of exact history.

The last comet of great splendour that was visible in this country appeared in the autumn of 1882. It was remarkable for the very close approach that it made to the sun, the distance being half a million miles. At that time it shone so brightly that it could be seen with ease in full sunshine; its tail was a hundred million miles long, and remarkably straight.

Another fine comet, known as Donati's, appeared in 1858; its tail was beautifully curved like a seimitar; it passed over the bright star Arcturus, which shone undimmed through hundreds of thousands of miles of cometary matter.

Another very grand comet appeared in 1811, at the time of Napoleon's Russian campaign. This had a tail 100 million miles long, and a very bright head, which was the more remarkable because the comet was outside the carth's orbit, and did not approach close to the sun. It takes some 3,000 years to go round the sun; the periods of some comets are longer still, and they go out into space to some thirty times the distance of Neptune, the furthest known planet. I have estimated that the total number of comets can hardly be less than an eighth of a million.

Travelling Stones.

It was found in the last century that there is a very close connection between comets and shooting-stars; these are lumps of stone or metal that are travelling round the sun in long oval paths like the comets. When they enter the earth's atmosphere, friction, produced by their speed of several miles per second, causes them to glow. Most of them are burnt to dust in the upper air, but sometimes they descend to earth. Some lumps of this kind can be seen in the Natural History Museum. Chemists have examined these lumps, and find that they contain a great deal of gas, chiefly hydrogen and its compounds.

Meteor Showers.

The belief now is that the head of a comet consists of a swarm of multitudes of these meteoric masses : the paths of many of the wellknow meteor showers, such as the November shower from the sickle of Leo, and the August shower, known as the Tears of St. Lawrence, were found to show a perfect agreement with the paths of certain comets. The conclusion is that the swarm of meteors that forms a comet's head is gradually scattered, under the disturbances produced by the sun and the planets, so as to leave a long trail of meteoric debris in the wake of the comet. A meteor shower takes place when the earth traverses one of these trails; and as they are very numerous, we get several showers every year.

The Sun's Repulsion.

The meteoric constitution of a comet's head also gives us an explanation of the formation of the tail. We have seen that meteoric lumps contain much gas; on approaching the sun, its heat draws out this gas, which forms a cloud round the comet's head. A violent repulsive force from the sun then acts on the gas, driving it with great speed away from the sun. This force does not disturb the big lumps forming the comet's head, but only the finely divided matter in the tail. A comet's tail is not attached to it like an animal's tail; a better analogy is the jet of steam and vapour from the funnel of a locomotive, which is continually dissipated and renewed. The tail matter does not return to the head, but is lost in space.

It is well to remember that when a comet is leaving the sun, it goes tail first. This is contrary to popular imagination, which pictures the tail as being left behind, like the tail of a rocket, but there is no analogy between them, in spite of a similar appearance.

As to the origin of comets, nothing certain is known. My own view is that a few of them arise from matter crupted from the sun, others from similar cruptions from the planets, especially Jupiter, which appears to be still in a very heated state. The remainder are, perhaps, detached fragments of the great cosmical cloud of dust and gas which is believed to have been the primitive form of the planetary system.

GOSSIP PROGRAMMES-GOSSIP ABOUT ABOUT

A Clever Violinist.



MISS ELEANORE
COWELL, L.R.A.M. who broadcasts from Glasgow, has had a very successful musical career, having commenced the violin at the age of eight. A year or two later she won three first prizes in Eisteddfod open competitions, and also won the W. Richter scholarship at the Leicester and County MISS ELEANORE COWELL. College of Music. She has performed a considerable

amount of solo work on the concert platform, as well as chamber music.

As a child Miss Cowell practised fairly religiously, but one day a little friend called and asked how long she had to play. On being told one hour, she said: "Well, hurry!" Thereupon, she played all her studies "presto," thinking the hour would also go "presto."

During her next lesson her foreign musicmaster said: "Vy vill you not go slow to make haste ?"

Hard on the Artiste.

MR. JAN WIEN, the banjoist, who broad-casts from Glasgow Station, and who is well known for his fine rendering of high-class music, relates a good story concerning one of his appearances at a concert.

"I was playing at a club concert," he says. "when one of its members approached me and said: 'Well, Mr. Wien, what nice nigger melodies are you playing for us this evening?"

"I felt rather uncomfortable at the remark. Preferring not to waste time with this gentleman, I handed him a programme of my solos for that evening, which included "Melodie in F" (Rubinstein), "Marche Hongroise" (Kowalski), "Husarenritt" (Spindler), and "Menuet" (Paderewski).

"However, that evidently did not satisfy him. When I had finished my solos, he again came forward. He said he quite liked the numbers I had rendered, particularly the 'Menuet.' The last one,' he added, 'was a very nice nigger tune, but it would have sounded much better had you sung with it.'

"I nearly collapsed !"

His First Appearance.

CIRST appearances on the stage are often the cause of amusing incidents. Mr. Jay Kaye, the comedian, has been telling about his

début at the tender age of six.

"I had been engaged," he says, "to play the part of a mouse in the pantomime Dick Whittington at Drury Lane Theatre. I was placed on the stage before the curtain went up, and had to make an exit at a cue, but, unfortunately, I began to cry and was afraid to move.

"Eventually, the cat pounced upon me, and in this way I was got off. My feelings regarding the stage at that time were far from funny."

The Cart Before the Horse.

THE well-known singer, Mr. Lee Thistlethwaite, who broadcasts from Manchester Station, was once playing in the Hallé Orchestra in a provincial town when the local conductor became so flustered and nervous that he got altogether lost.

During the pause which followed, the leader of the orehestra turned round to him and snavely remarked: "With us, Mr. Conductor,

please!"

A Matter of Money.



Photo: Foultham and Burfield. JUNE.

NE of the most talented and charming of our younger actresses is June, who plays the leading role in Little Nellie Kelly at the New Oxford Theatre. On December 13th and 14th she is to take part in a broadcast performance of this piece under the auspices of the B.B.C.

June is very fond of humorous stories, and she relates a particularly good

one as follows: In a town in America the local judge was also the cashier at the bank. One day, a man came in and presented a cheque that he wanted cashed. The judge was not satisfied as to the man's identity and declined absolutely to hand over the money.

"But, judge," said the visitor, "I've known you hang men on no better evidence than this."

"Very likely," replied the judge, "but when it comes to a matter of money, we've got to be careful."

He Couldn't Understand It!

NOTHER great suc-

Little Nellie Kelly by

Elson is fond of relating

a funny anecdote about

Miss Anita Elson.

cess is scored in



an old-time comedian who had a great idea of his own importance. day he met a friend to whom he remarked: "Old So-and-so had a bad time last night. In fact, the Photo: Funfaham and Ban Seld. audience hissed him right

MISS ANTIA ELSON. off the stage.

"Then I went on, and the audience gave a fine reception to my first song; but when I was half-way through the second, I'm blessed if they didn't start hissing old So-andso again!"

The Reason.



MR. RALPH WHITEperformance in Little Nellic Kelly has made him extremely popular with his audiences. One of Mr. Whitehead's best stories concerns a taxi. A man took a taxi to his home in the suburbs, and, on alighting at his destination, was astonished at the big fare.

Ms. RALPH WHITEHEAD. "Why," he exclaimed, "you are charging me

for four miles; but the distance is only two and a half miles!"

"It is as a rule, sir," replied the driver, "but, you see, we skidded such a lot!"

A Cute Answer.

A N excellent child story is told by Miss Nora Delmarr, the popular singer. Her little niece was asked by the schoolmistress where elephants were usually found.

The wee girl hesitated a moment, and then replied, in a firm voice, and with great dignity : "The elephant is such a large animal that it is very seldom lost,"

A Singer from New Zealand.

PARTICULAR A favourite with listeners is Miss Catherine Aulsebrook. This brilliant singer is a native of New Zealand; but she came to England at an early age and studied under Randegger, Sir Charles Santley, and Sir Henry Wood. She has sung many parts in operas, oratorios, etc., and is always sure of a hearty reception.



Photo : " Namme." MISS CATHERINE AULSEBROOK.

During the war Miss Aulsebrook was specially chosen to sing in London at the Eagle Hut for Admiral Sims, when that world-famous American sailor visited this country.

No Wonder !

MISS B. JENKINS, who has sung successfully from the Aberdeen Station, commenced her studies in London, where she was for five years under Mr. A. Thompson, F.R.A.M., at the Royal Academy of Music, and Mr. Cordon Clather, of the Guildhall School of Music, and she has performed at several London concerts, including the Gresham College, for Sir Frederick

A discussion once took place between Miss Jenkins and a friend upon the subject of enunciation, when her friend declared that she considered the enunciation of Miss Jenkins to be perfect, concluding her remarks by saying that she understood every word she said.

Another friend was told of the fact that Miss. Jenkins's enunciation was perfect, and she decided to go and hear for herself. Her report, however, was not exactly praiseworthy, for she exclaimed that she simply could not understand a single word that was sung. Miss Jenkins was informed of this, and she told her listener that no wonder she could not understand a single word, for she had been singing in Italian!

An Irish Violinist.

MRS. J. G. BURNETT, who is a violinist and well known to the people of Aberdeen, has broadcast successfully from the Aberdeen Station, and has been greatly appreciated by the many listeners.

She hails from the north of Ireland, where she commenced her studies under great difficulties, having to drive sixteen miles to her weekly lesson at Armagh. She entered the Royal Irish Academy at the age of twelve, and was placed under Signor Guido Papini, and was successful, within two years, in gaining the Gold Medal for violin playing.

Mrs. Burnett is an upholder of the broadening influence of foreign musical life, she herself having studied before and after her marriage at the Royal Dresden Conservatorium (where she gained the Prize Diploma, the highest award of the Institute), and for a year at the Budapest Meisterschule, under the celebrated Professor Jeno Hubay. She left there less than a month before the outbreak of hostilities.

A Little Mixed.

SHE was once playing "La Folia Variations," by Correlli, and had just finished when she was addressed by a lady who asked the title of the music she had been playing and the composer's name. On being told the names of the piece and the composer, the lady replied : "Oh. yes, I know; dear Marie Corelli!"

WIRELESS PROGRAMME—SUNDAY (Dec. 9th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

ORGAN RECITAL at the Armitage Hall, Great Portland Street. S.B. to all Stations.

Solo Organ, H. V. SPANNER, Mus Bac., F.R.C.O., L.R.A.M. 3.0.—Military March Schubert DOROTHY COWPER (Soprano).

"Who'll Buy My Lavender?" ... German
"The Rain Fairy" ... Arundale
"Keep on Hopin'" ... Maxwell
BEATRICE EVELINE (Solo 'Cello). Rondo Boccherini

GEORGE PARKER (Baritone). "The Ould Plaid Shawl" .. Battison Haynes
"The Camel's Hump" German
"Mr. Mole" Martin Shaw
ORGAN.

Overture, "Tannhäuser" Wagner
Prayer in F Guilmant
Grand Chœur in D Guilmant DOROTHY COWPER. "A Happy Summer Song" Kahn

BEATRICE EVELINE.

Celtie Lament Foulds Nocturne and Roundelay Arnold Trowell GEORGE PARKER.

ORGAN.

Introduction to Act III. and Bridal 5.0.-Close down.

Announcer: R. F. Palmer.

SUNDAY EVENING.

WILLIAM ANDERSON (of the B.N.O.C.)

"Honour and Arms" ("Samson").. Handel Hymn, "For Ever With the Lord"

3.45.—THE REV. J. H. RITSON, M.A., D.D., of the British and Foreign Bible Society: Religious Address. Hymn, "Sweet Saviour, Bless Us"

BAND OF HIS MAJESTY'S ROYAL AIR FORCE.

By Permission of the Air Council. (Conductor, FLIGHT-LIEUT. J. AMERS.) March, "The Iron Duke " Leo Stanley Overture, "The Merry Wives of Windsor

Cornet Solo, "Down in the Forest" Sir Landon Ronald, arr. Amers

Soloist, Corp. G. Regan, D.C.M. Suite, "Atlantis" ("The Lost Continent") "In a Persian Market" Ketelbey Hungarian Dances, Nos. 5 and 6 . . . Brohms

William Anderson. "The Village Blacksmith" Weiss

10.0.—TIME SIGNAL, GENERAL NEWS BULLETIN. S.B. to other Stations.

Local News and Weather Forecast. Band of H.M. Royal Air Force. Melodies from "Sally"

10.30.—Close down.

Announcer: A. R. Burrows.

BIRMINGHAM.

3.0-5.0.—Organ Recital. S.B. from London. ORCHESTRA.

March from "Tannhäuser" Wagner 8.40.—REV. D. F. CRICK, Parish Church, Wednesbury: Religious Address.

8.55. STATION REPERTORY CHORUS. Hymn, "Nearer, My God, to Thee"
"What are These?"

5. ORCHESTRA.

Overture, "Raymond" Thomas 9.20. NELLIE DEMPSTER (Soprano):

Orchestra. Selection, "Les Préludes" Liszt
Suite, "Dance of Hours" Ponchielli
Intermezzo, "Aubade Florentine" . . Mazza
10.0.—NEWS. S.B. from London.

Local News and Weather Forecast. 10.15.—Close down.

Announcer: H. Casey.

BOURNEMOUTH. 3.0-5.0.—Organ Recital. S.B. from London. 8.30.—THE REV. J. D. JONES, M.A.; D.D.,

Richmond Hill Congregational Church. Religious Address. 8.45.—THE RICHMOND HILL CONGREGA-

TIONAL CHURCH CHOIR. Conductor, Enos Watkins, F.R.C.O., A.R.C.M. Hymn, "All Hail the Power"..... Diadem 8.50.—REGINALD S. MOUAT'S STRING

QUARTETTE. 1st Movement from Quartette in F .. Beethoven Presto from Quartette Schubert 9.0. Reginald S. Mouat (Solo Violin).

" Ave Maria "..... Schubert

Choir. Anthem, "Let All the World", Tertius Noble 9.15.—THOMAS E. ILLINGWORTH (Solo 'Cello).

" Mélodie Romantique " Stern 25. Choir. Chorus," The Lord is My Light " Horatio Parker String Quartette.

1st and 3rd Movements from Quartette in D Quintette for Piano and Strings.

Serenade Toselli Quartette. 2nd and 4th Movements from Quartette in D

10.0-NEWS. S.B. from London. Local News and Weather Forecast. 10.15.—Close down. Announcer: Bertram Fryer.

Haydn

CARDIFF. 3.0-5.0.—Organ Recital, S.B. from London, 8.10.—ROMILLY BOYS' CHOIR.

Hymn, "If I Were a Beautiful Twinkling Star" (Tume, "Starlight")..... N. Byrne Part Song, "The Angelus"...... Wallace REV. T. W. WELCH, Rector of Barry. Religious Address.

Hymn, "I Love the Holy Angels" (Tune, 'Aurelia ')..... Wesley

WAVE-LENGTHS AND CALL SIGNS.

. 363 Metres LONDON (2LO) -ABERDEEN (2BD) BIRMINGHAM (5IT) - 423 BOURNEMOUTH (6BM) 385 CARDIFF (5WA) - - 353 GLASGOW (5SC) - 415 MANCHESTER (2ZY) - 370 NEWCASTLE (5NO) - 400

Edvard Grieg Programme.

Solo Pianoforte, VERA MCCOMB THOMAS. Vocalist, CICELY FARRAR. Conductor, OLIVER RAYMOND.

8.35. - Introductory Chat,

8.45.-I. Overture: "In Autumn." II. Pianoforte Soli: (a) Prelude and (b)
Gavotte (from the "Holberg" Suite);
(c) "To the Spring."

III. Two Elegiac Melodies for Strings: (a)
"Heart Wounds"; (b) "The Last Spring."

IV. Songs: (a) "The Swan"; (b) "I Love

Thee"; (c) From Monte Pincio. V. Pianoforte Concerto in A Minor (two movements): (b) Adagio; (c) Allegro,

presto, maestoso.

VI. Suite No. I, "Peer Gynt": (a) "Morning": (b) "The Death of Ase": (c) "Anitra's Dance": (d) "In the Hall of

The National Anthem. NEWS BULLETIN.

Announcer: A. Corbett-Smith.

MANCHESTER.

3.0-5.0.—Organ Recital. S.B. from London. 8.0.—S. G. HONEY. Talk to Young People. Hymn.

CANON SHIMWELL on "The Coming Conference of Christian Politics and Economics of Citizenship." Hymn.

8.45, SIDNEY WRIGHT (Solo Violoncello). (a) Largo from Sonata Chopin (b) Allegro apassionato Saint-Saens BEATRICE MIRANDA, of the B.N.O.C.

(Soprano).

(a) "A Feast of Lanterns" Bantock

(b) "By the Waters of Minnatonka" Lawrenes JOSEPH FARRINGTON, of the B.N.O.C.

(Bass).
(a) "Song of Pan" Bach
(b) "I Rage, I Melt." Aria, "Oh, Ruddier Than the Cherry" Handel Sidney Wright.

(a) Romance Carl Matys (b) Danse Hollandaise Dunkler Beatrice Miranda.

Seena and Ballatella (" Pagliacci ")Leoncavallo Joseph Farrington.

(a) "Sigh No More, Ladies" Aiken
(b) "In Summer Time on Bredon" Graham Peel (e) "I'm a Roamer" Mendelssohn 10.0,—NEWS. S.B. from London

Local News and Weather Forecast. 10.15.--Close down. Announcer: Victor Smythe.

NEWCASTLE.

3.0-5.0.—Organ Recital. S.B. from London. 8.30.—CONSTANCE WILLIS, of the B.N.O.C.

(Contralto).

(a) "The Unknown Land" Day
(b) "The Sandman" Brahms 8.40. LAMBERT HARVEY (Tenor).

Hymn, "Lead Us, Heavenly Father." 8.45.—THE REV. A. THOMAS. Religious Address.

Constance Willis. 9.0. Hymn, "Hark! Hark, My Soul." Lambert Harvey.

Handel

Constance Willis.

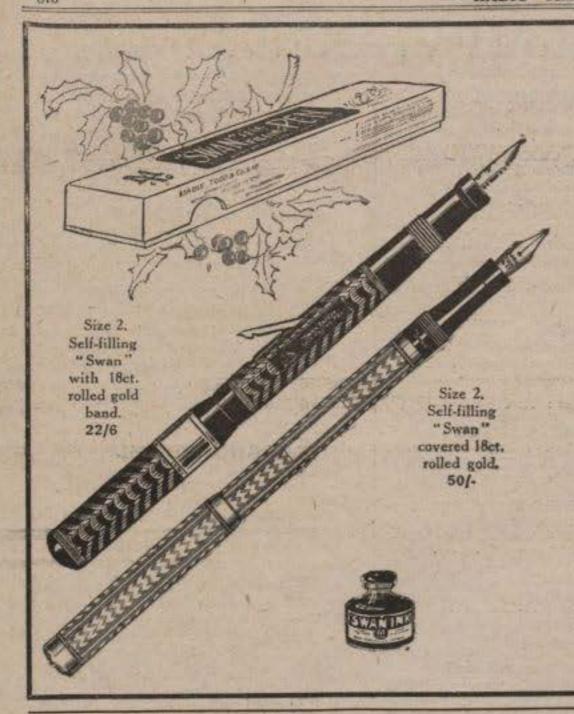
(a) "How Pansies Grow"...... Torrens
(b) "A Little Coon's Prayer"..... Hope
35. Lambert Harvey. 9.35. Lambert Harvey.

(a) "Where'er You Walk"..... Handel

(b) "Oh, It's Quiet Down Here."

G. Van Hee. "Prolude" Massenet
10.0.—NEWS, S.B. from London. Local News and Weather Forecast.

10.15:-Ciose down. Announcer: C. K. Parsons.



Christmas Gifts.

Let your Christmas greeting take the form of a famous "Swan"—the gift which appeals to all tastes.
"Swan" Pens may be had in simple form at 10/6 or in rich design at prices up to ten guineas.
Unsuitable nibs may be exchanged after presentation.

'SWAN' FOUNTPENS

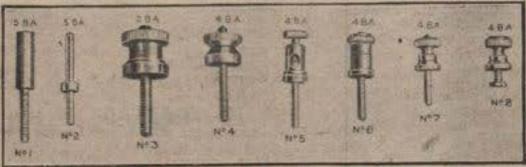
SOLD BY STATIONERS & JEWELLERS

Prices from 10/6.

Catalogue Post Free.

MABIE, TODD & CO., Ltd., Swan House, 133 & 135, Oxford Street, London, W.1. Branches: 79 & 80, High Holborn, W.C.1: 97, Cheapside, E.C.2; 95a, Regent Street, W.1; 3, Exchange Street, Manchester.

WALUE and



	_	_	_		_	_	_		_
VARIABLE C	XX :	. 8/-	each	101.05. 10002	HN Price				- each
LOUD SPEAR		A CONTRACTOR	0.15		The same	BEST 1			
							£2 1	K 0	each.
Sterling "Baby.	Price		440	600%	1994	***	Department of the	5 0	and the
Large Sterling		1994	E177	220	444	233	£2	2 0	
Amplion Jung.		THE STREET	111	100	7 444/10	277	£3	5 6	**
" De Lu	xe Mod		700	77+	Settle .	500	Name and Post Control	5 0	100
No. A	M 14	440	110		-110	***	360	0	**
VALVES.								10000	2000
Mullard Ora.	rice		G###12	444	24445	1100	12550	15/-	each
Cossor Pl and			644	***	244	***	***	15/-	19
Ediswan Valve	s. Price	444	200	(4)	Creek.	***	***	18/-	W
Marconi R	9++	+++	2656	244	1100	+++		16/-	- 49
Marconi D.E.R.	22000	14	199	+++	1946	***	£1	7 6	745
Marconi D.E.3.	16	***	1600	****	- 647	445	£1 1	0 0	30
AERIAL WIR	E 7/22	100-fe	et Co	ils. Pri	ce		7000	***	2/6
					-			120	11-
Lead-in Tubes, Pric	0.0	440	9(882)	200	10777	199	1000		1/3
	1	***	444	100	1000	***	1778	223	110
INSULATORS	2								
Reel Insulators.		100	1000	11.50	1440	200	7000	1d.	each.
Egg	1	The same	100	200	7445	444	- 664	1 d.	**
Small Shell		2000	1226		100	222		3d.	44
Keystone		544.0	160		Desc.	- 100	146	4d.	B-00
Sterling Headphone	4 000	ohms.		***	344		644	25/-	each.
Browns "F" ditto.		onione-		200	****		244	25/-	1
Igranic L.F. Transfo	recers 5			200	146	***	120	20/-	100
igranic tar, Francio	1	Dis Colonia		1000		Militar	2003		N. STERNA

FOR QUALITY SERVICE.

IF you are building a set or contemplating improving on your present set, send at once for WATES' List of Spare Parts, Accessories, Accumulators High-Tension Batteries.

BRASS TERMINALS, Price per doz. with nuts & washers :

DELAGO	A ACE	FIRE STATE	WHITE FILE	ce per dos. v	A SPEEL BARRY	B CC WH	ement-
No. 1	***	***	8d.	No. 5	444	1244	1/2.
No. 2		***	8d.	No. 6	***	***	1/
No. 3			2/2.	No. 7	***	-	1/
No. 4	4.4	***	1/2.	No. 8		Terr	10d.

Radio Instrument T Guaranteed L.F. Tri	nsformer	. 5/1. 1	rice		1		12/-	
OOJAH Banket Coi	la. 4 Coil	S		644	799	775	2/6	mch.
4 4 4	1 11	**		-544	244	244	5/-	10
PLUG IN TR	ANSFO	RME	RS.					
No. I. Price	4	6 each	No.	3. Pri	ce su	1	5/8	each.
	4			. 4			6/-	and the same of
		Price .		7/- 0			or course of	
Igranic Plug in Coile	at list s	orices.		C. STANKE				100
Igranic Filament Res			5 9000	00000	3000	***	4/6	each.
Vernier "				***	200	20.0	7/6	
Good Quality,		***	47 - 144	***	1444	242	3/-	44
Lissen Variable Grid	Leak.	Price		444	-	***	2/6	each.
And And	de Resis	tance.	Price	444	***	***	2/6	0
Dubillier Grid Leak	and Res	istances	at list	prices.	1		1000	
Two Coil Holder, be	est qualit	y. Price		200/	100	110	6/9	each.
Three Coil Holder.	best qual	ity. Pri	DE	440	3,040	444	9/3	99
CELLULOID /	CCHIN	STIE A	TORS	8.3			1. 12. 1	
Voltage, Amperes,	Price.	LULIA		oltage.	Amperes		Price.	
2 100	17/- 6	ach.	8-1-10	The same of	80		-	each.
4 40	16/6			6	40		23/-	- Control of
4 60	21/-	60		6	60		32/-	- 12
	volta, 80	amper	es. price	e 38/-	each.		3 10	

"IDEAL" VALVE ACCUMULATORS. MODEL W.5.

2 volts, 50 amps., 10/-, without crete. 4 volts, 50 amps., 24/-, with crete.

5 volts, 50 amps., 35/-, with crete.

Send for list of other sizes.

13-14, GREAT QUEEN STREET, LONDON, W.C.2. 'Phone: Gerrard 575-6. 'Grams: Zywateseng, Westcent;

WIRELESS PROGRAMME—MONDAY (Dec. 10th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

11.30-12.30.-Concert: The Wireless Trio and Effic Armour (Solo Violin).

5.0.—WOMEN'S HOUR: Ariel's Society Gossip. Story, "Girl," by O. Henry. 5.30.—CHILDREN'S STORIES: "Sabo, a Cold in the Head and an Elephant," by E. W. Lewis. "Jack Hardy," Chap. 13,

Part I., by Herbert Strang. 6.15.—Boys Brigade News.

6.25-7.0.—Interval. 7.0.—TIME SIGNAL, IST GENERAL NEWS BULLETIN. S.B. to all Stations.

JOHN STRACHEY (the B.B.C. Literary Critic): "Weekly Book Talk." S.B. to all

Local News and Weather Forecast.

7.30.—Russian Composers' Programme.

S.B. to other Stations. Augmented Orchestra, Conducted by PERCY PITT.

Overture, "Romeo and Juliet" Tchaikovsky Persian Dance, "Khovanstchina"

Moussorgsky THELMA PETERSEN (Soprano). Aria, "Joan of Are" . . . Tchaikovsky

Orchestra. Concerto in B Flat Minor for Piano Tchaikovsky

(Solo Pianoforte, JOHN PAUER). Suite, "Casse Noisette" . . Tchaikovsky

Thelma Petersen. "The Soldier's Wife". . . . Rachmaninoff "Lilacs" Rachmaninoff
"The Dreary Steppe" Gretchaninoff

9.10.—LT. COL. N. HOWARD MUMMERY, M.R.C.S., L.R.C.P. (Medical Director of the Federation of Medical and Allied Services), on "Health Problems." S.B. to other Stations. 9.30.—TIME SIGNAL, 2ND GENERAL NEWS

BULLETIN. S.B. to all Stations. ' Local News and Weather Forecast.

Orchestra. Prelude and March from "The Golden

John Pauer.

Orchestra. Valse, "Eugene Onegin" . . . Tchaikovsky

10.30.—Close down. Announcer: R. F. Palmer.

BIRMINGHAM.

3.30-4.30.—Concert: Harold Casey in a Song Recital.

5.0.—WOMEN'S CORNER.

5.30.—Agricultural Weather Forecast. KIDDIES' CORNER.

8.45.—Boys' Brigade News.
7.0.—NEWS. S.B. from London.
JOHN STRACHEY, S.B. from London.

Local News and Weather Forecast.
7.30.-RUSSIAN COMPOSERS' PROGRAMME. S.B. from London.

9.10.—LT. COL. N. HOWARD MUMMERY. S.B. from London.

9.30.—NEWS. S.B. from London. 9.45.—RUSSIAN COMPOSERS' PRO-GRAMME (Contd.). S.B. from London.

10.30.-Close down. Announcer: H. Casey.

BOURNEMOUTH.

3.45.—Concert: Arthur S. Tetlow, L.R.A.M. (Solo Piano), George Lyndon (Solo Banjo). 4.45,—WOMEN'S HOUR.

5.15.-KIDDIES' HOUR: Songs and Stories by Uncles Jack, Jumbo, and Rob.

6.0.—Boys' Brigade News.

6.15.—Scholars' Half-Hour: "Town Life 200 Years Ago," by Miss M. R. Dacombe, M.A.

7.0.—NEWS. S.B. from London.
JOHN STRACHEY. S.B. from London. Local News and Weather Forecast.

7.30.—RUSSIAN COMPOSERS' PRO-GRAMME. S.B. from London.

9.10.-LT. COL. N. HOWARD MUMMERY. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—RUSSIAN COMPOSERS' PRO-GRAMME (Contd.). S.B. from London. 10.30.—Close down.

Announcer: Ian Oliphant.

CARDIFF.

3.30-4.30.—Falkman and his Orchestra relayed from the Capitol Cinema.

5.0 .- " 5WA'S " " FIVE O'CLOCKS." " Mr. Everyman," Talks to Women, Vocal and Instrumental Artistes, the Station Orchestra. Weather Forecast.

5.45.—THE HOUR OF THE "KIDDIE. WINKS.

6.45.—Boys' Brigade News.

7.0.—NEWS. S.B. from London. JOHN STRACHEY. S.B. from London. Local News.

BAND OF THE GLAMORGAN ROYAL GARRISON ARTILLERY (T.A.).

By kind permission of Major A. P. Carey Thomas, T.D., J.P. Conductor, T. J. O'LEARY.

Vocalist, TALBOT JONES (Tenor).

7.30.—March, "Militaire" (Gounod); Overture, "Ivan" (Conterno).

\$.45.—Songs, (a) "Go Lovely Rose" (Roger Quilter); (b) "Until" (Coleridge-Taylor).

7.55.—Selection, "I Pagliacci" (Leoncavallo);

Concert Valse, "Toujours ou Jamais (Waldtenfel).

8.25.—Songs, (a) "Sometimes With Deep Regret" (Lambert); (b) "How Shall I Sing to You, Sweet?" (Sanderson).

8.35.—(a) "Demande et Reponse" (Coleridge-Taylor); (b) "La Tarantelle Fretillante" (Coleridge-Taylor); Suite, "Three Nell Gwyn Dances" (German). 8,55.—MR. HOWARD COATH: Chat on

"Income-Tax Down-to-Date."
9.5.—Songs, (a) "Dolorosa" (Phillips); (b)

"Where My Caravan Has Rested " (Lohr). 9.15.—Selection, "The Count of Luxembourg"

9.30.—NEWS. S.B. from London. Local News and Weather Forecast. 9.45.—Dance Music.

10.15,-Close Down.

Announcer : L. B. Page.

MANCHESTER.

3.30-4.30,-Concert by the " 2ZY " Orchestra. 5.0. MAINLY FEMININE, C. Pollard Crowther will speak on "Things Japanese."

5.25.—Farmers' Weather Forecast.

5.30,—CHILDREN'S HOUR. Uncle C. Pollard Crowther and a Japanese Fairy Tale.

6.30.—Boys' Brigade News.

6.35.—FRANCIS J. STAFFORD, M.A., M.Ed. : French Talk.

6.45,--C. POLLARD CROWTHER on " Photography.

7.0.—NEWS. S.B. from London. JOHN STRACHEY. S.B. from London. Local News and Weather Forecast,

7.30.—RUSSIAN COMPOSERS' PRO-GRAMME, S.B. from London. 9.10.—LT. COL. N. HOWARD MUMMERY.

S.B. from London.

9.30.—NEWS, S.B. from London.

9.45.—RUSSIAN COMPOSERS' GRAMME (Continued). S.B. from London, 10.30.-Close down.

> Announcer: S. G. Honey. (Continued on page 395.)

ELLEN TERRY, CLARICE MAYNE AND GEORGE ROBEY.

A chat about Christmas. By the Editor of "Tit-Bits."

HULLO, Everybody! Tit-Bits, the first paper of its kind, born forty-two years ago, has long been a national institution; but it is more especially at Christmas-time that Tit-Bits plays a great part in a million British homes. The Christmas Number of Tit-Bits will be on sale

It is said that the British Christmas was invented by Charles Dickens; if this is so, the founder of Tit-Bits, Sir George Newnes, did as much as any man to keep the flag of Dickens flying at Christmas-time; and this Christmas, just as much as during the early years of Tit-Bits, we of the House of Newnes have done our best to make the Christmas Number of the premier home journal one that will play a jolly part, with young and old, around the Christmas fireside and the festive board.

It never does for an editor to suffer from false modesty, and therefore I am going to make no apology for devoting the rest of this valuable space to a list of some of the main features of next Monday's Christmas Number of Tit-Bits.

Miss Ellen Terry contributes a fascinating article on her memories of other Christmas Days. A contribution by Miss Clarice Mayne, the popular pantomime artist and variety "star," takes the form of a charming complete love story, called "Little White Rabbit"a story of Christmas and the stage. Mr. George Robey (who contributes weekly to Tit-Bits), writes a screamingly funny article in the Christ-mas Number, called "That Kissing Game,"

Christmas Eve is the time for "creepycrawly " reading, and for those who love to be thrilled by the weird, Mr. Elliott O'Donnell tells about Christmas ghosts he has actually met.
"Mystery, Magic, and Mirth" is the title

of a two-page feature containing simple tricks and games for merry Christmas parties.

On another page famous people contribute. their funniest limericks. Among other wellknown contributors of articles and stories are F. W. Thomas, Ashley Sterne, Inglis Allen, W. Harold Thomson, Maurice Lane-Norcott, Walter E. Grogan, and A. B. Cox.—[ADVT.]



The Prime Minister of Newfoundland writes to the Marconi Company:

"I cannot refrain from writing to express my thanks to you on my own behalf and on that of Mrs. Warren for the very excellent arrangements you made in order that my broadcasted speech might be heard by my wife and her friends at Claridge's Hotel.

"I am told by those present that the demonstration was absolutely flawless and the best that they had ever heard. There was absolutely no hitch in the arrangements, and the Marconiphone reproduction was perfect in every way."

(Signed) W. R. WARREN.

Management of the Triumph of the Master Mind



Ask your dealer for full particulars of the various Marconiphone models. In case of difficulty apply to:-

MARCONI'S WIRELESS TELEGRAPH Co., Ltd Marconiphone Dept., Marconi House, Strand, W.C.2

Principality Buildings, Queen Street, CARDIFF; 41 St. Vincent Place, GLASGOW; ro Cumberland St., Deansgate, MANCHESTER; 38 Northumberland St., NEWCASTLE-ON-TYNE.

WIRELESS PROGRAMME—TUESDAY (Dec. 11th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

11.30-12.30.—Concert: Wireless Trio and David Jenkins (Bass).

5.0.—WOMEN'S HOUR: "Decorating the Dinner Table," by Mrs. Gordon Stables. "A Nursery Chat," by the House Physician of a London Hospital.

5.30.—CHILDREN'S STORIES: Aunt Priseilla on "How to Organize a Picnic." John Hope Fellows, "Railway Talk."

6.15-7.0.—Interval.

7.0.—TIME SIGNAL, 1ST GENERAL NEWS BULLETIN. S.B. to all Stations: Local News and Weather Forecast. MR. A. E. BAWTREE, F.R.P.S., the wellknown authority on the subject, will Talk

about "Banknotes."

7.30. THE MEREDYLL QUARTETTE.
MARGUERITE MEREDYLL, Pianoforte;
BESSIE RAWLINS, Violin; RAYMOND
JEREMY, Viola; EMILE DOEHAERD,
'Cello.

Pianoforté Quartette (G Minor), (Mozait); Allegro—Andante—Rondo. GEORGE HOWE AND ELIZABETH POLLOCK.

Imitations of London Actors and Actresses. THE ALDWYCH SINGERS.

PHILLIP WILSON (Tenor).

A Chat on the Music in the Reigns of Queen Elizabeth and James I., with the following

"Love is Not Blind" (Michael Cavendish, 1598); "I Saw My Lady Weep" (John Dowland, 1600); "When Laura Smiles" (Philip Rosseter, 1601); "Love's God is a Boy" (Robert Jones, 1601); "Flora" (Thomas Greaves, 1604); "Sweet, if You Like and Love Me Still" (Robert Jones, 1608); "O Eyes, O Mortal Stars" (Alfonso Ferrabasco, 1609); "Shall a Frown or Angry Eye?" (William Contsine, 1610), from "English Ayres (1598-1612)," transcribed and edited by Peter Warlock and Phillip Wilson.

The Meredyll Quartette.

Two Movements from Pianoforte Quartette,
E Flat Major, Opus 87 (Decrak), LentoAllegro ma non troppo.

BULLETIN. S.B. to all Stations. Local News and Weather Forecast.

9.45.—MR. ANTHONY BERTRAM, Official Lecturer to the National Portrait Gallery, on "The History and Meaning of Modern Painting Movements." S.B. to Cardiff.

10.0.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS, Relayed from the Savoy Hotel. S.B. to other Stations.

11.0.—Close down.

Announcer: J. S. Dodgson.

BIRMINGHAM.

3.30.-4.30.—Paul Rimmer's Orchestra relayed from Lozells Picture House. Ronald Pearson (Solo Piano): First Performance of the "Petite Suite" (Pearson).

5.6.—WOMEN'S CORNER.
5.30.—Agricultural Weather Forecast.
KIDDIES' CORNER.

7.0.—NEWS. S.B. from London. Local News and Weather Forecast. 7.45.—COLIN GARDNER (Midland Organisms Secretary of the Radio Society): "Wireless Hints to Beginners."

9.0.—THE KALAMAZOO PLAYERS will produce a Humorous Play entitled "The Quarrel" (arr. H. W. Lemon).
9.30.—NEWS. S.B. from London.

10.0.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS. S.B. from London. 11.0.—Close down.

Announcer: Joseph Lewis.

BOURNEMOUTH.

3.45-4.45.—Concert.
4.45.—WOMEN'S HOUR.
5.15.—KIDDIES' HOUR.
6.15.—Scholars' Half-Hour: Talk on "Music," by Hadley Watkins.
7.0.—NEWS. S.B. from London.
7.10.—J. C. B. CARTER, B.A.: "W. J. Locke and his Works."
7.25.—Local News and Weather Forecast.
7.30-8.0.—Interval.

Duets.

"Toy Duet" ("The Geisha")......Jones

"Tell Me, Pretty Maiden" ("Florodora")

Smart

S.50. Winifred Ascott.

"When the Heart is Young".....Buch
"Comin' Thro' the Rye".....Old Scots

Onchestra.

Selection, "San Toy"............Jones
9.55. Marjorie Scoon and Edward Hill.

Duct.

"Love's Old Sweet Song"......Molloy
10.0. Orchestra.
Potpourri, "Melodious Memories",....Finck
10.15.—Close down.

Announcer: W. R. Keene.

CARDIFF.

3.30-4.30.—Falkman and his Orchestra relayed from the Capitol Cinema. 5.0.—"5WA'S" "FIVE O'CLOCKS." "Mr. Everyman," Talks to Women, Vocal and Instrumental Artistes, the Station Orchestra. Weather Forecast. 7.0.—NEWS. S.B. from London.

Local News.

7.15.—MR. RICHARD TRESEDER, F.R.H.S. : Chat on "Gardening."

Literary Night.

7.30. Conducted, with a critical commentary, by MR. S. P. B. MAIS. "THE ROMANTIC REVIVAL OF ENGLISH

POETRY " (Continued).

Recitals in illustration by KATE SAWLE and

GWLADYS PARTRIDGE will sing songs of the period.

9.30.—NEWS. S.B. from London. Local News and Weather Forecast.

9.45.—MR. ANTHONY BERTRAM S.B. from London.

10.0.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS. S.B. from London. 11.0.—Close down.

Announcer: W. N. Settle.

MANCHESTER.

3.30-4.30.—Concert: Ella Goodfellow (Mczzu-Soprano), Arthur Davies (Tenor), Arthur G. Yates (Bass), Jack Bowden (Dinlect Entertainer).

5.0.—MAINLY FEMININE. 5.25.—Farmers' Weather Forceast.

5.30.—CHILDREN'S HOUR.
6.30.—Orchestra: Selection, "Melodious Memorine" (Final)

Memories' (Finck).
7.0.—NEWS. S.B. from London.
Local News and Weather Forceast.

"The Brightest Day ".... Easthope Martin Orchestra.

1.30.—NEWS. S.B. from London.
Local News and Weather Forecast.
9.40.—MR. W. F. BLETCHER (Examiner in Spanish to the Union of Lancashire and

Cheshire Institute): Spanish Talk.

10.0.—THE SAVOY ORPHEANS AND SAVOY
HAVANA BANDS. S.B. from London.

11.0.—Close down.

Announcer: Dan Godfrey, Jnc.

NEWCASTLE.

3.45,—Concert: Annie Armstrong (Solo Pianoforte), W. A. Crosse (Solo Clarinet), Jack Kelly (Baritone),

4.45.—WOMEN'S HOUR. 5.15.—CHILDREN'S HOUR.

6.0.—Scholars' Half-Hour: A Short Talk on "British Small Mammals," by Chas. Wain. 6.30-6.45.—Interval.

6.45.—Farmers' Corner.

7.0.—NEWS. S.B. from London.
 Local News and Weather Forecast.
 7.20.—MR. E. AKHURST (Royal Grammar

School): Talk on "Grasse: Where the Perfume Grows."

(Continued in column 1, page 395.)



Western Electric LOUD SPEAKERS

MAKERS OF OVER HALF THE WORLD'S TELEPHONES

WIRELESS PROGRAMME—WEDNESDAY (Dec. 12th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

11.30-12.30,-Concert: The Wireless Trio and Dorice Gay (Contralto). 5.0.—WOMEN'S HOUR: "Preparatory School

Aims and Ideals," by Mr. Paul King. "2LO"

5.30.—CHILDREN'S STORIES: Orchestra. Uncle Jeff's Talk on the Orchestra.

6.15-7.0. Interval. 7.0.—TIME SIGNAL, 1ST GENERAL NEWS BULLETIN. S.B. to all Stations. ARCHIBALD HADDON (the B.B.C. Dramatic Critic). "News and Views of the Theatre," S.B. to all Stations.

Local News and Weather Forecast.

ORCHESTRA (Conducted by L. Stanton Jefferies.)
March . . . , "The Boys of the Old Brigade" arr. Myddleton Overture, "Light Cavalry " Suppe "La Lettre de Manon " Gillet

MARGERY PHILLIPS (Contralto). "Somewhere a Voice is Calling " Tate "Happy Song" Teresa del Riego A Piano, Some Songs and EDITH JAMES. Orchestra.

Musical Comedy Selection, "The Mousme" Monekton JOHN HENRY on "What happened to me at the General Election."

A Piane, Some More Songs and Edith James. Orchestra.

"Three Irish Dances" Ausell
"Monsieur Tricotrin" Rawlinson Margery Phillips. "An Old Garden" Hope Temple "Bells of St. Mary" Emmett Adams 9.10.-MR. H. E. POWELL-JONES: "The

9.30.—TIME SIGNAL, 2ND GENERAL NEWS BULLETIN. S.B. to all Stations.

Local News and Weather Forecast. Orchestra. Selection, "Hullo, America" Finck John Henry on "Moving Day." Orchestra.

Three Movements from the "Ballet Russe" 1. Allegro Marziale. 2. Scene. 3 Mazurka, 10.30.—Close down.

Announcer: J. S. Dodgson.

BIRMINGHAM.

3.30.-4.30.—Concert : Louise Langley (Soprano) in a Song Recital. 5.0.—WOMEN'S CORNER.

5.30.—Agricultural Weather Forecast,

KIDDIES' CORNER.

7.0.—NEWS. S.B. from London, ARCHIBALD HADDON. S.B. from London. Local News and Weather Forecast.

7.30. Operatic Night.

A Performance of Benedict's Opera "THE LILY OF KILLARNEY by an augmented Orchestra and the Station

Repertory Company, conducted by Joseph Lewis.

Cast :-Edy EMILY BROUGHTON Ann Chute GLADYS WHITEHILL Hardress Cregna..... GEOFFREY DAMS MylesCHARLES HEDGES Father Tom JAMES HOWELL

Danny Mann HAROLD CASEY 9.30.—NEWS. S.B. Jrom London. Local News and Weather Forecast.

9.45.—G. F. J. BUVINGTON ("Chanticleer") in his fortnightly Poultry Talk "Poultry Pests and Parasites.'

ORCHESTRA.

Planquette 10.30.-Morse Practice, by "Beer Vic." 10.45.—Close down.

BOURNEMOUTH.

Announcer: J. Lewis.

3.45. - Concert: Arthur S. Tetlow, L.R.A.M. (Solo Piano); Edith Pearson (Soprano). 4.45.—WOMEN'S HOUR.

5.15.—KIDDIES' HOUR: Songs and Stories by Uncles Jack, Jumbo and Rob.

6.15. Scholars' Half-Hour: "Nature Talk," by Hubert Hill.

7.0. NEWS. S.B. from London. ARCHIBALD HADDON. S.B. from London. Local News and Weather Forecast. 7.30-8.0.—Interval.

Dance Night. ORCHESTRA.

(Conductor, Capt. W. A. Featherstone.)

Fox-trot ... "Swinging Down the Lane"
Waltz ... "Kiss in the Dark."
One-step ... "Oh, Harold"
8.15. JAZZ ORCHESTRA.

Fox-trot "Wana"
One-step "Daisy Jazztoes"
25. Orchestra. Fox-trot "Peggy Dear" Fox-trot "Sheba"

8.40. Jazz Orchestra. Fox-trot "Yankee Doodle Blues" Waltz "Georgia Moon"

8.50. Orchestra.
One-step "Singing All the While"
Fox-trot "Rose of Burmah"
Tango "Seduction"
9.5. Jazz Orchestra.

Fox-trot "The Sheik " One-step "Happy"
Fox-trot "All Muddled Up"

9.30.—NEWS. S.B. from London.

Local News and Weather Forecast.

Jazz Orchestra.

Fox-trot "Blue Danube Blues"
Fox-trot "Kitten on the Keys"
One-step "I'm Getting Better"
Waltz "Down Old Virginia Way"
Fox-trot "Yes, We Have No Bananas" 10.15.—Close down.

Announcer: W. R. Keene.

CARDIFF.

3.30-4.30.—Falkman and his Orchestra relayed from the Capitol Cinema,

5.0.—"5WA'S" "FIVE O'CLOCKS." "Mr. Everyman." Talks to Women, Vocal and Instrumental Artistes and the Station Orchestra, Weather Forecast.

5:45.—THE HOUR OF THE "KIDDE

7.0.—NEWS. S.B. from London: ARCHIBALD HADDON. S.B. from London. Local News.

7.30. Orchestra. "Triumphal March" (from "Aida") .. Verdi 7.40.—JOSEPH FARRINGTON of the B.N.O.C. (Bass).

"Sigh No More, Ladies".....Aitken Recitative and Aria, "O Ruddier Than the Cherry" (" Acis and Galatea"). . Handel

Orchestra. Overture, "Fortune's Labyrinth" . . Suppe 8-0.—BEATRICE MIRANDA of the B.N.O.C.

(Soprano). "By the Waters of Minnetonka" .. Lawrence "Ballatella" ("Pagliacci") .. Leoncavallo Orchestra. Suite, "An Evening Ramble" Mau 8.20 .- Beatrice Miranda and Joseph Farrington. Duet from "Pagliacci" Leoncavallo 8.25. JACK SHOPLAND (Solo 'Cello). 8.30.—CYRIL ESTCOURT in two Navy Yarns; (a) The "Gowan Lee" (Corbett-Smith): (b) Capt. Gordon Campbell, R.N.V.C., and

his "Mystery Ship (Corhett-Smith), 8.40. Joseph Farrington.

Two "Songs of the Sea"......Standard
(a) "Drake's Drum"; (b) "The Old Superb" Orchestra. Selection, "The Arcadians" Monchton 9.5.—DR. JAS. J. SIMPSON, M.A., D.Sc. :

Chat on " British Mammals." Joseph Farrington.

Concert Valse, "Soldaten Lieder"....Gung't 9.30.—NEWS. S.B. from London.

Local News and Weather Forecast. 9.40.—Dance Music.

10.15.-Close down. Announcer: A. Corbett-Smith.

MANCHESTER.

3.30-4.30.—Concert by the " 2ZY " Trio. 5.0.—MAINLY FEMININE. 5.25.—Farmers' Weather Forecast.

5.30.—CHILDREN'S HOUR. 6.30.—Organ Recital relayed from the Piccadilly Picture House. (Organist, Mr. J. Armitage, F.R.C.O.)

7.0. NEWS. S.B. from London. ARCHIBALD HADDON. S.B. from London Local News and Weather Forecast.

7.30-7.45.—Interval. ORCHESTRA. Selection, "A Princess of Kensington" German

HILDA MORRIS (Soprano). "Jewel Song "("Faust")...........Gounod JOSEPH MARKHAM (Tenor).

Hilda Morris.

"Songs My Mother Taught Me"..... Deorak
"Seenes That Are Brightest"..... Wallace Orchestra. Selection, "The Golden Moth".... Navello

9.30.—NEWS. S.B. from London. Local News and Weather Forecast.

9.45. Orchestra.
Selection, "The Beggar's Opera"....Austin
10.0 Joseph Markham.
"Serenade" "Thou art Repose" | Schubert "To Sylvia"

10.10.-MR. W. F. BLETCHER (Examiner in Spanish to the Union of Lancashire and Cheshire Institutes): Spanish Talk.

10.25.-Weekly Morse Practice. 10.40. - Close down.

Announcer: Dan Godfrey, Jung.

NEWCASTLE.

3.45. Concert: Wardle's Highland Pipers Band; A. Robins (Solo Cornet); Jennis Forster (Soprano).

4.45.—WOMEN'S HOUR.

5.15.—CHILDREN'S HOUR: Stories, etc., by Mrs. Latham and the Uncles Jim, Charlic and Richard, Song, Miss Baillie.

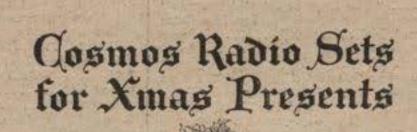
6.0.—Scholars' Half-Hour. A Short Talk on "The Early Astronomers—Galileo and Kepler," by Mr. Rae, M.Sc.

6.35.—Farmers' Corner. 7.0. NEWS. S.B. from London. ARCHIBALD HADDON. S.B. from London.

Local News and Weather Forecast. ORCHESTRA. "Selection of Irish Melodies".... Myddleton

(Continued on page 395.)

Mr. www. w/w. w/w. w/w. w/w. w/w



YOU could make a gift of nothing more acceptable this Christmas than a well-made and efficient Radio Receiving Set.

The Sets illustrated here represent a few of the series of-

COSMOS RADIOPHONES

any of which, from the Crystal Set at £3 10. 0. to the Six-Valve Jacobean Cabinet at £125 0. 0., would form a splendid gift.

"Cosmos" Radiophones are obtainable from all Retailers of Wireless Apparatus.

Send for our Catalogue & Handbook, 7117/1R.T. Post Free 1/- from the manufacturers—

METROPOLITAN Vickers CO. LTD

TRAFFORD PARK WORKS

MANCHESTER.

OBTAINED
YOUR COPY
YET
OF
"BUILDING
WITH
RADIOBRIX"
I/- EVERYWHERE.
(POST FREE
I/5.)

THE STREET, WHERE

HAVE

WIRELESS PROGRAMME—THURSDAY (Dec. 13th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

11.30-12.30.—Concert: The Wireless Trio and Frederick Carlton (Baritone).

5.0.—WOMEN'S HOUR: "Fashion Talk" by Miss Nora Heald. "The Training of a Telephonist," by Miss A. M. Webb.

5.30.—CHILDREN'S STORIES: Musical Talkby Auntie Hilda and Uncle Humpty Dumpty. "Jack Hardy," Chap. 13, Part 2, by Herbert Strang.

6.15. Boy Scouts' and Girl Guides' News.

6.25-7.0. - Interval. -

7.0.—TIME SIGNAL, 1ST GENERAL NEWS BULLETIN, S.B. to all Stations.

"The Week's Music." S.B. to all Stations.
Talk by the Radio Society of Great Britain.

Local News and Weather Forecast.

7.35. "2LO" DANCE BAND. S.B. to other Stations.

S.B. to all Stations.

"Teach Me"	. Fox-trot
"Non-stop Daneing"	. Fox-trot
"Faded Love Letters"	Valse
"Allalah "	. One-step
"My Sweetie Went Away "	Blues
"Vamp Me?"	. Fox-trot
"Say it Whole Dancing "	. Fox-trot
8.5. "2LO" OCTETTE.	

S.B. to other Stations.

"Mystic Beauty" Finck

"Angel's Serenade" Braga

"In a Persian Market" Ketelbey

8.20.—"LITTLE NELLIE KELLY," Act I, relayed from the New Oxford Theatre, London. S.B. to other Stations.

9.30.—TIME SIGNAL, 2ND GENERAL NEWS BULLETIN. S.B. to all Stations. Local News and Weather Forecast.

9.45.—THE RT. HON. SIR WILLIAM BULL, Bart., M.P., P.C., on "The Encouragement of Inventors." S.B. to all Stations.

10.0. "2LO" DANCE BAND.

S.B. to other Stations.

"China Resebud" Fox-trot
"Wistful" Valse
"Chansonette" Fox-trot
"Wooden Soldiers" Fox-trot
10.15.—Close down.

Announcer: J. S. Dodgson.

BIRMINGHAM.

3.30-4.30.—Paul Rimmer's Orchestra, relayed from Lozel's Picture House.

5.0.—WOMEN'S CORNER.

5.30.—Agricultural Weather Report. KIDDIES CORNER.

8.45.—Boy Scouts' and Girl Guides' News.

7.0.—NEWS. S.B. from London.

PERCY SCHOLES, S.B. from London. Radio Society Talk. S.B. from London. Local News and Weather Forecast.

7.35. BAND OF H.M. GRENADIER GUARDS.

(By permission of Colonel B. N. Sergison-Brooke, C.M.G., D.S.O.)

Director of Music, Lieut, G. Miller, L.R.A.M. March, "Marche Slave" Tchaikoesky Moreeau, "Caprice Espagnol"

Rimsky-Korsakov

Intermezzo, "In a Monastery Garden"

Suite, "The Pagoda of Flowers" Woodforde-Finden

(a) Introduction and Passing of Priests.

(b) Midst the Petals. (c) The Star-flower Tree. (d) The Blue Lotus Dance.

Scottish Patrol, "The Gathering of the Claus"
Williams

Overture, "The Magic Flute" Mozart
"Evensong" Martin
Valsette, "Wood Nymphs" Coates
8.20.—"LITTLE NELLIE KELLY," Act I.

S.B. from London. 9.30.—NEWS. S.B. from London.

9.45.—SIR WILLIAM BULL. S.B. from London.

10.0. BAND OF H.M. GRENADIER GUARDS.

Two Movements from the 5th Symphony

Scènes des Ballets "Sylvia" Delibes Fantasia, "A Shepherd's Life in the Alps"

10.30.-Close down.

Announcer : P. Edgar.

BOURNEMOUTH.

3.45.—Concert.

4.45.—WOMEN'S HOUR.

5.15.—KIDDIES' HOUR: Songs and Stories by Uncles Jack, Jumbo and Rob.

6.15.—Scholars' Half-Hour : Talk on "Ruskin," by Miss G. Darke.

6.45.—Boy Scouts' and Girl Guides' News.

7.0.—NEWS. S.B. from London.
PERCY SCHOLES. S.B. from London.
Radio Society Talk. S.B. from London.

Local News and Weather Forceast.
7.35.—"2LO." DANCE BAND. S.B. from

8.5.—" 2LO " OCTETTE. S.B. from London. 8.20.—" LITTLE NELLIE KELLY," Act I. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SIR WILLIAM BULL. S.B. from London.

10.0.—"2LO" DANCE BAND, S.B. from London.

10.15,-Close down.

Announcer: Ian Oliphant.

CARDIFF.

3.30-4.30.—Falkman and his Orchestra, relayed from the Capitol Cinema.

ALTERATIONS TO PROGRAMMES, Etc.

Owing to the enormous circulation of The Radio Times, it is necessary for the journal to go to press many days in advance of the date of publication. It sometimes happens, therefore, that the B.B.C. finds it necessary to make alterations or additions to programmes, etc., after The Radio Times has gone to press.

5.0.—"5WA'S" "FIVE O'CLOCKS." "Mr Everyman," Talks to Women, Vocal and Instrumental Artistes, and the Station Orchestra. Weather Forecast.

5.45.—THE HOUR OF THE "KIDDIE: WINKS."

6.45.—Boy Scouts' and Girl Guides' News.

7.0.—NEWS. S.B. from London.
PERCY SCHOLES. S.B. from London.
Radio Society Talk. S.B. from London.

Local News.
7.35.—"2LO" DANCE BAND. S.B. from

London. 8.5,—" 2LO " OCTETTE, S.B. from London.

8.20.—"LITTLE NELLIE KELLY," Act I.
8.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SIR WILLIAM BULL. S.B. from London.

10.0.—" 2LO" DANCE BAND. S.B. from London.

To. 15.-Close down.

Announcer: L. B. Page.

MANCHESTER.

11.30-12.39.—Concert by the "2ZY" Trio.

5.0.—MAINLY FEMININE.

5.25. Farmers' Weather Forecast.

5.30.—CHILDREN'S HOUR.

6.30.—Boy Seouts' and Girl Guides' News.

6.40. Mr. Francis J. Stafford, M.A., M.Ed. German Talk."

7.0.—NEWS. S.B. from London.
PERCY SCHOLES. S.B. from London.
Radio Society Talk. S.B. from London.

-- Local News and Weather Forecast.

.7.45.—Concert relayed from the Oxford Picture House.

8.20.—"LITTLE NELLIE KELLY," Act I. S.B. from London.

9.30.- NEWS. S.B. from London.

9.45.—SIR. WILLIAM BULL. S.B. from London.

10.0. - "2LO " DANCE BAND, S.B. from London,

10.15.—Close down.

Announcer: Victor Smythe.

NEWCASTLE.

3.45.—Concert: Dorothy Sanderson (Seprano), Sidney Coulson (Solo Violin).

4.45.—WOMEN'S HOUR.

5.15.—CHILDREN'S HOUR: Stories, etc., by the Uncles Jim, Charlie and Richard.

6.0.—Scholars' Half-Hour: A Short Talk on "Stories of Other-Lands," by Mrs. L. Bilteliffe.

6.30.—Boy Scouts' and Girl Guides' News.

6.45.—Farmers' Corner.
7.0.—NEWS. S.B. from London.

PERCY SCHOLES. S.B. from London. Radio Society Talk. S.B. from London. Local News and Weather Forecast.

7.35.—" 2LO" DANCE BAND. S.B. from London.

8.5.—"2LO" OCTETTE. S.B. from London. 8.20.—"LITTLE NELLIE KELLY," Act. L. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45,—SIR WILLIAM BULL. S.B. from

10.0.—" 2LO" DANCE BAND. S.B. from

10.15.—Close down.

Announcer: C. K. Parsons



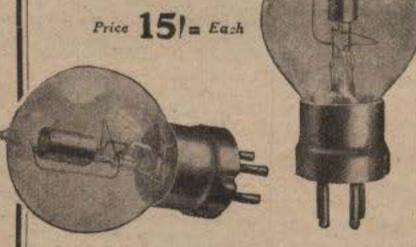
Radio

BRITISH MADE

B.T.-H. H E A D-PHONES

have become famous for their wonderful sensitiveness and tonal quality. They perfectly reproduce speech and music, and, moreover, give maximum amplitude of sound. Comfortable and readily adjusted, they are a worthwhile addition to any wireless set. Since the invention of the Thermionic Valve our research chemists and laboratory engineers have been working continuously for its improvement. As a result the B.T.-H. Valve is the perfect receiving valve and is unsurpassed for amplifying and detecting.

The valve is as strong mechanically as is consistent with efficient operation. The risk of the filament "sagging" is almost nil.



The British Thomson-Houston Co. Ltd.

(Wholesale only)

Works: RUGBY.

London Office: CROWN HOUSE, ALDWYCH, W.C.2

Sole Agents for the Music and Gramophone Trades:-

THE MURDOCH TRADING COMPANY, 59 & 61, Clerkenwell Road, LONDON, E.C.I.

WIRELESS PROGRAMME—FRIDAY (Dec. 14th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

11.30-12.30. - Concert: The Wireless Trio, and Vivien Hughes (Solo Violin). 5.0. - WOMEN'S HOUR : "A Chat on Health

Culture," by Miss M. G. Shields, "Impressions of the Week," by Ivy van Someren. 5.30.—CHILDREN'S STORIES: "Cinderella."

from Stead's "Books for the Bairns." Uncle Jack Frost's Wireless Yarn.

6.15-7.0, Interval.

7.0.—TIME SIGNAL, 1ST GENERAL NEWS BULLETIN. S.B. to all Stations.

G. A. ATKINSON (the B.B.C. Film Critic): "Seen on the Screen." S.B. to all Stations. Local News and Weather Forecast.

ORCHESTRA. Conducted by L. Stanton Jefferies.

STANLEY HOLT, Syncopations at the "The Cat's Pyjamas" Harry Jents
"You Tell 'em Ivories" Zez Confrey
"Loose Fingers" Holt

Orchestra. Musical Comedy Selection, "The Merveilleuses " Felix Valse, "Mimi" Gardener Mrs. May: "Lectures to Ladies." Stanley Holt.

"Coaxing the Piano " Ze: Confrey Stunts, Pot Pourri "The Shelk" Holt

Orchestra. "Medley of Popular Tones" . . . Darcwski March, "The Woman Soldier" . . . Bombie 9.0. MR. M. HARDIE, B.A. (Keeper of the Department of Engravings, etc., Victoria and Albert Museum): "The Picture Collections at the V. and A. Museum."

9.30.—TIME SIGNAL, 2ND GENERAL NEWS BULLETIN. S.B. to all Stations.

9.40 .- " LETTLE NELLIE KELLY." Act IL, relayed from the New Oxford Theatre, London. S.B. to other Stations. 11.0.-Close down.

Announcer: R. F. Palmer.

BIRMINGHAM.

3.30-4.30.-Paul Rimmer's Orchestra, relayed from Lozells Picture House.

5.0.—WOMEN'S CORNER.

5.30.—Agricultural Weather Forecast. KIDDIES' CORNER.

7.0.—NEWS. S.B. from London. G. A. ATKINSON. S.B. from London. Local News and Weather Forecast. WILFRED RIDGEWAY

> will give a Lecture-Recital "THE APPRECIATION OF MUSIC." Illustrations by

"THE ENGLISH TRIO." WILFRED RIDGEWAY Piano CHARLES BYE Violin FREDERICK BYE 8.45,-Wilfred Ridgeway and the English Trio:

Continuation of Lecture-Recital. 9.15.—MAJOR VERNON BROOK, M.I.A.E.; " Motors and Motoring."

9.30. NEWS. S.B. from London. 9.40 .- "LITTLE NELLIE KELLY," Act II, S.B. from London. 11.0.-Close down.

Announcer : P. Edgar.

BOURNEMOUTH.

3.45.—Concert: Gertrude Newsom (Soprano). 4.45.—WOMEN'S HOUR.

5.15.—KIDDIES' HQUR.

6.15.—Scholars' Half-Hour. 7.0.—NEWS. S.B. from London.

G. A. ATKINSON. S.B. from London. Local News and Weather Forecast. 7.30.—ROWLAND THURNAM, M.D., on the

Opera, "The Lily of Killarney."
"THE LILY OF KILLARNEY." (By Sir Julius Benedict.) Conductor: Capt. W. A. Featherstone.

Can : Eily O'Connor (The Colleen Bawn) BEATRICE MIRANDA, of the

Mrs. Cregan (Sheelab) B.N.O.C. (Soprano)
GLADYS PALMER (Contralto)

Miss Anne Chute (The Heiress) MARY JEFFERIES (Soprano) Hardress Cregan (Myles Na Coppaleen)

GERALD KAYE (Tenor) Mr. Corrigan (Father Tom O'Moore) TOM KINNIBURGH (Bass)

Danny Mann .. JOHN HUNTINGTON (Baritone) Chorus trained by Hadley Watkins,

7.45. Act L. Interval.

Act 2. 9.30.—NEWS, S.B. from London. 9.40.—"LITTLE NELLIE KELLY," Act II. S.B. from London. 11.0. Close down.

Announcer: W. R. Keene.

CARDIFF.

3.30-4.30. Falkman and his Orchestra, relayed from the Capitol Cinema. 5.0,—"5WA'S" "FIVE O'CLOCKS."

5.45.—THE HOUR OF THE "KIDDIE-WINKS."

7.0.—NEWS. S.B. from London. G. A. ATKINSON. S.B. from London. Local News and Weather Forceast.

Choral Night. ORCHESTRA.

Overture, "Titus" 7.40.—THE CARDIFF MUSICAL SOCIETY'S SMALL CHOIR.

"Sing a Joyous Roundelay "... Sir J. Barnby "Softly Come Thou Evening Gale" . . G. Smart "A Hunting Song" Mendelssohn Orchestra. Suite (No. 2) "Peer Gynt"..... Grieg 8.10.—FRANK TAYLOR (Baritone).

"The Gentle Maiden Somerville "Atwain" Cyril Scott Choir. "Who is Sylvia ? "..... E. German "My Garden" H. R. Hulbert

Frank Taylor. Orchestra.

Selection, "Il Tabarro" .. Puccini-Tavan Choir. "You Stole My Love" .. Sir G. Macfarren "Since First I Saw Your Face " Ford "Airs of Summer" H. E. Button

9.10. MR, R. J. PUGSLEY, on "Individuality in Business.

Frank Taylor. "O, That We Two Were Maying " .. Nevin "In Summer Time on Bredon " . Graham Peel 9.30.—NEWS. S.B. from London.

9.40.—"LITTLE NELLIE KELLY," Act. II. S.B. from London. 11.0.—Close down.

Announcer: L. B. Page. MANCHESTER.

3.30-4.30. Concert: Nelly Riley (Contralto), Arthur Schofield (Comedian), O. Collet (Baritone), T. Owen Smawfield (Solo Piano-

5.0.—MAINLY FEMININE. 5.25.—Earmers Weather Forecast. 5.30.—CHILDREN'S HOUR. 6.40. Orchestra: "Three Arabian Dances" 7.0.—NEWS. S.B. from London. G. A. ATKINSON. S.B. from London. Local News and Weather Forecast. ORCHESTRA. Three Old English Songs. (a) "Barbara Allan;" (b) "Come Lasses and Lads"; (c) "D'Ye Ken John Peel?" 8.15 CONSTANCE WILLIS of the B.N.O.C. (Soprano).

"Abiding Joys." "Pierrot and Columbine" . . Leslie Woodgate Orchestra.

Selection from "The Last Waltz"., Strauss 8.45.—MR, W. F. BLETCHER (Examiner in Spanish to the Union of Lancashire and Cheshire Institute): Spanish Talk. Tom Sherlock.

Three More Old English Songs.

(a) "Early One Morning"; (b) "The Village Blacksmith"; (c) "Here's a Health unto His Majesty."

Constance Willis. "Knowest Thou the Land ?" ("Mignon") 9.40.—"LITTLE NELLIE KELLY," Act II.

S.B. from London. 11.0.—Close down. Announcer: Victor Smythe.

NEWCASTLE.

3.45.—Concert: Florence Farrar (Solo Piano-forte), Martin Henderson (Solo Concertina), Ella Dent (Soprano).

4.45.—WOMEN'S HOUR. 5.15.—CHILDREN'S HOUR, 6.0. Scholars' Half-Hour. 6.45.—Farmers' Corner.

7.0.-NEWS. S.B. from London. G. A. ATKINSON. S.B. from London. Local News and Weather Forecast.

Opera Night. ORCHESTRA Overture, "Orphée"...... Offenbach "O Paradiso" Moyerbeer 7.55. DORIS LEMON of the B.N.O.C. (Soprano).

"Santuzza's Romance" Mascagni "Ave Maria" ("Cavalleria Rusticana") Mascagni

5. Orchestra. Excerpts from "Pagliacci" ... Leoncarallo 8.15 WILLIAM MICHAEL of the B.N.O.C. (Bass).

"Credo" ("Othello")..... Verdi "Devon, O Devon in Wind and Rain Orchestra.

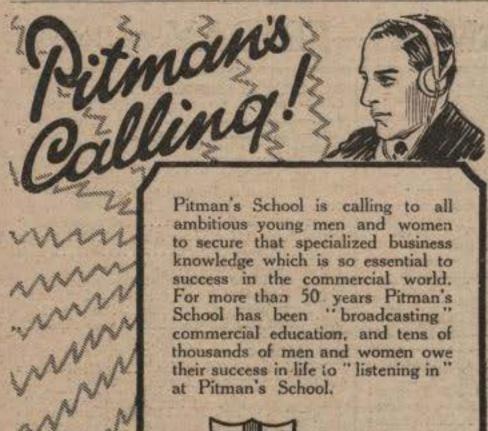
Selection, "Faust" Gounod 35. John Clinto.
"Flower Song" ("Carmen") Bizet
"Ah! So Pure" ("Martha") Flotow Orchestra. Selection, "Tannhäuser" Wagner

William Michael. "The Lute Player"..... Allitsen " Drake's Drum "..... Stanford "Captain Mae "..... Sanderson Doris Lemon. 9.10.

"Flower Song" ("Faust") Gounod "Musetta's Song" ("Bohème").... Puccini 20. Orchestra. Overture, "Mirella "..... Gounod

9.30,-NEWS. S.B. from London. 9.40 .- "LITTLE NELLIE KELLY," Act II. S.B. from London.

11.0.-Close down. Announcer : E. L. Odhams,



ambitious young men and women to secure that specialized business knowledge which is so essential to success in the commercial world. For more than 50 years Pitman's School has been "broadcasting" commercial education, and tens of thousands of men and women owe their success in life to "listening in" at Pitman's School.



269, Southampton Row, W.C.1. DAY, EVENING OR POSTAL COURSES.

The prospectus of Pitman's School will be forwarded to any applicant in response to a postcard or telephone message.

A marvel for simplicity and clearness

APOLL CABINET CRYSTAL SET No. 5



Solid mahogany cabinet, engraved ebouite panel.

Special Features.

Highly efficient variometer, tuning from 250-750 metres. Perikon detector of great reliability and sensitiveness, fitted with glass dust protector.

Price (Instrument only, including B.B.C. Royalty 19.)

£2:12:6

Price (with one pair 4,000 ohms phones and aerial equipment)

£4:3:0

Full illustrated list of Apollo wireless instruments and parts sent on application. New two-valve reactance set. Range 300 miles. Crystal Receivers from £1.

Call, write or 'phone: CRAIES & STAVRIDI, Apollo House, 4, Bunhill Row, London, E.C.1.

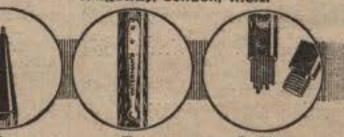
Glargote Agents: LUMLEYS, 80, Sauchiehall Street.

Last Christmas she gave me a beautiful Waterman's Ideal Fountain Pen, which has never caused me one moment's anxiety. And now she has given me a

pencil—not an ordinary pencil, but a Waterman's Pencil, a perfect companion for my perfect pen. This Waterman's Pencil is a splendid pencil. It is light; it is strong, it is beautifully shaped and balanced, it never requires sharpening, and the point is as rigid as though it were encased in wood. In appear-ance it matches exactly my Waterman's Ideal Pen; at the end is a receptacle with refills, and to make it still more complete there is a clip-cap to secure it firmly in my vest pocket.

-the LIGHTEST and STRONGEST made 3/-: or with Patent Waterman nickel clip, as illustrated, 4/-; or with gold-filled clip, 5/-. Can also be had in MOTTLED finish to match the Mottled Waterman's Ideal Pen Of Stationers everywhere.

L. G. SLOAN, Ltd., The pen Corner, Kingsway, London, W.C.2.



Rigid Point

Listen in with

an Efescaphone

Prices complete except valves.
Crystal Ope-Valve - \$12
Crystal Two-Valve - \$15

Plus B.B.C. tariff extra.

For those who live within 15 miles of a Broadcasting Station the "BENBOW" Crystal Set is ideal. It costs complete only

£3: 10s. (Plus I/- B.B.C. Tariff).

The Waterman Clip.

Refille.

Wherever you live

00000000

you can listen-in to the nearest Broadcasting Station with the new "St. Vincent" Crystal-Valve Efescaphone Set, illustrated here. It is designed to give maximum signal strength over the

whole range of broadcasting wave lengths.

The modest price of this new Efescaphone model brings the pleasure of listening-in within the reach of most people.

A loud speaker with one valve

The one-valve "St. Vincent" Set will work a load speaker within a radius of from 10 to 15 miles from a Broadcasting Station. while the two-valve set will do so within a radius of from 30 to 40 miles. The difference between the one- and two-valve models is the relative strength of signals.

Write for Catalogue, 300 containing full details of these and other models of

Receiving Sets. It will be sent to you post free, together with name of nearest dealer;



Wholesale only: FALK, STADELMANN & CO., LTD. Efesca Electrical Works: 83-85-87, Farringdon Road, London, E.C.1, and at Glasgow, Manchester and Birmingham.

a a a a a a a a a a a a a a a a a a

WIRELESS PROGRAMME—SATURDAY (Dec. 15th.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

LONDON.

14.30-12.30. - Concert: Mona V. K. Benson

5.0 .- WOMEN'S HOUR: " In and Out of the Shops," by "The Copy Cat." Chat," by Mrs. Marion Cran. " Gardening

5.30.—CHILDREN'S STORIES: Sophie at the Piano. Games and Pastimes. Children's News.

6.15,-7.0,-Interval. 7.0,-TIME SIGNAL AND 1ST GENERAL NEWS BULLETIN. S.B. to all Stations, Local News and Weather Forecast.

7.15.—ALLAN BADDELEY: "The Day's League Football.

7.30.—"PAGLIACCI," relayed from the "Old Vis." Theatre. S.B. to Newcastle. 8.50.—THE ROOSTERS' CONCERT PARTY.

S.E. to Newcrestle.

1. The "Roosters" break their shell.

2. Concerted, "Never Say Die"-The "Roosters.

3. WILLIAM MACK (High Soprano) war-

 Humorous Trio, "Over and Over and Over Again"—WILLIAM MACK. ARTHUR MACKNESS, PERCY MERRI-

5. Vocal Duct, "The Two Beggars" ARTHUR MACKNESS and SEPTIMUS

6. Humorous Song, "Potted Geography "-WILLIAM MACK.

 Humorous Quartette, "Little Tommy"— SEPTIMUS HUNT, WILLIAM MACK, ARTHUR MACKNESS, GEORGE WES-

8. A Few Short Stories-PERCY MERRI-

9. Song at the Piano, "The Boishevist"-GEORGE WESTERN.

10. A Bucche Affair, introducing "Four Jolly Roosters," by Merriman and Western, some Yokel Yarns, and the Old West Country Song, "Widdicombe Fair"—The "Roosters."

9.30.—TIME SIGNAL, 2ND GENERAL NEWS BULLETIN. S.B. to all Stations.

Local News and Weather Forecast. 9.45.—MR. W. J. BASSETT-LOWKE, M.Inst., Loco.E., on " Models and Model Railways. 10.0.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS relayed from the Savoy Hotel, London: S.B. to Birmingham and Newcastle.

11.0.—Close down.

Announcer: J. S. Dedgeon.

BIRMINGHAM.

3.30-4.30.-Concert for the Kiddles. 5.0.—WOMEN'S CORNER. 5.30.—Agricultural Weather Forecast. KIDDIES' CORNER.

7.0.—NEWS. S.B. from London. Local News and Weather Forecast.

7.15 .- SYDNEY RUSSELL (of the B.N.O.C.) will present

The Balcony Scene from

"ROMEO AND JULIET."

Cast :-Romeo..... E. STUART-VINDEN Juliet..... MARY BROTHERTON

Cast:-

Hamlet SYDNEY RUSSELL Horatio..... E. STUART-VINDEN Chost of Hamlet's Father

VINCENT CURRAN Marcellus..... EDWARD BURT The Queen of Denmark.. EDITH CLEGG Ophelia..... MARY BROTHERTON 8.0.—EDFTH JAMES, in Songs at the Piano. 8.15. 8.45. —Interval. 8.45.—THE STATION REPERTORY COM-PANY LEADS will give a few of the Favourite Old Time Songs.

9.30.—NEWS, S.B. from London. Local News and Weather Forceast.

9.45.—The Station Repertory Company Leads will give more Old Songs. 10.0.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS. S.B. from

11.0. Close down.

Announcer: J. Lewis.

BOURNEMOUTH.

3.45-4.45, -- Concert. 4.45. - WOMEN'S HOUR. 5.15.—KIDDIES' HOUR. 6.15.—Scholars' Half-Hour. 7.0.—NEWS. S.B. from London. 7.10.-L. O. SPARKS, on "Wireless."

7.25.—Local News and Weather Forecast. 7.30-8.0.—Interval.

ORCHESTRA. (Conductor—Capt. W. A. Featherstone)
Soite, "Rustic Revels" Fletcher
8.10. RITA OWEN and EDWARD JAMES in a Dramatic Sketch "THE BISHOP'S CANDLESTICKS,"

preceded by Curtain Music. Orchestra. (a) "Oriental": (b) "On the Links," (Words and Music by Capt. W. A. Featherstone.)

Orchestra. Selection, "Chu Chin Chow" Norton 9.30,-NEWS.-S.B. from London. Local News and Weather Forecast.

Orchestro. "An Evening in Toledo" Schmeling (1) The Serenade; (2) The Spanish Dance. 9.55. Rita Owen and Edward James in a Comedy Sketch

"A HAPPY PAIR," preceded by Curtain Music, 10.15. Close down.

Announcer: Bertram Fryer

CARDIFF. 3.30-4.30. Fulkman and his Orchestra relayed from the Capitol Cinema.

5.0.- 5 WA'S " "FIVE O'CLOCKS." "Mr. Everyman," Talks to Women, Vocal and Instrumental Artistes, Orchestra. Weather

5.45.—THE HOUR OF THE "KIDDIE WINKS."

7.0.—NEWS. S.B. from London. Local News.

7.15 .- WILLIE C. CLISSITT on "Sport of the Week.

Popular Night. ORCHESTRA.

7.30.—Overture, "Italians in Algiers", Rossini OWEN GANE (Baritone). (a) "Wreckers of Dunraven" . Pugh Evans
(b) "Once Aboard the Lugger" . D. D. Slater
50. MAY BLACKMORE (Solo Violin).

(a) "Reverie" Vieuxtemps (b) "Traumerei" Schumann (c) "L'Abeille" Francois Schubert ALEC JOHN (Tener). (a) "Living Poems" Batten (b) "Knotting Song" Purcell

Orchestra. Suite, "Nell Gwyn" Raymond Roze 8.25.—ALEC JOHN and OWEN GANE.

(a) "Land and Sea" A. J. Colborn (b) "Come to the Fair" .. Easthope Martin 8.35.—CHARLIE CHIPMUNK in "A Res-

taurant Episode." Owen Gane. "Falmouth is a Fine Town

Sir Landon Ronald "Captain Danny" R. Loughborough 8.55. Orchestra.

Selection, "Whirled Into Happiness". . Stolz 9.10.-MAJOR E. H. GUNN (the well-known Dog Judge): Chat on "Dogs."

Alec John.

"Sleep On" M. Marks
"Shy Mignonette" May Brake

9.30.—NEWS. S.B. from London. Local News and Weather Forecast.

9.40.—Dance Music. 10.15.—Close down.

Announcer: W. N. Settle.

MANCHESTER.

3.30,-4.30.-Concert, relayed from the Oxford Picture House.

5.0.—MAINLY FEMININE, 5.25.—Farmers' Weather Forecast. 5.30.—CHILDREN'S HOUR.

6.30.—Organ Recital, relayed from the Piccadilly Picture House. Organist, Mr. J. Armitage, F.R.C.O.

7.0.—NEWS. S.B. from London. Local News and Weather Forecast.

7.15-7.45.—Interval. 7.45.—THE HEYWOOD CO-OPERATIVE GLEE AND MADRIGAL SOCIETY. (a) Part Song, "The Hunting Song" Benedict

(b) Creations Hymn Beethoven (c) Part Song, "My Love is Like a Red, Red Bantock

Rose"

(d) Song, "Onaway, Awake Beloved"

("Hiawatha's Wedding Feast") Coleridge-Taylor

(e) Part Song, "The River Floweth Strong (f) Song, "Our Island Home."

8.30. -VICTOR SMYTHE has something to say. 8.45.—T. H. MORRISON (Solo Violin). 2nd Movement from the Sonata in C Minor.

Glee and Madrigal Society. 8,55. (a) Part Song, "Annie Laurie" . . . Bantock
(b) Epilogue, "It Comes From the Misty
Ages" Elgar
(c) Song, "Sen Fever" John Ireland
William Murray.

9.30.—NEWS. S.B. from London. Local News and Weather Forecast.

T. H. Marrison, 1st Movement from Fantaisia Apassionate Viewxtemps

.0. Glee and Madrigal Society.
(a) Choral Fantasia from "Maritana" Wallace (b) Part Song, "Oh! Hush Thee, My Babe '

(c) Song, "If I Had Wings"

Mme. N. Greenhalgh (d) Soldiers' Chorus, "Faust"..... Gounod 10.30.—Close down.

Announcer: Victor Smythe.

NEWCASTLE.

3.45 - Concert: The Clay-Page Trio: Hetty Page (Solo 'Cello), Ethel Page (Solo Pianoforte), Tom H. Clay (Solo Violin). 4.45.—WOMEN'S HOUR.

5.15.—CHILDREN'S HOUR: Stories, etc., by the Uncles Jim, Charlie and Richard.

6.0.—Scholars' Half-Hour: A Short Talk on Musical Appreciation-Opera," by Mr. L. L. Strong, A.L.C.M.

6.35.—Farmers' Corner. 7.0.—NEWS. S.B. from Landon. Local News and Weather Forecast.

7.30.—" PAGLIACCI." S.B. from London. 8.50.—THE ROOSTERS' CONCERT PARTY. S.B. from London.

9.30.—NEWS. S.B. from London. 9.40.—MABEL HERBERT (Contralto).

"A Song of Thanksgiving " Allitsen "Knowest Thou the Land " Thomas 9.50 .- STUART McINTOSH (Baritone). "The Curfew" Gould

55. Mabel Herbert. Barrau

Stuart McIntosh "The Devout Lover" M. V. White "Glorious Devon" German 10.10,-THE SAVOY ORPHEANS AND SA.

VOY HAVANA BANDS. S.B. from London. 11.0.-Close down.

Announcer: R.C. Pratt.

Famous Army Band.

The Story of the Grenadier Guards. By Herbert Parker.



MARTIAL music in almost every human being, and it would be difficult to imagine any modern army without the resplendent uniforms and the thrilling music of its band. It is, therefore, remarkable how little is known of the early history of some of the most famous of military bands, and Lt. G. MILLER, L.R.A.M. particularly of our own

Guards' Bands, British military music might be said to have its origin in the history of the Grenadier Guards. When the regiment was first raised in 1656, it was musicless, unless seven drummers can be described as the regimental band, but it was not possessed of even so important a person as the drum major until 1662, when his rank was created with the pay of Is. 6d. per day.

King Charles's Warrant.

In 1685, the year of the births of Bach and Handel, military music was introduced into the British Army by a warrant of Charles H. authorizing the maintenance of twelve Hautboys in the companies of the King's Regiment of Foot Guards in London, and one of the last acts of the Merry Monarch was to order that a fictitious name should be borne on the strength of each of the other companies quartered in the country, so that these musicians might be granted higher pay. To this day, the uniform of the Grenadier Guards Band has a distinctive feature commemorating this King. A dark blue cloth goes half around the arm and is a relic of an old mourning band worn for Charles II., who instituted the Hautboys.

Scanty Records.

Historical material is so scanty that no complete account has yet been made of the development of these military bands. Dr. Burney, however, writing in 1772, records that the Foot Guards had an excellent band, which played every morning at St. James's and in the park. Nearly a century, however, had passed since the warrant of King Charles, and yet there is little known of the development of military music during this period, and no record exists to show the growth of its popularity either within or outside the Army itself.

A Child Composer.

It is not generally known that Samuel Wesley, as a child between the age of seven and eight'years, specially composed a march for the Grenadier Guards. Its origin is best described by the composer's father, the Rev. Charles Wesley, the hymn writer, who says :-

"He (Samuel) was desired to compose a march for one of the regiments of the Guards, which he did to the approbation of all that heard it, and a distinguished officer declared that it was a movement which would probably inspire steady and serene courage when the enemy was approaching. As I thought the boy would like to hear the march performed, I carried him to the parade at the proper time, when it had the honour of beginning the military concert. The piece being finished, I asked him whether it was executed to his satisfaction. To which he replied : 'By no means!' I then immediately introduced him to the band, which consisted of very tall and stout musicians. . . . On this, Samuel said to them: 'You have not done justice to my composition,' to which they answered the urchin with astonishment and

contempt: 'Your composition?' Samuel replied with great serenity: 'Yes, my com-

"This I confirmed, when they stared and severally made their excuses by protesting that they had copied accurately from the manuscript put into their hands. This, Samuel most readily allowed to the Hautboys and Bassoons. He said it was the French Horns that were in fault. They making the same defence, he insisted upon the original score being produced and, showing them their mistake, ordered the march to be played again. To this they submitted with as much deference as they would have shown to Handel."

"One for Each Troop."

In the early years of the nineteenth century it would appear that the War Office was charily acknowledging the existence of military bands, for a General Order issued from the Horse Guards in 1803 states that :-

"It is His Majesty's pleasure that in Regiments having Bands of Music, not more than one private soldier for each troop or company shall be permitted to act as Musicians, and that one non-commissioned officer shall be allowed to act as Master of the Band.

"These men are to be drilled and instructed in their exercises, and in case of actual service, are to fall in with their respective troops or companies completely armed and accoutred."

How the shade of Peter Van Hausen must have smiled with pleasure at this recognition of bandmaster and band! He it was, who, in 1764, by Royal Warrant, was given an allowance of 1s. 6d. per day to instruct one man in each company of the Guards in the use of the fife.

A Famous Bandmaster.

There have been many famous bandmasters associated with the Grenadier Guards, who have striven to make the existence of the band a vital part of the life of the regiment. From the scanty records available, it is difficult to give details of the obstacles they had to overcome. Perhaps the best known of the distinguished bandmasters is Dan Godfrey, father of Sir Dan Godfrey, of Bournemouth, who, in 1886, was appointed the Grenadiers' bandmaster, a post which he held with distinction for forty years. He was the first bandmaster in the British Army to receive a commission, being gazetted an honorary second lieutenant on the occasion of Queen Victoria's Jubilee, in 1887.

Playing to the King.

In turn with the four other bands of the Household Infantry Regiments-the Coldstreams, Scots, Irish and Welsh Guards-the Grenadiers' Band is on duty every morning when the King and Queen are in residence, at the mounting of the guard or at St. James's Palace.

The immediate successor of Lieut, Dan Godfrey was Dr. A. E. Williams, M.V O., who not only enhanced the musical fame of the band, but contributed to its library many scholarly and brilliant compositions. He held the post of conductor for more than twentyfive years.

Record of the achievements of the Grenadier Guards Band would not be complete without an appreciation of the work that is being done by their present Director of Music, Lieutenant G. Miller, L.R.A.M. This successor of Sir Dan Godfrey has not only striven to maintain the high level of his predecessor, but now is undoubtedly regarded as contributing largely to the great popularity of his band.

Birmingham Calling.

By Percy Edgar (Director of Birmingham Station).

ONE of the things I am asked to do in this article is to comment upon the type of programme which appeals most to the listener. Why, listeners like portions (I only said portions) of every programme that the most agile brain of a Station Director could evolve, and their tastes are so diversified that I think, had I the time—it's all right, I haven't—I could devote at least a couple of columns to this one subject.

An Ideal Programme.

Were I a broad-eatcher, and not a broadcaster, I think the type of programme I would appreciate would be made up of items like the following:-

75 minutes orchestral or military hand music, including both classical and popular items, with, perhaps, the latter predominating.

20 minutes vocal, ditto.

15 minutes humour (real, not alleged). 10 minutes talk on a "live" subject by a live" speaker.

15 minutes part songs or quartettes.

10 minutes instrumental soli.

10 minutes chat occasionally on wireless

reception.

But that would be only one programme out of seven-what : bout the other six nights? I can hear you say. Well, I think this type of programme, while remaining substantially the same, could be so varied as not to become stale, and there could be introduced from time to time such land-line transmissions of special "stunts," speeches, etc., as you have heard from the various stations of the B.B.C., and, of course, occasional dance music which most of the youngsters appreciate.

The Youthful Spirit.

And, talking about virility, that's the very word I wanted to introduce the subject of my staff-those keen, enthusiastic boys and girlsfor they are that in spirit-without whose co-operation and ever-ready help the carrying on of 5IT would be impossible.

I have three Aunties-permanent ones-to back me up. There is Auntie Gladys, who takes the Women's Corner, and not being satisfied with that, stays on and tells delightful fairy stories in that most fascinating hour of the day-the "Kiddies' Corner."

Then there is Auntie Elsie, whose nimble fingers supply the accompaniment for auditions, soloists, etc., and who gives the most realistic imitation of the denizens of a farmyard that one could wish to hear-these latter, of course, only for the benefit of the kiddies.

Next comes Auntie Phil, who writes and broadcasts those charming "Snooky" stories which all the kiddies who listen to 5IT love so much. And, too, there is Auntie Kitty. who also during the Kiddies' Corner has contracted a most appalling habit of punning on the slightest provocation.

And the stronger sex of the staff ? Well, there's Harold Casey (Uncle Pat) with the voice, but he's got more than that; he's my A.S.D., and he's blessed with a never-failing energy and

the faculty of getting things done.

And talking of energy, what an inexhaustible fund of it has Joseph Lewis, our musical director. One has only to see him conducting a choral and orchestral rehearsal in the studiocoatless and dishevelled-to know that in him we have a man whose whole soul is steeped in music, and it is to him and the repertory company which he has formed that we owe entirely the operas which have been broadcast from 5IT during the past three months.

Look to the Future! Ideals versus Expediency.

By P. P. ECKERSLEY, Chief Engineer of the B.B.C.

"THERE is nothing permanent except

So wrote a great philosopher. It takes someone really great to say so simple a thing in a very few words. That is my quarrel with journalism; there seems to be such a lot of padding spoiling the outline of bare essential. But I wrote about that on the question of the little mottled egg, and, by the way, the 140° Centigrade was part of the subtle touch; don't people spouting out a froth of words clothe the pure naked outlines of truth with the gross padding of description and usually get it wrong at that?

As I write, I see Truth's slender form more and more covered with this same shapeless padding, and the wrappings are my own. I apologise,

but can only hope that the dress I attempt will but serve to paint a purer outline and present a more modest, but no less beautiful, view. (Voice from the back, "What a hope!")

Seeing Ahead.

"There is nothing permanent except change," and we are living in mutation that, like a quicksand, clogs progress and confuses wit.

On the engineering side research and experiment are only proving "ancient good uncouth." A year ago pendulous from the ceiling of a small uncomfortable room draped, save the mark! with mosquito netting, hung microphones which were designed to do duty on the ordinary telephone of daily use. Two years ago Writtle started with "combination tones," grid current and distortion circuits galore, backed by a microphone held in the hand of the broadcaster. I have been happy to have been even from the early Chelmsford days a participater in improvement, but always I have itched under the necessity of seeing much further than actuality. The last sentence sounds almost as good as the great philosopher's, and so it ought, because I composed it.

Changes Must be Practical.

I mean it has been possible, by looking up experiments, to prove such and such a part in the chain wrong. It has been quite another thing to apply that knowledge to the service. It is so in all things; can we not see so easily the evils of Society (no! this is not a novel bound in red paper, with

a vamp in a risqué evening dress and black hair illustrated beneath the puce lettering). It is easy to see that slums and unemployment and war are wrong; but it is so difficult to frame schemes of practical utility to bring things "nearer to the hearts' desire."

It is all very well to counsel "shatter it to bits." Remember that we must have a service, that the wheels must go on turning. It is the same thing with designing and experimental work; whatever changes are to be made must be practical, unextravagant—ideals must give way to expediency.

I have spent much time designing things and a more delightful pastime does not exist. To take you into my confidence, we have been finding out a lot about "simultaneous." In my mind I have conceived a great big switchboard with orderly plugs with different coloured cords, with valves aglow and a shaded switchboard light and a green opal reflector. There are meters everywhere, all reading the same and the lines are silent, balanced, stretching over leagues of country carrying a perfect broadcast to delight the ears of every listener in the island.

Weeks of Scheming.

Actually, at this moment, in a corner of a workshop valves do glow, chords elick to jacks, and the lines do flow most poetically from the heart of London to the great towns. The desire, however, to change to semething newer, cleaner and more comprehensive, is there, but weeks of scheming lie between conception and actuality. Always change! What we con-

"Nar, then! 'Ow do you expect me to get the 'Ague concert with those rags on me aerial?"

sidered the last word a month ago is now scornfully looked upon as a temporary "lash up."

A new studio, too, and I promise myself a thrill when it is completed, when the builders are gone with their mess, when the decorators have clanked away with their whitewash-pails and the vacuum-cleaner has picked up its last piece of inevitable fluff from the new carpet. That thrill of pleasure in creation, alas! will be throttled in the chagrin of a new discovery, when one of these brainy people like Captain R-d will come along with a piece of iron, a small bit of wire, two pieces of string, a lump of plasticine and will show me that if the draping had been puce and not apple green, the tone value of the piccolo would be infinitely sweeter. It is so difficult to look ahead, and however much one may revel in the sublety of the string, the plasticine and the little coil, one is always confronted with the war of ideals and expediency.

We are in a froth of politics as I write. A. says that such and such a scheme is the only one; B. that A.'s scheme is drivel. C. has a third solution to put an end to strife for all time.

Politicians should have the job of making mechanical things work, and voters, too. Who can be judged except by a committee of his peets? Anyone can frame schemes—what if they really must work? It is so difficult not to praise one's own child and see in it a quintessence of the virtues; it is so difficult to abandon one's pet scheme in favour of another; but if there is one thing that design work teaches one, it is to have an impartial

Trust the Experts.

Thus would I adjure politicians to pause in their harangues and ask themselves if their scheme is practical, and if they cannot judge, let them trust their experts. If they want training, let them frame electrical achemes or mechanical schemes that must work.

There is nothing permanent except change," and some of you homemakers must keep pace too. There is absolutely no reason why you, too, should not keep pace with development. Remember, in the old days it was useless to perfect receivers because an ordinary carbon could not give anything like the right stuff, but now "we have changed all that," and if you are using loud speakers a little negative on the grid, a certain amount of shunting on your transformers, a good loud speaker, a low impedance valve with plenty of back sweep should give you all you want. Now a valve and transformers are the very bestwhat? I haven't told you, alas! I mayn't do it; but go forth and experiment; design towards tomorrow; don't cling to the skirts of yesterday.

"There is nothing. . . .

[Yes, but you've said that before, and the only permanent change we shall make is not to include your articles in the—er—official organ,— Ep.]

Shame! Readers.

Thank you! Author.

"And the street shall be filled with policemen,
And the Night in the starlight swoons;
But the burglars shall take out their jemmies
And silently steal the spoons."

LISTENING TO FOOTBALL.

Wireless was put to a novel use the other day when the students of Princeton University, New Jersey, listened to their football team playing a U.S. Navy team at Baltimore, 150 miles away.

On the lawn at Princeton loud speakers were placed, through which progress of the match was recorded. Exciting incidents in the match were wirelessed every few minutes, and the listening students cheered excitedly when their team did well, but were somewhat dejected when they learned the result of the game—a draw!



It's fine to have these topping sweets handy when the call of hunger comes! And any time is CLARNICO LILY BRAZIL time. Delicious sugar-butter-cream confections studded with lumps of Brazil nut which are rapidly creating the Lily-Brazil-Habit all over England. Buy a quarter to-day and you will want half-a-pound to-morrow.

If you prefer Chocolates, ask for CHOCOLATE LILY BRAZILS, they only cost ld. more per 1-lb.

Made by **CLARNICO** - So they're Pure!



CLARKE NICKOLLS & COOMBS Ltd Victoria Park London

HENDERSON



GUARANTEED BRITISH.

HENDERSON HEADPHONES-Specially wide leather headband completely eliminates all possibility of discomfort—even after long periods of wearing—no metal touches you. Light in weight and fully adjustable, resistance 4,000 ohms (2,000 ohms each earpiece). Very sensitive music and speech repeated Price, per pair accurately and naturally.

Radio Engineers and Manufacturers:

W. J. HENDERSON & CO.,

351, Fulham Road, South Kensington, London, S.W.10. 'Phone: Kensington 8983. Nearest Stations: Earl's Court or South Kensington. 'Bus Routes: 31, 14, 96.

Xmas Gifts to all our Readers

offers Radio Press **Books at Half Price**

BECAUSE we feel that you have only to read SPECIAL NOTE. appreciate its technical superiority over all other weekly wireless Magazines, we are prepared to offer a big inducement to get you to give it a trial.

Commencing with the next issue, we are producing six special numbers containing special articles including a series dealing with dual amplification both practical and theoretical written by John Scott-Taggart, F.Inst.P. (Editor of "WIRELESS WEEKLY") WEEKLY"). Each one of these six issues will contain a coupon and if you send these six coupons up to Radio Press, Devereux Court, Strand, W.C.2, you will be entitled to purchase at half-price, any e of our 14 wireless books. I hus the vall these coupons is worth to you anything from 3d. to 5/- according to your selection, quite apart from the value of the special six issues of "WIRELESS WEEKLY."

Be sure to place your order for a copy of this superior Weekly to-day 6d. at all Newsagents.

> HAND THIS ORDER TO YOUR NEWSAGENT.

Please supply six issues of "WIRELESS WEEKLY, commencing December 12th, to: Name..... Address

We appreciate the fact that we may considerably under-estimate the demand for the next issue of "WIRELESS WEEKLY" and that you may not be able to get

To safeguard you, however, we shall repeat the coupon in the seventh issue, so that even if you miss the December 12th issue you can still participate by commencing with the December 19th issue.



WIRELESS PROGRAMME—ABERDEEN (Dec. 9th to

The	letters	"S.B." printed in italics
in	these	Programmes signify a
Si	multan	eous Broadcast from the
st	ation m	entioned.

SUNDAY.

3.0-5.0.—Organ Recital. S.B. from London.

8.30,
BEECHGROVE U.F. CHURCH CHOIR.
Anthem, "Save Us, O Lord" Bairstow
8.40R. E. JEFFREY: The Story of "Sam-
son and Delilah."
8.50. KATHLEEN MORGAN (Soprano).
"He Shall Feed His Flock" Handel
8.55. Choir.
Hymn, "Jesu, Lover of My Soul,"

9.0.—THE VERY REV. PROVOST ERSKINE HILL, M.A., St. Andrew's Cathedral. Religious Address. 9.15. Choir.

Psalm, "Our God, Our Help." 9.20.—R. E. Jeffrey. A Story from "Esther." 9.25. Choir. Anthem, "Oh, for a Closer Walk With God"

Forster Kathleen Morgan. Choir. Anthem, "To Thee, O Lord" .. Ruchmaninoff The Gloria from 12th Mass Mozart 10.0.-NEWS. S.B. from London. Local News and Weather Forecast, 10.15.—Close down.

Announcer: R. E. Jeffrey. MONDAY.

3.30-4.30.—The Aberdeen Wireless Quartette.
5.0.—WOMEN'S HALF-HOUR,
5.30.—CHILDREN'S CORNER.
6.0.—Weather Forecast for Farmers.
6.5.—Boys' Brigade News.
6.15.—Talk on French Language, No. 1, with
Simple Conversation.
6.40.—Boy Scouts' Talk. Dr. W. L. Stephen or
"Scout Law Part 2." Imperial Headquarters

Scottish Headquarters, and City News. 7.0.—NEWS, S.B. from London.

JOHN STRACHEY, S.B. from London.

Local News and Weather Forecast.

Popular Night.

7.25.	ORCHESTRA.	
Overture,	Poet and Peasant " Suppe	
-7.35.		
ADELA	IDE L. MUNRO and MINA	

MITCHELL. Duet, "In Springtime" Newton Orchestra. 7.55.—DUFFTON SCOTT will entertain.

Orchestra. Duet, "The Rose Garden" Carse

8.40.—Duffton Scott will entertain. Orchestra.

Selection, "Samson and Delilah " Saint-Saens 9.0-9.30.—Interval. 9.30.—NEWS. S.B. from London. Orchestra.

Selection, "Rigoletto" Verdi 10,0.—Duffton Scott will entertain. 10.10. Adelaide L. Munro and Mina Mitchell.

Duet, "Carmena"......Lane Wilson

10.20. Orchestra Selection, "Chu Chin Chow" Norton

10.30.—Close down. Announcer: W. D. Simpson.

TUESDAY.

3.30-4.30.—The Aberdeen Wireless Quartette. 5.0.—WOMEN'S HALF-HOUR. 5.30.—CHILDREN'S CORNER, 6.0.—Weather Forecast for Farmers. 6.5-7.0.—Interval.

7.0.—NEWS.	S.B.	from L	ondon.
Local News	A STATE OF THE PARTY OF THE PAR	COLUMN TO SERVICE	Market Company of the
0	lassi	cal N	light.

Overture, " Magic Flute " Mozart DORIS LEMON, of the B.N.O.C. (Soprano).

ORCHESTRA.

7.40. ABERDEEN MADRIGAL CHOIR. (Under the conductorship of Mr. Arthur Collingwood, F.R.C.O.).

"Weary Wind of the West" Elgar
"Ballad of Yarrow" arr. Robertson
"Northumbrian Bagpipes" ... arr. Whitaker Orchestra.

"First Movement of Symphony No. 5" Beethoven 8.0.-MR. HARRY TOWNEND (Director of the Art Gallery, Aberdeen) on "How To Appreciate a Picture."

Choir. "Aye, She Kaimed Her Yellow Hair" . . Scott "A Shepherd in a Shade" Dowland
"Aye Waukin O" arr. Robertson Orchestra. "Chant Elégiaque " Tchaikovsky

WILLIAM MICHAEL, of the B.N.O.C.

Prologue to " Pagliacei " Leoncavallo " Non piu Andrai " Mozart Choir. "Springtime of the Year" Williams
"Bonnie Fisher Lad" Whitaker
"Quick, We Have But a Second" . Stanford

Orchestra. Overture, "Leonora No. 3" Beethoven 9.0-9.30.—Interval.

9.30.—NEWS. S.B. from London. Local News and Weather Forecast. Orchestra.

"Voi Che Sapete " (" Figaro ") Mezart "Vissi Darte" ("Tosca") Puccini Orchestra. "Magdalene at Michael's Gate " Davies Selected William Michael.

Announcer: R. E. Jeffrey.

WEDNESDAY.

3.30-4.30.—The Aberdeen Wireless Quartette. 5.0.—WOMEN'S HALF-HOUR. 5.30.—CHILDREN'S CORNER.

6.0.—Weather Forecast for Farmers. 6.5-7.0. Interval.

7.0.—NEWS. S.B. from London. ARCHIBALD HADDON. S.B. from London. Local News and Weather Forecast. ORCHESTRA.

Fox-trot, "If Rachel was Only Annie Laurie"; Waltz, "Arrawarra." 7.30.—CONSTANCE WHLLIS of the B.N.O.C.

"Oh Love, From Thy Power" ("Samson

One-step, "I'm Getting Better Every Day"; Fox-trot, "Caravan." 50. W. G. SMITH (Tenor).

"Your Tiny Hand is Frozen"......Puccini
"The Song of the Sea Kings"......Lohr Orchestra. Waltz, "Angelus"; A Ballad in Fox-Trot Rhythm, "When the Leaves Come Tum-bling Down."

8.10.-MR. D. CHRISTIE, M.A. (Hon. President, Aberdeen Esperanto Society), on " Esperanto."

One-step, "Down Yonder"; Waltz, "Won-derful One"; Fox-trot, "If We Could Live on Love" Live on Love. Constance Willis. "The Wood Pigeon" Lehmann 8.50 .- PIPERS OF OAKBANK SCHOOL. Pipe Major, JOHN REID. Foursome, "The Devil in the Kitchen"; "Reel o' Tulloch," 9.0-9.30.-Interval. 9.30.—NEWS. S.B. from London. Local News and Weather Forecast. Orchestra. Fox-trot, "Where the Volga Flows"; Waltz, "Shadow Waltz"; Waltz, "You to Me and Me to You." Constance Willis. "If I Should Call"..... Tennent Eightsome, "Kate Dalrymple"; "Back o' Bennochie." 10.30. - Close down.

Announcer: W. D. Simpson. THURSDAY.

3.30-4.30.—The Aberdeen Wireless Quartette. 5.0.—WOMEN'S HALF-HOUR. 5.30.—CHILDREN'S CORNER. 6.0.—Weather Forecast for Farmers.

6.40.-Boy Scouts' and Girl Guides' News. 7.0.—NEWS. S.B. from London.

PERCY SCHOLES. S.B. from London. Radio Society Talk. S.B. from London. Local News and Weather Forecast.

Scotch Night, ORCHESTRA. Overture, "Heart of Midlothian "... Thomson 7,30. THE SHEPHERD'S CHOIR. Conductor, GEO. A. INNES.

"Kate Dalrymple"..... W. Meston - Orchestra. "Scottish Fantasia"......Volti

ALEXANDER MACGREGOR (Baritone).

8.0. Orchestra.

Number from "Keltic Suite".....Foulds
8.10.—MR. A. BURNETT-WHYTE, Advocate, Aberdeen, on "Colour Photography." 20. Orchestra.

30. Choir.
Solo and Chorus from "Rob Roy" (arr. Dr.
Bell) (Soloist, MISS ETTA MAIR).

"The Eriskay Love Lilt" (Hebridean) Kennedy-Fraser

"The Hundred Pipers "..... W. S. Roddie 8.40. Orchestra Patrol, "Wee Macgregor".......Amers
50. Alexander MacGregor.

".Where Hath Scotland Found Her Fame ?" "The Wee Cooper of Fyfe". . H. S. Robertson "The Gathering of the Clans", . W. S. Roddie " Green Grow the Rashes "........... Meston

9.15-9.30. Interval. 9.30.—NEWS. S.B. from London.

9.45.—SIR WILLIAM BULL. S.B. from London. - Alexander MacGregor.

"The Standard on the Braes o' Mar " Patterson Orchestra. Selection, "The Thistle".......... Myddleton.

10.30.-Close down. Announcer: H. McKee. (Continued on page 395.)



ONLY an Amplion associated with a suitable receiving set, is capable of reproducing in full volume the harmony of Broadcast Dance Music.

With the use of an Amplion, speech, as well as vocal and instrumental music, is loud, clear and free from distortion and objectionable resonance.

Prices from Two Guineas.

AMPLION LOUD SPEAKERS



THE FLUXITE TOUCH



The fouch that stamps your delicate little wire-less set as perfect—without that touch, how can you say with conviction, "My set is all it should be "?

We must admit ourselves that nothing is easier than twisting two wires into connection—it is quick and it serves to a certain

extent, but the snag is that it is liable to loosen, and electricians know fully what a loose connection will lead to. Soldering renders your connections "loose-proof"—it grips tight and doesn't let go. Don't jib at the sound of soldering—just bear in mind the fact that Fluxite makes it an easy affair. Give the attention to your set that you wish it to give you, and solder each connection carefully with the aid of Fluxite—in other words, give your set the "Fluxite touch." Ask your Ironmonger or Hardware Dealer to show you the neat little

FLUXITE SOLDERING

It is perfectly simple to use, and will last for years in constant use. It contains a special "small-space" Soldering Iron with non-heating metal handle, a Pocket Blowlamp, FLUXITE, Solder, etc., and full instructions. Price 7/6. Write to us should you be unable to obtain it.

FLUXITE

SIMPLIFIES SOLDERING

All Hardware and Ironmongery Stores sell-FLUXITE in tins, price 8d., 1/4, and 2/8.

Buy a Tin To-day.

FLUXITE LTD., 328, Bevington Street, Bermondsey, England



For the teol-kit of your car or motor cycle or any soldering jobs about the home.

BEGINNERS GUIDE TO WIRELESS

Best Book Obtainable.

If you wish to make your own receiver, or to improve the set you already have, you cannot do better than obtain this book.

HOW TO ERECT, CONNECT, AND MAKE

Aerials, complete crystal and valve receivers, coils, tuners, etc.; also the latest two and three valve tuned anode receivers and one and two valve amplifiers.

144 pages (including 28 diagrams), 1/3 post free. SAXON RADIO CO. (Dept. 24), South Shore, BLACKPOOL.



Catalogue "C" to-day if you cannot call!

Retailers should write for Whole-

sale List.

What "Service" Means!

IN Wireless as in all the lines we handle—we are thorough, efficient and helpful. Our "Service" means offering you all that is New and Good—Special Bargains—Easy Payment Terms—Advice. This is a pleasant Centre in which you can see, buy, or just chat with an Expert. Call in to-day if you can, and appreciate all that is offered in goods and helpful Service. We specialise in LISSEN, IGRANIC, DUBILIER, POLAR, BURNDEPT, G.E.C. and other leading apparatus.

The Service Company still

Wireless Dept., 292-3, High Holborn, ondon, W.C.1



They accumulators
for your valves

Unskilled chargers will only ruin them. For 15/- a quarter
ONLY 1/3 A WEEK ENCLUSIVE

we will supply you continuously with reliable charged L.T.
Batteress, replaced at time of collection by motor anywhere
in London.

BRITISH BATTERY SUPPLY SERVICE,
Carr Street, London, E.14.

Write NOW for Pamphlet D Free.

Originators of the Battery Supply Service.

WIRELESS PROGRAMME—GLASGOW (Dec. 9th to Dec. 15.) Dec. 15.)

The letters "S.B." printed in italics in these Programmes signify a Simultaneous Broadcast from the station mentioned.

CITATOAV

SUNDAY.
3.9-5.0.—Organ Recital. S.B. from London,
8.30. QUARTETTE OF BELHAVEN
CHURCH.
Anthem, "O Blessed Jesu" Deorak
8.40.—THE REV. JAMES McMILLAN, M.A.,
of Newlands United Free Church. Religious
Address.
8.50. Quartette.
"O Love Most Wonderful" A. H. Brewer
Hymn, "Jesus, These Eyes Have Never
Seen."
9.0. WILLIAM ROGERS (Solo Violin).
Two Movements from Sonata for Violin and
Piano Cesar-Franck
9.10. PEG GORDON (Contralto).
"Love's Coronation " Florence Aylward
"Perhaps" Dorothy Forster 9.20. William Rogers.
9.20. William Rogers.
Two Movements from Sonata for Violin and
Piano Cesar-Franck
9.30. HELENA HARTLEY (Soprano) and
JAMES NEWALL (Tenor).
Duet, "Love Divine" Stainer
9.40. Quartette,

Quartette.

"Turn ye to Me" .. arr. T. H. Collinson

"Good-Night, Good-Night Beloved" Pinsuti

10.30.—Special Announcements. Close down. Announcer: A. Carruthers.

Local News and Weather Forecast.

William Rogers. Violin Solo, "Romance" Svendsen 10.0.—NEWS. S.B. from London.

MONDAY.

3.30-4.30.—An Hour of Melody, by the Wireless
Quartette.
5.0.—A TALK TO WOMEN.
5.30.—THE CHILDREN'S CORNER,
6.0.—Weather Forecast for Farmers.
6.45.—Boys' Brigade News.
7.0.—NEWS. S.B. from London.
JOHN STRACHEY. S.B. from London.
Local News and Weather Forecast.
7.30.—RUSSIAN COMPOSERS' PRO-
GRAMME. S.B. from London.
9.10.—LTCOL. N. HOWARD MUMMERY.
S.B. from London.
9.30.—NEWS. S.B. from London.
9.45.—RUSSIAN COMPOSERS' PRO-
GRAMME (Continued). S.B. from London.
10.30.—Special Announcements. Close down.
Announcer: A. H. Swinton Paterson.

THESDAY

IUESDAI.
3.30-4.30An Hour of Melody.
5.0.—A TALK TO WOMEN.
5.30.—THE CHILDREN'S CORNER.
6.0.—Weather Forecast for Farmers.
7.0.—NEWS. S.B from London.
Local News and Weather Forecast.
7.15. ORCHESTRA.
Overture, "Giralda" Adams
7.25.—PROFESSOR LINDSAY (of Glasgow
University), on "The Effect of Mechanical
Invention on Industry."
7.35. CONSTANCE WILLIS of the B.N.O.C.
"Life and Death" Coleridge-Taylor
"Big Lady Moon" Coleridge-Taylor
Big Lady Moon Coveringe-Luylor
7.45. Orchestra. Entr'acte, "Merry Playmates" Howgill
7.50. ALEX. MACGREGOR (Baritone).
" Badanin Love Song" Pinnuti
"Bedouin Love Song" Pinsuti "A Song of London" Cyril Scott
8.0. Orchestra.
Selection, "La Secchia Rapita"
Burgmein-Tavan

ı	
8	8.10. Constance Willis.
ı	Serenade Brahms
9	"Sunday"
1	8.20. Orchestra.
•	Two Pieces: I—Chanson Triste, 2—Humor-
8	esque
1	8.30. Alex. MacGregor.
8	8.30. Alex. MacGregor. "The Four-Leafed Shamrock" K. Russell "In an Old Fashioned Town" Squire
ı	"In an Old Fashioned Town" Squire
•	8.40, Orchestra.
	Waltz, "Girls of Vienna" Ziehrer
9	8.50. Constance Willis.
1	"Abiding Joys" Woodgate
3	"Abiding Joys" Woodgate "Primrose and Columbine" Woodgate
1	9.0-9.30.—Interval.
я	9.30.—NEWS. S.B. from London.
9	Local News and Weather Forecast.
g	9.45. Orchestra
1	Suite, "Three African Dances" Ring
	10,0. Alex, MacGregor.
4	"Song of the Flea " Moussorgsky
ä	"I'm Wearin' Awa, Jean " Traditional
3	10.10. Orchestra.
Š	Selection, "Squire's Popular Songs"
d	arr. Baynes
3	March, "Prodana Nevesta" Smetana
9	Special Announcements.
3	10.30.—Close down.
9	The state of the s
ì	Announcer: H. A. Carruthers.
-	
	WEDNESDAY.

7.35.

	Classical Night.
.35.	ORCHESTRA.
Overture,	" William Tell "
.47.—MR.	A. P. GILCHRIST, on "?

cless

don.

Rossini

7.47. MR. A. P. GILCHRIST, on Motive I
Modern Art."
8.0. Orchestra.
Symphonie Poem, "Les Préludes" T. Lis:
8.10. WILLIAM MICHAEL of the B.N.O.C
(Bass).
"Credo" ("Othello") Vero
8.20. Orchestra.
Two Entractes: (a) "Poem Elegiae"
(b) "Minuet" Bantoc
8.35,-DORIS LEMON of the B.N.O.C.
(Soprano).
" Dove Sono " ("Figaro") Mozar " Voi che Sapete " (Figaro") Mozar
"Voi che Sapete " (Figaro ") Moza
With orchestral accompaniment.
8.45. Orchestra.
Suite, " Poétique " Dvora
9.0-9.30.—Interval.
9.30.—NEWS, S.B. from London.
Local News and Weather Forecast.
9.45. Doris Lemon.
"Vissi D'Arte" ("Tosca") Puccin
"Ann Maria !!
"Ave Maria"
With orchestral accompaniment.
9.55. Orchestra.
THE PERSON NAMED OF THE PE

Symphony, No. 6. ("The Jupiter") .. Mozart).5. William Michael. "Ari tu" ("Masked Ball") Verdi "Race of Courtiers" ("Rigoletto") .. Verdi Orchestra. Continuation of Symphony No. 6 ("The

Announcer: Mungo M. Dewar.

THURSDAY.

3.30-4.30An	Hour of Melody	by the Wireless
Quartette.	-	
5.0.—A TALK		marron
5.30.—THE CI	COMPANDED TO FOR	

6.0.—Weather Forecast for Farmers. 6.45.—Boy Scouts' and Girl Guides' News.

THE CONTRACTOR OF THE CONTRACT
7.0.—NEWS, S.B. from London.
PERCY SCHOLES. S.B. from London.
Radio Society Talk. S.E. from London.
Local News and Weather Forecast.
7.35. FORTY-FIVE MINUTES WITH
THE KIDDIES.
ORCHESTRA.
Selection of Popular Aira.
Serenade, "Baby's Sweetheart" Corri
7.45. GAMES BY THE ORCHESTRA.
Grand Old Duke of York; Musical Chairs;
ete.
8.0. Old and New Choruses by the Uncles.
8.10. Orchestra.
Salastian "Daha's Owen " a Catastian of
Selection, "Baby's Opera"; a Selection of
Popular Nursery Rhymes Byng
8.20.—"LITTLE NELLIE KELLY," Act I.
S.B. from London.
9.30,—NEWS. S.B. from London,
9.45.—SIR WILLIAM BULL. S.B. from
London,
10.0. THIRTY MINUTES WITH THE
OLD DANCES.
ORCHE-TRA.
Petronella; Old-Time Waltz; Polka; Eight-
some Reel.
10.30.—Special Announcements. Close down.
Announcer : Mungo M. Dewar.
The same of the sa
FRIDAY

3.30-4.30An Hour of Melody by the Wir	ele
Quartette.	
5.0.—A TALK TO WOMEN.	
5.30.—THE CHILDREN'S CORNER.	
6.0.—Weather Forecast for Farmers.	
7.0.—NEWS. S.B. from London.	
G. A. ATKINSON. S.B. from London.	
Local News and Weather Forecast.	

		Da	nce	Ni	ght.
.30.		0	HCH	EST	KA.
Fox-trot.	31	Ann	abell	e":	Waltz

the Dark"; One-step, "Tsing."
7.48.—MR. JOHN LEGGAT (Secretary of the
N.W. Lanark Referees' Association) on "Foot-
ball from a Referee's Point of View."
SO CATHERINE PATERSON (Controlle)

8.0. CATHERINE PATERSON (Con	tralto).
"The Market" Mo	Illu Coreso
"Canzonet Bohemian" ("Carmen"] LRIDEL
8.10. Orchestra.	
THE RESERVE OF THE PROPERTY OF) Desce

Lancers, "The Marching"; Waltz, "Wonderful One. 8.25. WILLIAM McDOWALL (Baritone).

"Hail! Caledonia" Stroud
"The Auld Scotch Sangs" ... Traditional Orchestra.

Fox-trot, "You've Got to See Mama Every Night"; Eightsome Reel. 53. Catherine Paterson. "Slow, Horses, Slow" Mallinson
"Gipsy Spring" Herbert Oliver
9,0-9,30.—Interval.

9.30.—NEWS. S.B. from London. 9.40.—"LITTLE NELLIE KELLY," Act II. S.B. from London.

11.0.—Special Announcements. Close down. Announcer: A. H. Swinton Paterson.

	DILL CALDILLE
ı	3.30-4.30.—An Hour of Melody by the Wireless
ı	Quartette.
ı	
	5.0.—A TALK TO WOMEN.

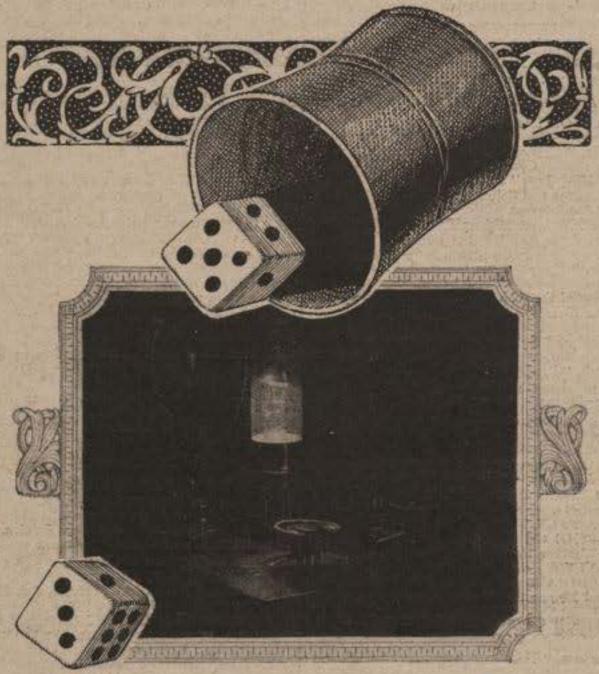
5.30.—THE CHILDREN'S CORNER. 6.0.—Weather Forecast for Farmers. 7.0.—NEWS. S.B. from London. Local News and Weather Forecast. ORCHESTRA.

Overture, "Poet and Peasant" Supps 7.25. R. A. CUNNINGHAM (Baritone). "The Rancher's Daughter" .. L. Lehmann
"Night Herding Song" L. Lehmann
7.35. THE POSSILPARK AND DISTRICT

PRIZE PIPE BAND. Pipe Major, WILLIAM ARTHUR. Slow March . . . "The Highland Brigade at

Magersfontein" March "The Burning Sands of Egypt " Strathspey... "The Caledonian Society"
Reel "Jack Wilson":

(Continued on page 395.)



Sont take



Gilbert Ad.



DON'T BUY NEW ONES, we supply you with a fully charged Wates Bros. Ideal Valve Accumulator weekly for 15/- per quarter. LESS THAN 1/3 PER WEEK. OR, if you have your own, WE COLLECT, CLEAN, ADJUST ACID GRAVITY, CORRECTLY RECHARGE and DELIVER anywhere in Greater London for 13/- per quarter, 1/- per week.

Our Modern Generating Plant, Skilled Operators, and Perfect Organisation Guarantee Punctual and Efficient Service.

Phone or Postcard immediately brings particulars.

The Accumulator Maintenance Co., 267, High Street, Camden Town, N.W.1.
Phone-Hampstead 2598.

EIFFEL TOWER AT 500 MILES ON A LOUD SPEAKER using 3-valves only.

A typical example of the wonderful reception which is an every-day occurrence with the "Abbiphone" Super-4. We guarantee reception of all the B.B.C. Stations and most Continental Stations on a loud speaker. Possessing many distinctive features it is a worthy example of the "Abbiphone" reputation "usually different—always better." The complete set consists of three units—Tuner, Detector and Amplifier—which can be easily linked together. Note the reasonable price £22: 11:0 (B.B.C. Tax '5')- extra). This set is also supplied in handsome cabinets at reasonable prices.

Write to-day for catalogue fully describing our range. Write to-day for cutalogue fully describing our range of Sels and Parts.

ABBEY INDUSTRIES, LIMITED, Abbey Wood, London, S.E.2.

The 2-Value Amplifier Unit



Telephone: Woolwich 538,

WIRELESS

"Abbindries, Abwood, London." PRODUCTS.

THE WALTHAM CRYSTAL RECEIVER

gives splendid reception up to 25 miles with an average Aerial. This set is mounted in a highly polished cabinet and is suitable for Broadcast Reception from any B.B.C. station. Approved by the P.O. and stamped B.B.C., it is supplied complete with Aerial Equipment and post paid for ... £1 10 0

BRITISH DOUBLE HEADPHONES

(4000 obms) for use with the above set 21/-ACCUMULATOR CHARGING RESISTANCES

for charging valve batteries at home when electric current is available. - Send postcard for separate leaflet.

THE WALTHAM MFG. Co. JACKSON RD., HOLLOWAY, LONDON, N.Z.

MONDAY'S PROGRAMME.

(Continued from page 377.)

NEWCASTLE.

3.45.—Concert: Eva Smith (Soprano), William J. Starkey (Solo Banjo). 4.45.—WOMEN'S HOUR.

5.15.—CHILDREN'S HOUR: Stories, etc., by the Uncles Jim, Charlie and Richard.

6.0.—Scholars' Half-Hour: A Short Talk on "Stories of the Nations—Patricians and Plebeinus," by Mr. A. W. Dakers, B.A.

6.30.—Boys' Brigade News.

6.45.—Farmers' Corner, 7.0.—NEWS. S.B. from London.

JOHN STRACHEY. S.B. from London. Local News and Weather Forecast.

7.30.—RUSSIAN COMPOSERS' PRO. GRAMME, S.B. from London, 9.10.—LT.-COL, N. HOWARD MUMMERY.

S.B. from London.

9.45.—RUSSIAN COMPOSERS' P R O-GRAMME (Continued). S.B. from Lonond. 10.30.—Close down.

Announcer: R. C. Pratt.

TUESDAY'S PROGRAMME.

(Continued from page 379.)

8.15. Orchestra.	6
"Campane a Sera"	ě,
8.20. George Hodgson.	
"Down in the Forest" Ronale	7
"The Wish of My Heart "	n
8.30. Elsie Downing.	
" Unmindful of the Roses " Coleridge-Taylor	
"The Nightingales of Lincolns Inn". Olive	r
8.40. M. Kelly.	
Strut, "Miss Lizzie"	
Fox-trot, "Fate."	
8.50. Orchestra.	I
Selection of English Songs	۸
9.0-9.30.—Interval.	
9.30.—NEWS. S.B. from London.	
Local News and Weather Forecast.	
9.45. Orchestra,	
Melodies from "The Country Girl" Monckton	
HAVANA BANDS, S.B. from London,	E
11.0.—Close down.	

Announcer : R. C. Pratt.

WEDNESDAY'S PROGRAMME.

OFFIC PODSTERS OF A DEPTT

DOROTHY FORSTER'S QUARTETTE PARTY.

"In England, Merrie England" German Dorothy Forster (Soprano). "Spring" Henschel

JENNIE WATSON and HUBERT STANWAY.

Duet, "Good Luck and Bad ".....Squire 8.0. EDNA SHEARD (Contralto). "The Glory of the Sea ".....Sanderson

"Here's a Paradox for Lovers".....German ERNEST HUDSPITH (Tenor.) "Eleanore".......Taylor

9.30.—NEWS.—S.B. from London. Local News and Weather Forecast. 9.45. Orchestra.
Selection, "The Runaway Girl". Monchton 9.55.
Dorothy Forster and Ernest Hudspith.
Duet, "Dear Love of Mine".....Thomas

Tunes from "The Peep Show "..... Tate

10.15.—Close down.

Announcer: E. L. Odhams,

ABERDEEN PROGRAMME.

(Continued from page 391.)

FRIDAY.

3,30 4.30.—The Aberdeen Wireless Quartette
5.0.—WOMEN'S HALF-HOUR,
5.30.—CHILDREN'S CORNER,
6.0.—Weather Forecast for Farmers,
6.5.—Weekly Talk for Scholars,
6.25.—Answers to Scholars' Enquiries,
7.0.—NEWS. S.B. from London,
G. A. ATKINSON. S.B. from London,
Local News and Weather Forecast,

Excerpts from Shakespeare.

Selection, "Henry VIII."..... Saint-Saens 8.0.—"HENRY VIII.," Act 11, Scene 4. (Abridged).

King. H. McKEE
Crier. W. D. SIMPSON
Scribe. A. HARVEY
Wolsey. R. E. JEFFREY
Queen Catherine. JOYCE TREMAYNE

Queen CatherineJOYCE TREMAYNE 8.10.—THE VERY REV. PROVOST ERSKINE HILL, M.A. (President of the Aberdeen Shakespearean Club), on "Shakespeare."

8.40. Orchestra.
"King Lear," Op. 4........... Berlioz
8.50.—"JULIUS CÆSAR," Act III., Scene 2.
(Abridged).

Mark Anthony.......R. E. JEFFREY Citizens.....MESSRS. HARVEY, McKEE, SIMPSON, etc.

9.0.-9.30.—Interval.

9.30.—NEWS.—S.B. from London, Local News and Weather Forecast.

9.45.—"THE TAMING OF THE SHREW,"
Act II., Scene 1, and Act V., Scene 2 (Abridged),
Katherine....... DAISY MONCUR
Bianca........ CHRISTINE CROWE
Petruehio....... R. E. JEFFREY

10.0. Orchestra.

"Richard III.," Op. 68...... Volkmann
10.10.—"RICHARD III.," Act I, Scene 4.

10.20. Orchestra. Intermezzo, "Maebeth"...... Johnson 10.30.—Close down.

Announcer : H. McKee.

SATURDAY.

3.30-4.30.—The Aberdeen Wireless Quartette.
5.0.—WOMEN'S HALF-HOUR.
5.30.—CHILDREN'S CORNER.
6.0.—Weather Forecast for Farmers.
6.5.—Interval.
7.0.—NEWS.—S.B. from London.
Local News and Weather Forecast.

7.20. ORCHESTRA.

"The Jazz Reel"; "Three Dances" ("Hullo America"); "Wabash Blues"; "Gladiator's Farewell"; "Temptation Rag."

7.50. FLASHLIGHT ENTERTAINERS.

Song, "My Dreams"... COLIN WILSON Concerted, "Military Band"..... Party Song, "Parted"... MOLLY PATERSON Duet, "Farewell, My Friend"

Molly Paterson, and Frances Lawson Song, "Two Eyes of Grey"... ALF GUNN Instrumental Selection L and A. AGGASILD Concerted, "Mr. What's 'Is Name". Party Song, "Don't Forget the Auld Folks"

Concerted, "Coon Selections"...... Party
Song, "Julius"...... Molly Paterson
Concerted, "Floatin' Down"...... Party
Laughing Song, "Risibilitee".... Alf Gunn
9.0-9.30.—Interval.

9.30.—NEWS. S.B. from London. Local News and Weather Forecast. 9.45. Flashlight Entertainers. Song, "Granny's Song at Twilight"

Frances Lawson
Instrumental Selection (Scotch)

L. Cressy and L. and A. Aggasild Song, "Southern Maid"..... Colin Wilson Duet, "Angels". Frances Lawson and Ali

Song, "Smilin' Through".. Molly Paterson Duet, "I Stood On the Bridge at Midnight".. Colin Wilson and Alf Gunn Final Chorus and "God Save the King,"

10.30.—Close down.

GLASGOW PROGRAMME.

Announcer: R. E. Jeffrey.

(Continued from page 393.)

7.48.—J. R. PEDDIE, M.A. (of Glasgow University), on "The Latest Nobel Prize Winner in Literature—Mr. W. B. Yeats."

7.58. GEORGE HEWSON (Banjoist).
"Camptown Carnival" Joe Morley
"Pièce Caracteristique" Joe Morley
8.10. Orchestra.

Entr'acte, "Berceuse de Jocelyn" . . Godard 8.15. R. A. Cunningham.

"The Skew-Ball Black" L. Lehmann
"Bright is the Ring of Words" Vaughan
Williams.

8.25. Orchestra.
Intermezzo, "Lazy Dance" Ring
8.30. George Hewson.
"Mountaineers' March" Jos Morley

"Mountaineers' March" Joe Morley
"Mister Jolliboy" E. Grimshaw
8.40. Pipe Band.
Slow March "Fair Young Mary"

Slow March "Fair Young Mary"
March "The Drumken Major"
Strathspey "Mony Musk"
Reel "Over the Isles to America"
8,53. Orchestra.

"Three Famous Pictures" ... Haydn Wood 9.0-9.30—Interval.

9.30.—NEWS. S.B. from London. Local News and Weather Forecast.

9.45. R. A. Cumingham.
"The Grenadiers" Schumann
"Mariska" F. Korbay

9.55. Orchestra. Fantasia on the Works of Weber.

10.15. Orchestra.
Suite, "Petite Suite Moderne" Rosse
March, "Vimy Ridge" Bidgood
10.30.—Special Announcements, Close down.

Announcer : Mungo M. Dewar.

HORNBY WORK TRAINS

Boys! You can take Hornby Trains to pieces and rebuild them!

THE Hornby Trains are quite different from any other Clockwork Trains, being strongly built in sections and screwed together with nuts and bolts. You can take them to pieces, clean them and rebuild them, and if a part becomes lost or damaged you can buy another and fit it yourself quite easily. The clockwork mechanism is strong, does not easily get out of order, and has a remarkably long run. Hornby Trains last for ever!

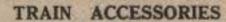


PETROL TANK WAGON

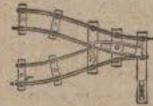


WINDSOR STATION

Excellent model, beautifully designed and finished. Dimensions length 2it. 9in., breadth 6in., height 7in.



This year there are new Wagons, Signals, Lamps, Stations, Turntables, all built in correct proportion in size, gauge, method of coupling, etc., to the Hornby Trains. Most important of all they have the uniformly beautiful finish which is the great feature of the Hornby system. To use cheap looking rolling stock or a foreign looking station with a Hornby Train spoils all the fun. Make sure you buy Hornby Accessories. THE WINDSOR STATION is a thing of beauty—the only really British station obtainable. Its bright colouring and realistic appearance will bring joy to the heart of every



boy who sees it.

25/6

35/-

SPRING BUFFER STOP

PARALLEL POINTS

No. 1-Goods Set

Passenger Set ...

MECCANO RAILS, POINTS AND CROSSINGS

Meccano Rails, Points and Crossings are made of the finest materials and hold together rigidly. The extra sleepers give strength and steadiness to the track. Superior in quality and finish. Low in price, and obtainable from all dealers.



BRAKE VAN

ACUTE ANGLE CROSSING

HORNBY CLOCKWORK TRAIN PRICES

No. 2 Goods Set Pullman Set 70/-

ZULU CLOCKWORK TRAIN PRICES Goods Set ... 18/8

Homby Tank Loco

Zulu Tank Loco .. 12/6



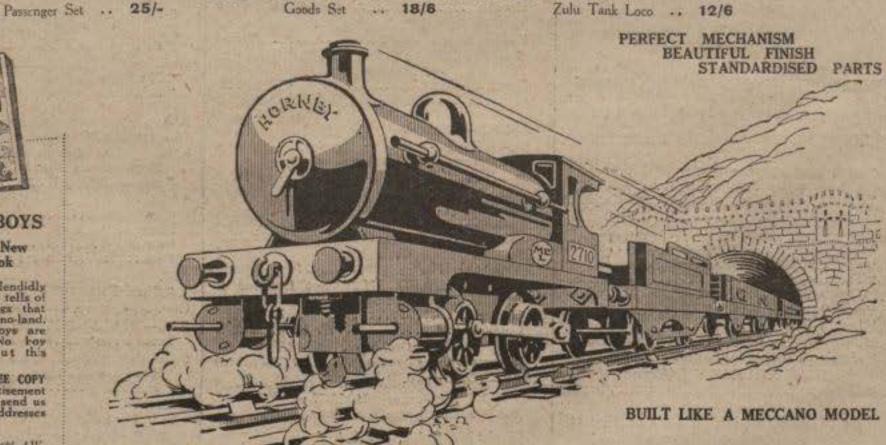
FREE TO BOYS

A Splendid New Meccano Book

This is a new and splendidly illustrated book that tells of all the good things that come from Meccano-land, where the best toys are manufactured. No loy should be without this wonderful book.

HOW TO GET A FREE COPY Just show this advertisement to three chums and send us their names and addresses with your own.

Address your letter to Dept. A II'.



MECCANO LIMITED: BINNS RD: LIVERPOOL

THE CHILDREN'S CORNER. UNCLE MUNGO'S LETTER.

Conducted by UNCLE CARACTACUS.

HULLO, children!

—he never seems to forget about his nephews and nieces who are waiting to hear something from him. He has even written two letters this week—one with a lovely story in it about collie dogs saving the sheep, and another one about Soosie, and some more about those funny hills which seem to live all round 5SC.

From Uncle Mungo.

Hullo, Kiddies! How are you all keeping? Quite a number of you, according to the letters which pour in every forenoon and afternoon here, are ill in bed. Your Auntie and Uncles, though, are thinking about you, and do hope so much that you will all be well again very soon.

The following story about the brave collie dogs is for you dear wee nieces and nephews who are tucked up in bed, and disturbed "every four hours" by Mr. Medicine.

You all know that the wilder sheep are, the better climbers they become, and that a field of rich pasture, perched high upon some mountain side, is sufficient to tempt a small flock to make a perilous journey over the hills to reach it. Of course, they can often make the ascent very easily; but the work of returning down the steep slopes is quite another thing.

near the footpath, and, after singling out one of the sheep, they drove it across the chasm. The others attempted to follow, but the savage snarling of the collies kept them back. A second sheep was then sent over in the same way, and the process repeated until the whole flock was scattered about on the other ridge. Then the two collies crossed, and began to collect the sheep in a flock again, and, without much difficulty, they conducted the whole flock to their master.

Wouldn't you like to have one of these dogs for a pet? I think they are just wonderful.

Has this story taken away the nasty taste of the medicine? I do hope it has, and that you won't require a teaspoonful of jam after reading it.

More Competitions.

How elever all you kiddies are! You set your Uncles and Aunty a stiff task to decide the winners of the books—the prizes in the competition asking you to write a short essay on "Why we commemorate the 21st October," and "Who is Admiral Sir F. C. Doveton Sturdee?"

Now, remember, all of you, there are other competitions coming off, and every member of the Radio Circle is expected to make a great big effort to secure a prize. If at first you don't succeed, try, try again. At least, that

is what Uncle Alex does when his first attempt at answering Auntie Cyclone's conundrums falls short of the correct answer. We are looking for a fleet of G.P.O. mail vans to bring in the next lot.

How did you all enjoy "Hallowe'en"? "Soosie" has given up washing herself since that evening—she got so much water on her dear young face whilst "dookin' for apples" that she has given up this daily exercise. Now, your Aunt and Uncles don't know what to do regarding the weather forecast, because "Soosie" doesn't wash her face, and, consequently, does not wash behind her ears, therefore we are unable to say whether it is going to be fine or rainy. I'm so glad we still have that meteorological place to fall back on, aren't you?

Does her meow upset any of your pet dogs? I received a letter the other morning from a dear wee niece to say that her doggie had bolted from the house on hearing "Soosie" send her good-night kiss. So far "Niek" has not arrived at 5SC, but I do hope he will return home very soon. I feel very ill over this, because I am perfectly certain that "Soosie" meant no harm.

Many Hills.

That reminds me. Have you thought of any more to add to that list of hills I gave you recently? Here are a few: Horselethill, Hun-

dredacre Hill, Knockhill, Huntershill, Blackhill, Corkerhill, Hamilton Hill, Camphill, Easterhill, Budhill, Leckethill, Shawhill, Sighthill, Stobhill, Towerhill, Easthill, Whitehill, Gadshill, Dovehill, Haghill, Golfhill, Dundashill, Greenhill, Edgehill, Hopehill, Yorkhill, Provanhill, Springhill, Thornhill, One "young" enthusiastic listener says that I should now be ready for Stobhill, thereafter being taken to Sighthill. I only hope I shall be free from further ills,

With love from

UNCLE MUNGO.

A Tall Story.

American: "At home we grow parsnips so big that we have to pull them up with a steam crane."

Britisher: "That's nothing! We once grew carrots so high we couldn't see the tops, and one day they died."

American: "Overgrew their strength, I suppose ?"

Britisher: "Oh, no. A wireless message was received from Australia to say that the tablits were nibbling the roots off!"

That is a jolly long letter from Uncle Mungo, isn't it? And I hope that the other Uncles will follow suit next week,

CARACTACUS.

In a recent issue of The Radio Times it was stated that the B.B.C. had received hundreds of letters on the question of broadcasting Sunday talks by elergymen. Owing to a misprint, the majority in favour of such talks was mentioned as having been over three to one. As a matter of fact, it was over ten to one.



A PRETTY LITTLE LISTENER.

This photograph, tent by F. T. Treverton, 109, Conway Road, Southgate, N., was awarded a consolation prize in the B.B.C.'s recent Brighter Britain Competition.]

The Lost Sheep.

One day, two shepherd dogs were sent out in search of a flock of sheep which had been missed for several days. It was a long time, though, before the faithful animals got on the scent of the wanderers, and, when they did, they were many miles from home. The path they were following led them up one of the highest ridges of the mountain, but this was quickly climbed. The bleatings of the sheep soon attracted their attention, and, following the sounds rather than the trail, they soon caught sight of the lost flock. The sheep had clambered up a rough slanting wall of rock to feast themselves on the pasture land there, but, on attempting to return, they had become frightened. One of them had tried to go back, and lost his life in so doing.

The two collies quickly sprang up among the sleep, and began to make investigations. They soon came to a mutual understanding, and while one started ahead to lead, the other one drove the sheep along from behind. For quite a long time this curious company mounted higher and higher, until a safe plateau was reached. Leading from this plateau was a small footpath, which connected two ridges of mountains together. A misstep now would prove fatal! To drive a flock of sheep over such a place seemed impossible. You know that when frightened or urged on by dogs, sheep always make a rush for any particular point in a body, and, if the leader of the flock should start across the chasm on the footpath, the others would attempt to follow, and hundreds would be crowded into a deep abyss,

Safe at Last.

The dogs seemed to know this, for they both took up their station



We haven't had a fire...nor a strike...but we have jolly good 'Phones!



HE British L.M. Ericsson Mfg. Co., Ltd., wish to announce that any person or persons circulating the falsehood that a fire or strike has prevented them meeting the tremendous demand for their headphones will be proceeded against.

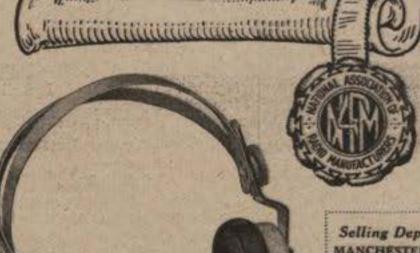
The world-wide demand for our famous telephones has simply swamped us and we must apologize to our friends for non-delivery. We are, however, increasing our output with all possible speed, and hope to shortly overtake the demand.

Orders Executed in Strict Rotation.

Meanwhile we shall be very glad to send you our lists, prices and information re our famous receivers, crystal and valve.

The British L.M. Ericsson Mfg. Co., Ltd.

International Buildings, Kingsway, London, W.C.2.



Selling Depots:
MANCHESTER: 19.
Bridge St., Deaussale.

NOTTINGHAM: W.
J. Furse & Cd.,
Traffic Street.
BIRMINGHAM: 1415, Snow Hill:
SCOTLAND: Malcolm Breingan, 57,
Robertson Street.

Glasgow.

N. E. ENGLAND:
Milburne Ho. Newcastle on-Tyne.

COLCHESTER: 121,

High Street.

Buy British Goods only.

Silosson

Telephones



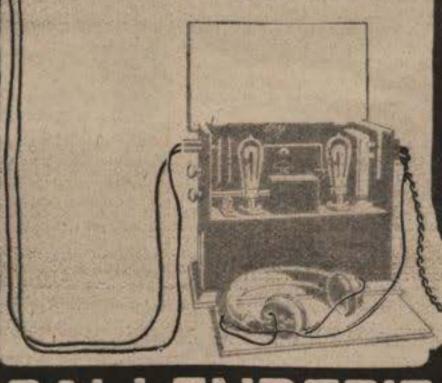
-and leave nothing to chance.

"CALLENDER" Wires and Cables-

"Callender" Rubber Insulated Wires and Flexibles are built up from the finest materials procurable, by skilled workmen under expert supervision, afterwards thoroughly tested in up-to-date laboratories before being despatched to the customer.

"Callender" Rubber Insulated Wires are British made at Leigh, in Lancashire, and although costing a little more than foreign and other inferior makes, they are truly economical in the end.

Make a point of asking for "Callender" Cable.



CALLENDER'S
CABLE&CONSTRUCTION COLUTO
CABLE & CONSTRUCTION COLUTO
LONDON E.C.4.

Readers' Own Humour.

Funny Stories Told by Listeners.

N recent issues of The Radio Times readers were asked to send accounts of funny things they had seen and heard in connection with wireless. This week we print a further selection, for which payment will be made :-

The other evening I switched the loud-speaker on, and it would not even whisper. Imagine my horror on finding the horn half full of water.

After scolding the obvious culprit, aged five years, she said, between her sobs ; "I only gave Uncle Ca'cticus a drink, 'cos you don't, and he must be firsty."-G. F. PENGILLY, Fulham, S.W.

A Bargain!

The other day I had occasion to enter the shop of a jeweller who also deals in wireless apparatus. I was buying a crystal, when I heard a young girl customer say to her friend: "My! what a fine diamond that chap has bought for one and six" !-W. E. SHADWELL,

Here is an extraordinary coincidence! The other evening, a minister friend of mine came to see me, and we listened. A play was being broadcast, and we just tuned in as one of the characters said, "The minister is here," to which my friend replied quickly: "He is, indeed!" to the amusement of us all .- G. H. DICKINSON, Lincoln.

An old acquaintance and I met recently at a country inn. We soon discovered a mutual interest in wireless, and many references were made by me to my "circuits."

As we turned to leave later, a yokel approached and asked me to give him "a job wi' the 'orses.' I inquired his reason for such a request.

"Well, sir," he answered, with an injured air, "it be all along o' your circus as you was talkin' about."-W. WARD, Golders Green.

Some time ago I was fixing an aerial for a friend who has several small children. Having bored a hole in the window frame for the lead-in wire, I was just pushing this through from the outside when one of the children, who had been quite excited over the prospect of wireless, rushed to her mother, saying, "Come and look, mother! There's something coming through from Manchester!"-F. BARNES, Lyme, Disley.

One of my little grandsons, aged about three, was out walking with his elder brother, and to the latter's great annoyance, he would persist in shouting at the top of his voice. On being admonished for making such a noise, he exclaimed, in surprise: "Why not? Nobody's 'listening'" !- C. A. CURD, Buckhurst Hill.

I had a friend staying at my house who had always lived in the country, and I asked him if he would like to listen. He replied that he would, so, putting on the 'phones, we sat and waited for the evening's programme to start.

Suddenly we heard: "Hullo, everybody!" and immediately my friend snatched off the 'phones and said, "You had better speak to him, I don't know what to say."-H. T. POUNE. Gillingham.

Foreign Stations.

WIRELESS TRANSMISSIONS FROM EIFFEL TOWER.

6.40-7.0. Local Forecasts. Every day except Sunday.

11.0-11.15.—Talk on Fish from the Central Hall, Paris. Every day except Monday.

11.15-11.30-Time Signal; General Forecast. Every day except Sunday.

3.40-4.0. Financial Talk (French Rates, The Exchange and the "Beginning of the Stock Exchange "). Every day except Sunday.

5.30 5.55. Closing Prices and the Stock Exchange. Every day except Sunday.

6.10-7.0. Radio Concert or Lecture. Every day. 7.0-7.20.-Local Forecasts. Every day.

10.0-10.30. General Forecast. Every day except

COMPAGNIE FRANCAISE DE RADIOPHONE (EMISSION RADIOLA).

Programme for Monday, November 26th, 1923. First Transmission.

12.30 .- Talk on Textiles. News of the Markets. Talk on the Cafés.

Information. (News Bulletin.)

12.45 .- Radio Concert.

1.45. Talk of the Paris Stock Exchange.

2.9 .- Close down.

Second Transmission.

4.30.- Talk of the Paris Exchange of Commerce.

Talk on Metals.

Talk on Cottons.

Talk on Paris Stock Exchange. General Information. (News Bullstin.)

4.45. Radio Concert.

5.45. Results of the Races. Parliamentary Information. Musical News Summary.

6.0. Close down.

Third Transmission.

8.30. News Bulletin and Talk.

9.0. Radio Concert and Talk.

10.0. Close down.

On Sundays and Thursdays, Radio Dancing at 10.0 p.m. Close down at 10.45 p.m.)

L'ECOLE SUPERIEURE DES POSTES ET TELEGRAPHES. (Wave Length 450 Metres.)

SUNDAY .- 9.0 p.m .- Chat on the Work of a Contemporary Poet. This chat is followed by a little Concert.

TUESDAY, 8.15 p.m.-Course of Talks on the Morse Code.

8.30 p.m. English Talk.

9.0 p.m.-Lecture.

9.25 p.m.-Concert.

WEDNESDAY, 9.0 p.m.-Weekly review of literature.

THURSDAY, 9.0 p.m.-Performance of a Classical Play. This performance alternates, the following Thursday, with a chat on the Evolution of French Poetry from the beginning of the 19th Century.

FRIDAY, 9.0 p.m .- Musical Festival. On this day the Station will transmit an Opera or Comic-opera played at the studio.

SATURDAY, 9.0 p.m.-Transmission of the Concert given at the Gaveau or Bleyel Halls. The times of transmission are the Greenwich hours, counted from 0 to 24.





The R.I. Lyrian Cabinet is the only cabinet on the market that has a range of 4,000 metres without the use of any external coils. Complete with self-contained Loud Speaker.

25 years' wireless experience has been embodied in this set to achieve this perfection. It brings the joy of "listening in" to all the British and Continental concerts within the reach of every home.

Before choosing your set for the coming winter send for the R.L fifty page catalogue of sets, accessories and components free on application, or it in London, visit our showrooms; London's Chief Radio Centre.

Contractors to the Admiralty and chief Government departments.

RADIO INSTRUMENTS, Ltd.

Managing Director—J. JUNEPH, M.L.E.E.

Chief Designer—W. A. APPLETON, M.B.E., M.L.E.E., Into
Adminstly Technical Research Officer,
WORKS, OFFICES AND SHOWROOMS—

12. KYDE STREET, NEW OXFORD STREET, W.O.1.

Phone: Regant 6234-0-0. Telegramia; "Instructio, London."
Northern Depot—19. Represed Avenue, MANCHESTER; TrinstaHouse, Commercial Street LEEDS. Aug. 42

Valves!! Valves!! Valves!!

Owners of wireless sets. Don't waste money on new valves. Send your old ones to us with 7/6 and we will return them to you as good as new.

London Valve Repairing Co., Magnet Wharf, Bow Bridge, E.

RADIATES HAPPINESS



Letters From Listeners.

[All letters to the Editor to be acknowledged must bear the name and address of the sender. Anonymous contributions are not considered.]

Broadcast Stories.

DEAR SIE,-Here is a suggestion: All humans dearly love a story, the huge output of fiction testifies to this; scarcely a paper, daily or weekly, without its story. In the days of old the storyteller held an honoured place, and when we visit the picture theatres we go primarily to be told a story.

Why not, as an experiment, give us a short story-say, from R. L. Stevenson ("A Lodging for the Night," or "Providence and the Guitar"), abridged to come within fifteen or twenty minutes, and ask opinions of your listeners ?

Yours faithfully,

London, S.W.

W. H. H.

[There are many difficulties in the way of broadcasting stories of this nature: chiefly because of length and the technique of reading. We have begun, however, to broadcast the stories of O. Henry in the Women's Hour.]

Hearing America.

DEAR SIR,-Re your announcement that there will be a B.B.C. transmission for the benefit of American amateurs, I beg to state the following in the hope that it may encourage other amateurs in the British Isles who have not yet received the American B.C. to take heart and try again.

On Monday, November 19th, at 11.55 p.m., I was carrying out some experiments in longdistance reception on a two-valve receiver. I was tuned in the vicinity of 372 metres and got a telephony carrier wave. I could not make anything further of this until 12.20 a.m., and then I heard W.E.Y. calling. I got a lot of interruption with Morse, but eventually, at 1.25 a.m., a pianoforte solo came through very clearly, and I heard the announcer state that it was played by Mr. Allan Bryon.

Then a paper was read on the manufacture of plate glass. After this there was a baritone solo, but I could not get the artiste's name. This again was followed by a piano solo by Mr. Bryon. It was now 2.15 a.m. and I closed down.

I should like to mention that this is the fourth time that I have received the American B.C.; but, to be quite frank about it, I have not been believed. However, if you care to verify the above items, you will find that I have not been exaggerating.

Yours faithfully,

Castle Eden, Durham. G. W. R.

A Dog as Listener.

DEAR SIR .- After hearing the speeches at the Lord Mayor's banquet, on a friend's set, I experienced a rapid conversion to the possibilities of your wireless service, and decided to give my wife a set for a birthday present, a month in advance.

During the playing of the National Anthem, my wife placed the headphones over the ears of her black-and-tan dog, "Jock," who listened quietly until the announcer began: "That completes our programme to-night; 2LO closing down," etc. Then up he sprang, barking loudly, and chased about the room in search of the unfamiliar intruder.

I wish you every success in the magnificent

work you are doing in the broadcasting service. It is of national importance, and you are wielding a power which may remake the world, and help to mould the nations into one common brotherhood. Yours truly,

London, E.C.

S. G. H.

Talks in French.

DEAR SIR,-Would it not be possible to have a short talk in French once a week from 2LO? I am sure that this addition to the delightful programme of the B.B.C. would be appreciated by many English people, as well as by the many French people who live in, or near, London. Yours truly,

Fulham, S.W.

R. B.

(Such talks have been given for months past at the Manchester Station. It has been arranged to begin a series at 2LO, and the first talk will be given in the early days of the New Year.]

A Plea for Gilbert and Sullivan.

DEAR SIRS,-We, regular listeners for the past twelve months, beg to draw your attention to the singular absence of Gilbert and Sullivan's works from your programmes,

We feel sure that there are few composers, living or dead, whose melodies are appreciated by all classes of listeners. Sullivan, however, is one of these.

We hope, therefore, to hear some of his selections broadcast in the near future.

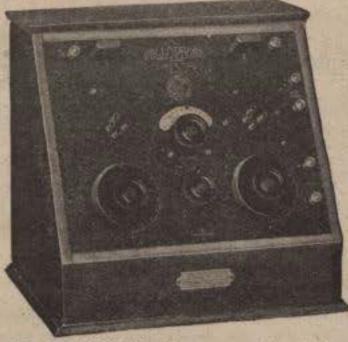
We are, yours truly,

C. A. N. (Lee). A. W. R. (Battersea). J. G. H. New Cross). L. H. B. C. (Molesey). F. L. P. Battersea).

The absence of selections from the works of Gilbert and Sullivan is not due to the B.B.C. We are endeavouring to secure permission to add these items to our programmes, and hope to do so in the near future.]



SUPER FELLOPHONE



Mounted in a well-finished mahogany case, it comprises 1 H.F. Valve and I detector. This instrument permits the fullest reaction allowed by the P.M.G., and will give excellent results on all the British Broadcasting Stations.

PRICE £9:0:0

Plus B.B.C. Tax, 17 : 6. Marconi Tax, £1 : 5 : 0. 2 Valves 15 : 0 each. Complete with H. T. battery, Accumulator, 100 ft. 7/22 stranded copper aerial, 2 insulators, 1 pair 4,000 ohms headphones.

Adv. of the Fellows Magneto Co., Willssden, N.W.10. Sanggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggaranggar

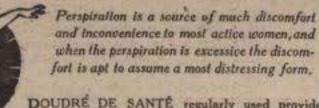
£500 A YEAR for Certificated Book-keepers

Let the City Correspondence College experts show you the way to success they guide you through the various stages step by step. Postal tuition Success guaranteed at two advanced examinations.

Prospectes, testimosocials from prospectes past stations, etc. free an application.

CITY CORRESPONDENCE COLLEGE (Dept. 443).





poudre de Santé regularly used provides a perfect and healthful remedy. It is a delightful toilet powder, which exercises a corrective effect on the secretion of the sweat glands without hindering in any way the normal healthy action of the skin, and it gives its users complete immunity from every discomfort and unpleasantness to which perspiration can give rise. The longest round, the closest tought tennis match, the hottest dance will not disturb the bodily coolness and freshness of the woman who uses Poudré de Santé regularly,

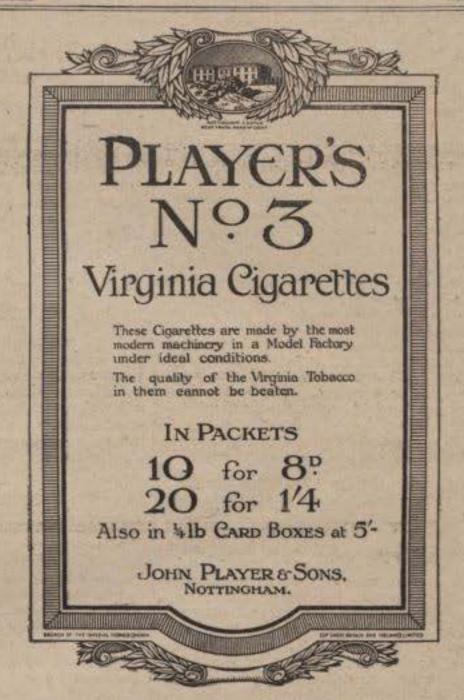
In Boxes, 2/9, 3/9, and 4/9, Post Free.

MARSHALL & CO., 70a, Basinghall St., LONDON, E.C.

To Owners of Valve Wireless Sets in London Districts.

Don't buy that new battery you thought Instead, write to us of buying!!! for particulars of our service.

THE LONDON BATTERY CHARGING & MAINTENANCE SERVICES, 53, Victoria Street, S.W.I.



WIRELESS OPERATORS.

THE ROYAL AIR FORCE requires skilled and semi-skilled Wireless Operators of good education. Age limits: -Ex-Service men, 18 to 30; non ex-Service, 18 to 26; highly skilled operators up to 35; ex-N.C.O.s up to 38 (with rank according to trade ability). Commencing rate of pay 21/- to 59/6 per week and all found. Allowance for wife and children to men 26 and over. Write, stating age, or call:—INSPECTOR OF RECRUITING, R.A.F., 4, Henrietta Street, Covent Garden, London, W.C.2.

The ACME 3-Valve Set BUY BRITISH GOODS ONLY.

embodying several distinctive features of Acme invention, gives a very high degree of efficiency. Loud speaker reception is possible with it for over 100 miles.

The set comprises a H.F. amplifier, a rectifier, a L.F. amplifier; aerial circuit tuned by Acme variometer. The mode of the H.F. valve is tuned, and reactance from the rectifying valve is coupled to the anothe of the first valve. Only one iron-cored transformer (Acme design). Selectivity assured and simple.

Supplied in compact mahogany cabinet, price 219/12/0 lucheding Royaltion, or Complete with all accessories £25.

Catalogue Free. Pull descriptions of this and other Acuse receivers at lower prices and many interesting acces-cories are included in the Acuse estalogue. Every amateur and radio dealer should send for a free copy.



The Acme Production Co., Ltd., Smethwick, Birmingham.

EVERY NIGHT TENS OF THOUSANDS OF BROADCAST LISTENERS SIT AND ENJOY THE PROGRAMMES-THEY DON'T HAVE TO FIDDLE ABOUT WITH THE CAT WHISKER TO FIND THE SENSITIVE SPOT-THEY USE CYMOSITE.



Sold only in sealed boxes

If unable to obtain from your Dealer, send P.O. direct to NORMAN HALL, A.I.R.E., Durham Road, Low Fell, Gateshead.

Other People's Opinions.

AN AWFUL PROSPECT.

THE prospect of the curious being able to resurrect messages broadcast years ago is truly awful!

Anyone listening on 440 metres with one of these revivalist sets should clearly understand that he does so entirely at his own risk!

This wave was used for wireless telephony in the R.A.F. during the war, and I regret to say that it is unfortunately a fact that two officers of a certain Bristol fighter squadron at Dunkirk in April, 1918, were severely reprimanded by the naval authorities for using very unparliamentary language in the air. As the Navy objected to it, I feel this word of warning is necessary. People unused to "language" might suffer very seriously!—C. E. Stewart, in the Daily Express.

A RETROSPECT.

YOU remember the old days of wireless when you, my male reader, sat with phones upon your head the livelong evening listening to the iddies and the umpties of distant stations, whilst you, dear lady, clicked knitting needles in the mazy tangles of a jumper and mentally cursed wireless as a soul-destroying pastime that made the best of husbands a mute, inglorious thing. Ah, me! What days! And then came broadcasting with music and mirth, whereupon feminine opinion veered round, as feminine opinion will, finding in wireless a heaver-sent boon instead of a thing accursed.—Wireless Weekly.

ENORMOUS POSSIBILITIES.

BROADCASTING has enormous possibilities before it by way of instruction and amusement for every home and household in the country, however remote, and a diversity of programmes will probably soon become a necessity. The first step towards variety has, perhaps, been secured by the new decision which removes the restriction on the times at which broadcasting may be done. At any rate, it is highly important that the new amusement, or science, or art, as we may decide to call it, should be used to the highest standards. It is the product of the intelligence and should be used to serve that faculty.—The Times.

VALVE AND MAGNET.

HAVE you ever tried piacing a horse-shoe magnet over the valve? It should be placed symmetrically and in a vertical plane, the valve being upright. If the magnet is properly adjusted, a considerable amplification of signals will sometimes result, whilst occasionally a variety of extraneous noises is created by moving the magnet up and down,—Wireless Review.

RADIO DRAMA.

RADIO drama has the subtle power of staging, or suggesting action without being under the necessity of actually reproducing it. So long as there is an ear to hear, and an imagination to construct and colour, there are no secric limitations to the radio play, and very few as to action. Deftly written lines can carry the listener across the wilderness and overseas, through torrential rains and to the Frozen North, into deep mines and on the wings of speeding aircraft. — Popular Wireless.

LETTERS FOR THE EDITOR should be addressed to "The Radio Times," 8-11, Southampton Street, Strand, W.C.2.

Charles and the contract of th

LETTERS FOR THE B.B.C. should be sent to 2, Savoy Hill, W.C.2.

EVENTS OF THE WEEK.

• 10000-10000-0000-000-000-000

SUNDAY, DECEMBER 9th.

LONDON, 3.0-5.0. Organ Recital from the
Armitage Hall. S.B. to all Stations.

9.0. Band of H.M. Royal Air Force.

CARDIFF, 8.35. Grieg Programme.

MONDAY, DECEMBER 10th.

LONDON, 7.30.—Russian Composers' Programme.

S.B. to other Stations.

TUESDAY, DECEMBER 11th.

CARDIFF, 7.30.—Literary Night.

BOURNEMOUTH, 8.6.—a Night of Memories.

WEDNESDAY, DECEMBER 12th.
BIRMINGHAM, 7.30.—"The Lily of Killarney"
(Benedict).
BOURNEMOUTH, 8.6.—All Dance Programme.

THURSDAY, DECEMBER 13th.

LONDON, 8,20.—" Little Nellie Kelly," Act I., relayed from the New Oxford Theatre.

S.B. to other Stations.

9.45.—Sir William Bull. S.B. to all Stations.

FRIDAY, DECEMBER 14th.

LONDON, 9.40.—"Little Nellie Kelly," Act II., relayed from the New Oxford Theatre. S.B. to other Stations.

BOURNEMOUTH, 7.30.—"The Lily of Killarney" (Benedict).

ABERDEEN, 7.25.—Shakespeare Programme.

SATURDAY, DECEMBER 15th.

LONDON, 7.38.—" Pagliacei " (Leoncavallo). S.B.,
to Newcastle.

8.50.—The Roosters' Concert Party.
S.B. to Newcastle.

BIRMINGHAM, 7.15.—Shakespeare Programme.







SAFETY FIRST!

Protect your Wireless Set with ROBINS'

Combination Lightning Arrester and Leading-in Tube. Provisionally protected.

No Wireless Set or Listener in is safe from lightning without it. PRICE 3/6

Postage 3d. extra
To be had from any Wireless Dealers or direct from
the Patentees and Monujacturers. Telephone 5176.

ROBINS ELECTRICAL & WIRELESS
DEPOT & INSTITUTE, LTD.
Manufacturers of all kinds of Wireless Instruments
and Equipment.

CARDIFF.

RADIO TELEGRAPHY AND TELEPHONY.

By E. W. MARCHANT, D.Sc., M.I.E.E.

Crown 8vo, 150 pp. 51 illus, in text.

"Professor Marchant has covered a wide field, and his book will form a suitable introduction to many branches of this wide and fascinating subject.

Yorkshire Observer.

"The book is written in the simplest language compatible with the intricacies of the subject, and should be understood by and interesting to all listeners-in. Glasgow Herald.

THE UNIVERSITY PRESS OF LIVERPOOL, LTD. HODDER & STOUGHTON, LIMITED, LONDON.

LISTEN! SALMON ODY THE SALMON ODY ADJUSTABLE SPIRAL SPRING ARCH SUPPORTS ATE prescribed by eminent Medical men for FLAT FEET & WEAK INSTERS

FLAT FEET & WEAK INSTEPS
Experience has proved that they are individely more occupiontable and efficient than the usual right plates.

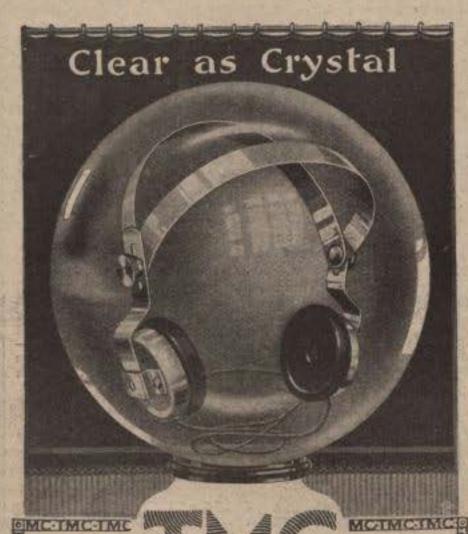
ALL SIZES 15/6 per pair. Write for leaflet FREE.
SALMON ODY, LTD., 7, NEW OXFORD ST., LONDON, W.C.1

HEIGHT

COUNTS in life's battle.
INCREASE YOUR
HEIGHT by The Carne
Scientific Treatment. Students
report from 2 to 5 inches of
Increased height with wonderful
improvement in health. Endorsed
by leading Statesmen, Physicians,
and by thousands of gratified
students the world over. Write
for FREE particulars, testimonials
and my £100 Guarantee.

Post free, under plain scaled cover. Address:—

P. CARNE, 3 First Avenue, Caerphilly, Cardiff, 3.



Headphones

Big Price Reduction

Demand has increased!
Output has increased!
CONSEQUENTLY

Cost has decreased!

BUT

QUALITY REMAINS SUPERLATIVE.

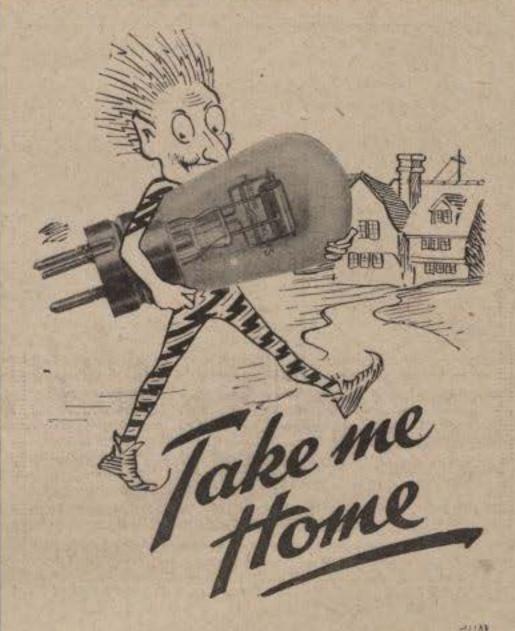
Standard 4,000 ohms Headsets now

19/6

per pair.

The Telephone Manufacturing Co., Ltd., Rollingsworth Works, Bulwich, London, S.E.21. London Showrooms: 68, Newman St., Oxford St., W.1.

We shall be exhibiting in the Electrical and Allied Engineering Section, British Empire Exhibition, 1924.



THE Valve's the biggest little thing on your set, because it's the valve that can make or mar your wireless reception.

of the Broadcasting era. They were being made long before wireless reached its present popularity—and they have lost none of the lead they thus obtained.

They become the life-long friends of every use. because they are dependable.

Take one home to-day: Try it out to-night!

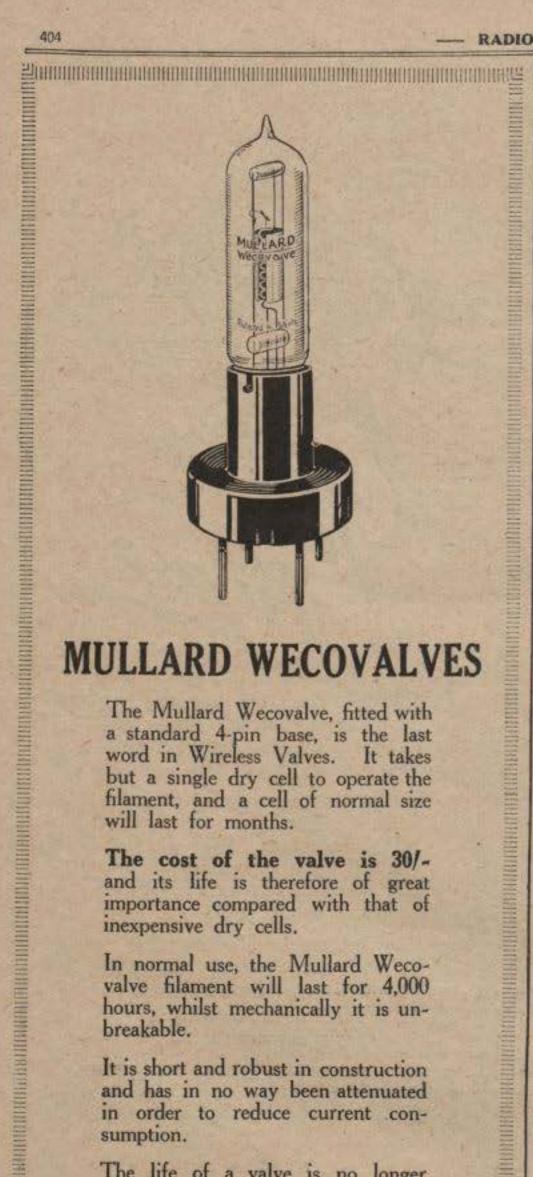


BUY BRITISH GOODS ONLY.

Sold by all leading Wireless Dealers,
Electrical Contractors, Stores, etc.

(Manufacturers and Wholesale only.)

The GENERAL ELECTRIC Co., Ltd. Head Office: Magne House, Kingsway, London, W.C.2.



sumption.

The life of a valve is no longer than that of its filament.

Turn these points over and then order Mullard Wecovalves for your set.

Advi. 1 The Mullard Radio Valve Co., Ltd., Balham, S.W.12

(E.P.S. 85.)

FREE Trial Offer to ALL sufferers from ARTHRITIS

Great Discovery by London Manufacturing Chemist-Thousands Cured-Prescribed and Recommended by over 300 Doctors



dose—pain is banished—swellings disappear—vitality is restored. No such remedy has ever before been placed within the reach of sufferers from

This simple home treatment is working miracles every day. CURICONES have saved thousands of sufferers from despair. Their wonderful action often begins with the first

Rheumatoid Arthritis, Rheumatism, Lumbago, Gout, Sciatica, Neuritis.

Its action is prompt and direct. The cause, whether it be Uric Acid, Urates of Soda, Lime, Potash, etc., even Microbes, is removed without resort to nauseous drugs, CURI-CONES are pure gelatine capsules containing an entirely new combination of medicines approved by the British Pharmaceutical Authorities. They are pleasant and easy to take and relieve torturing pain in a very short time.

Are you a Human Barometer?

Send for TRIAL PACKAGE NO MONEY REQUIRED

Fill in and post the coupen AT ONCE. You will then receive a generous trial treatment, together with a useful book telling how CURICONES were discovered, and how a London Manufacturing Chemist cured his wife of Rheumatoid Arthritis—the most chronic of all Rheumatic ailments—by this simple home treatment after everything else had failed, Over 300 doctors have given CURICONES their warm approval, and are now recommending them as a quick, safe and easy cure for all Rheumatic ailments.

Here are a few of the thousands of unsolicited Testimonials received.

Drs. D. . . . and B. . . . write: "Pleased to say Curicones have given good results."
Dr. J. M. D. "Have used Curicones

Dr. J. M. D. "Have used Curicones in a case of Chronic Arthritis—they have given great relief."

Dr. B. . . Send 500 Curicones tonight certain. They are excellent."

Dr. M. . "Enclosed cheque for Curicones for my daughter. I am so much better, and I want her to try them. They are invaluable."

FREE TREATMENT COUPON.

Send this Coupon TO Please send me free and post paid your trial package and book on Rheumatoid - Arthritis and Rheumatic Affections, diet table, and full particulars of your discovery-

AHLMENT ...

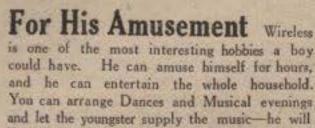
Address Envelope to-STEPHEN MATTHEWS & CO., LTD. Manufacturing Chemists & Druggists (Dept. R.T.1.) 19-21, Farringdon Street, London, E.C.4. If you are suffering from any trouble of a Rhenmatic nature, fill in and post this coupon NOW, and in addition to the FREE treatment and useful book, you will receive further convincing testimony from the medical profession and former sufficers, of the curative action of CURICONES, This free treatment has been the first step to a complete cure with thousands of sufferers who had almost given up hope of ever enjoying life again. Don't delay. Post the coupon TO-DAY and learn how YOU can obtain relief from your pains in a

For your Boy this Xmas-



YOUR boy can build a wireless set the Burndept way. Give him the means to entertain the whole Family this Xmas, with music and song. The Ethophone Home Constructor No. III is a highly efficient 3-valve receiver, capable of receiving all British Broadcast under suitable conditions, as well as many Continental programmes from Paris, Brussels, etc. These sets have often received American concerts, but don't tell your boy that—or it may keep him up later than is good for any growing youth.

Eighty miles to a hundred miles is the ordinary range on a Loud Speaker but much greater ranges have been obtained.



be delighted, and the fact that all his family are depending on him to make the evening a success, will make him all the keener.

He can also listen to the great telegraphic stations of the world. Encourage him to learn the Morse code. It will keep him at home on winter evenings, and he will be healthily employed. He will get to know many of the countries of Europe; it will broaden his mind and his outlook on life.

And Instruction He is bound to want to know where the wireless stations he hears are situated. Fix a map of Europe in his room and make him mark up the stations he hears. Get him to keep a record of the weather reports.

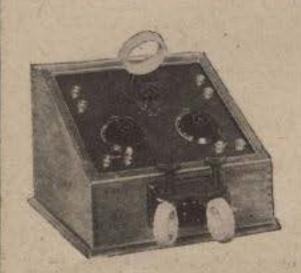
The Ethophone Home Constructor No. 111 is a receiver specially designed for those who are desirous of constructing their own wireless set. It consists of a complete set of parts, complete down to the smallest detail, every nut and screw is included. It can be assembled by anybody in a very short space of time. Previous experience is unnecessary.

Particulars of a cheaper model may be had on request, but it will not operate a Loud Speaker.

Can be obtained at any of our branches or at Harrods, Selfridges, Shoolbreds, etc., and all high-class dealers in wireless.

BURNDEPT LTD., Aldine House, Bedford St., Strand, W.C.2.

BURNDEPT



The simplicity with which this set may be constructed is clearly indicated in the following extract from a customer's letter:—

Constructor which I gave my son about a month ago, it may interest you to know that he (aged 12) built it up with very tittle help from me, and that every night since we have had all the B.B.C. Stations with it. If a boy of 12 can do this I should imagine that any grown-up person should be able to do so without the elightest difficulty."

MONMOUTH.



you own a Wireless Set and if it is not clear to you how it works, you are missing half the pleasure. The first little Book giving an elementary explanation of Radio is "Wireless for All"—and you should certainly get a copy. This Book is written by John Scott-Taggart, F. Inst. P. (Editor of "Wireless Weekly" and "Modern Wireless"), and is easily the most popular one of its kind-scores of thousands having been sold.

Special Instructional Books

Wireless for All	*** ***		6d.
Simplified Wireless	+++		1/-
Wireless Valves Simply			2/6
Practical Wireless Valve	Circuits		2/6
Radio Valves and How			
More Practical Wireless	Circuits		3/6
All the above by John	Scott-Taggart,	F. Ins	t.P.
Pictorial Wireless Circuit	ts	***	1/6
500 Wireless Questions		***	2/6

RADIO PRESS LTD.,

Devereux Court, Strand, W.C.2.

LIVING TELEGRA

Nerves That Need Tuning.

Every human being carries a living telegraph about with him. The wires are tiny threads or nerves running into every nook and crevice of the body. The instrument that receives messages is the brain; the battery that feeds the nerves is the heart. The beating of the heart sends blood coursing through the arteries. The blood picks up food through the walls of the stomach, feeds the nerves and muscles, and carries off the waste matter.

If the blood is poor, pale and thin, it can neither feed the body nor carry off the waste. Then we grow pale, sallow and anemic and our nerves suffer. Sometimes we have horrible neuralgia. Agonising pains torture joints and muscles; we grow stiff and tired; rheumatism! Or perhaps we are so nervous that we cannot sleep, and grow irritable and fretful. All these different ills are due to the same cause-starved blood. Feed the blood and all will be well again. 'Dr. Williams' pink pills are the bloodfood that will build up and reinvigorate your whole system.

Begin to build up your nerves by starting Dr. Williams' pink pills now. Of chemists, or from address below, 3s. 0d. per box, post free. Good for men and women too.

FREE .- "The Nerves and Their Needs" is a little book that will help you to avoid nerve troubles. Write to R. M. Dept., 36, Fitzrey Square, London, W.1, for a free copy.



which gives a good volume in the Headphones, but insufficiently strong to work a Loud Speaker. There are two ways in which you can get louder results. One is by adding an amplifying unit, using one or two more Valves, and the other way is to connect your Set to a Brown Microphone Amplifier.

With the former you have the attendant cost of Valves and the usual risks of burning them out, together with the upkeep costs of current.

The Microphone Amplifier, however, is Valve-less. Its first cost is the last cost, and it requires only a cheap 6-volt dry battery to keep it running for months.

Yet this wonderful amplifier gives the amplification of two Valves and with a total absence of distortion.

Small wonder, then that an increasing number of Wireless enthusiasts are choosing this method for operating their Loud Speakers. Use a Brown Microphone Amplifier and a Brown Loud Speaker, and you can be sure of obtaining results which will delight the heart of the musically inclined, and be the envy of your friends.

PRICES:

Microphone Amplifier.

Input 120 chms	£5 10 0
Output 120 ohms)	The second second
Input 2,000 ohms Output 120 ohms	£5 13 6
Input 2,000 ohms	
Output 2,000 ohms	£5 18 6

oud Speakers	80.			
Model H.1, 2	1 inch	es hi	gh.	
120 ohms		£5		
2,000 ohms	****	£5		
4,000 ohms	Jack.	£5	10	0
Model H.2, 1	2 inch	es hi	gh.	
120 ohms	***	£2	5	0
2,000 ohms	250	£2	8	0
4,000 ohms	***	£2	10	0

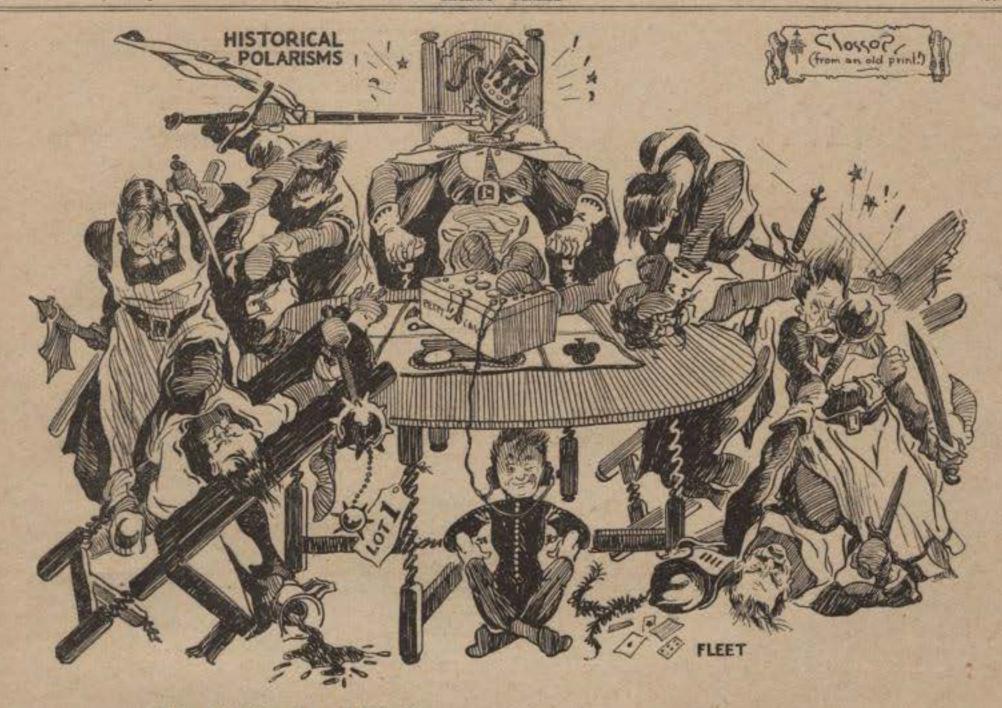
From all dealers.



S.G.BROWN LTD. WHOLESALE: VICTORIA ROAD, N. ACTON. W.S.



Printed by Newnes & Peanson Printing Co., Lid., Exmoor Street, Ladbroke Grove, W.ro, and Published for the Proprietors by George Newnes, Ltd., 8-11, Southampton Street, Strand, London, W.C.e, England. December 7.5, 1923.



Iking Arthur's (Ik)nights.

On chivalry insistent
Each knight was so persistent
To sacrifice his turn to don the 'phones,
That Arthur's table round Tclas a (k)nightly battle ground, And "Children's Hour" was passed in tuneful groans.

"Science's last word - Society's first choice."

Music reproduced as music is synonymous with the Polarphonespeech becomes conversation.
It is a continual joy and revelation to the critical music lover,

and is the source of the keenest enjoyment and satisfaction to all who listen.

In harmony with its surroundings, its beauty of construction exudes and creates an atmosphere of silent dignity.

This is another of the features which contribute in no small measure to the right of pre-eminence held by the Polarphone to-day in the world of wireless.

We would like you to see the beautiful models illustrated in the

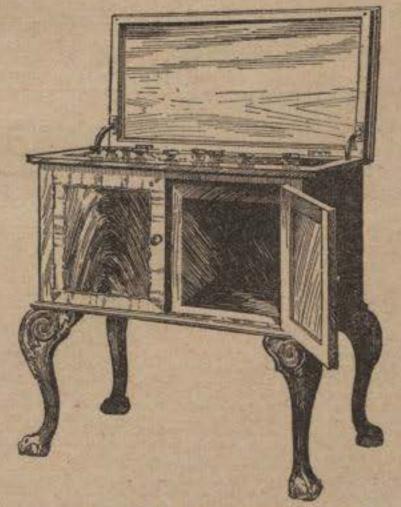
Polarphone brochure—gladly sent free on application.

RADIO COMMUNICATION Co., Ltd.

34-35, NORFOLK STREET, STRAND, LONDON, W.C.2.

Telephone: Central 8480 (3 lines).

Telegrams: Radiocomco-Estrand, London.



The POLARPHONE 7-Valve Cabinet, remote control, Chippendale Model, finely brushed in polished mahogany. Price, £120 0. 0. B.B.C. Tax. £2 0. 0.



RADIO COMPONENTS

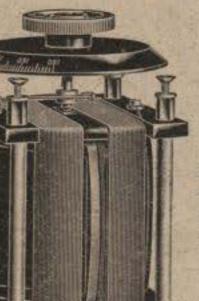
The Standard of Quality.

Two Really Good Things:

HIGH GRADE VARIOMETER, | SQUARE LAW VARIABLE AIR PRECISION TYPE. CONDENSERS. WHOLLY BRITISH

(Patent applied for.)

MANUFACTURE



UNIQUE DESIGN. Very Selective Tuning. Inductance Ratio.

9:1.

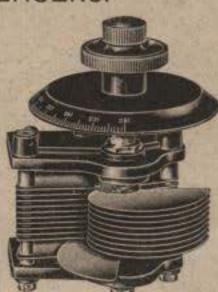
Rotor and stator windings brought out to separate terminals for connecting in series or parallel to cover wave ranges below.

> PRICE 21/-

USEFUL WAVE-RANGE DATA FOR P.M.G. AERIAL.

	Condenser in Series.	Direct to Aerial.	'0005 mfd, fixed Condenser in Parallel.		
Rotor and Stator in Parallel.	250-700 Metres.	370-940 Metres.	380-890 Metres.		
Rotor and Stator in Series.	530-1340 Metres.	730-1850 Metres.	975-2725 Metres.		

STRAIGHT WAVE-LENGTH CURVE.



MPC d of Quali		EI	V -	TS	3				
Good	Thi	ing	s:			100			
SQUAR						. 1	AI	R	
BRITISH CTURE.	Co	NDI	=NS	ERS	5.				
STRAIGHT	WAVE LE	NGTH							
giving unifo	rm wave-	length		National Property of the Parket	autgul				
Permit of Nearly capacity.	exact tu					T	32		
End plate									
mounting.						A	318		
With Vernier A			ustrate	ed). Ti	he auxil		kno		
No. R 2724 No. R 2725 No. R 2726 Do. do. mountes	t in metal	,00025 ,0005 ,001	mfd.	te ivari	ne dial	£1 £1	3 5 10	0 6 6	
No. R 2733		.00025	mfd.		110	£2	2 5	6	
No. R 2734 No. R 2735		.001	mfd.		***	£2	10	0	
Without Vernier No. R 2729	Adjustme	.00025		as illus	tration.	21	0	0	
No. R 2730 No. R 2731	***	.0005	THE RESERVE OF THE PARTY OF THE		***	£1	2 7	6	
e cheapest	020.3		2 5	heet	they	-	70		
d consisten	3750-1000		Comments.	out	they t	416			
OF TECHN		EXPE	RTS						
Modern Wireless to those who are these Condensers i The Broadcaster that the Sterling variation of capaci	THE" These making with s a straigh and Wire condenser	ave-mete it line." less Rela vanes	strumers, for	nts are the wa "It is shaped	ve-length not gener as to gi	ally l	mow	n m	

"Sterling" Radio Components are not the cheapest on the market, but they are the best value ever offered consistent with quality.

A FEW OF THE OPINIONS OF TECHNICAL EXPERTS OF THE RADIO PRESS.

THE VARIOMETERS

Wireless Trader .- " A Variometer which, to our mind, has advantages over the majority of those now in use."

Popular Wireless .- "There are many excellent variometers on the market at present, but perhaps none quite so neat as the new Sterling

Amateur Wireless,-"We have been able . . . to carry out a test of the Variometer . . . The instrument is admirably constructed and possesses many novel and ingenious features . . This Variemeter is, we think, unique in this country, covering, as it does, a wave range of from 250 to 2,725 metres . . . It is thus possible . . . to enjoy all the telephony and music that is being transmitted with the single tuning apparatus. We must confess to having had slight scepticism as to the validity of the claims put forward by the makers in this connection, but our tests of the instrument have more than confirmed these claims This instrument can confidently be recommended as a tuner of vast

Modern Wireless,-" It is undoubtedly a great convenience to have so large a range of inductance in one instrument, and resulting available wave-length . . . The instrument submitted represents an interesting type of variable inductance, finely made, and high-class in every

these Condensers is a straight line. The Broadcaster and Wireless Retailer,-" It is not generally known that the Sterling condenser vanes are so shaped as to give uniform variation of capacity throughout the scale. There is also a vernier fitted to some of these instruments which controls the movement of a single

vane and gives extremely fine tuning."

Conquest.—"A particularly useful type of variable condenser having specially shaped plates to provide critical tuning near the minimum setting and fitted with vernier adjustment."

Wireless World.—"The needs of the scrutinising experimenter have

been carefully considered when designing the condensers... These instruments represent a distinct step forward in variable condenser design."

Wireless World.—" This Company has carned the thanks of every user of wireless apparatus who appreciates refinement in design by the introduction of a new type of variable condenser, which has specially shaped plates providing critical adjustment near the zero position, and, if desired, a concentric knob gives vernier adjustment, which is almost indispensable when tuning the circuits of an H.F. Amplifier. There is little doubt that this condenser will find a place in every tuning instrument that the experimenter may build. There are other Sterling components useful to the experimenter and of equally clever design.

The above are only two of a complete range of "Sterling" Radio Components, obtainable from all Electrical Dealers and Stores.

Advertisement of STERLING TELEPHONE & ELECTRIC Co., Ltd., Manufacturers of Telephone and Radio Apparatus, etc., 210, Tottenham Court Road, London, W.1. Works: Dagenham, Essex.