

THE NERVE-CENTRE OF BROADCASTING. By P. P. ECKERSLEY.



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EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES

THE BRITISH BROADCASTING COMPANY.

For the week commencing
SUNDAY, February 22nd.

MAIN STATIONS.

LONDON, CARDIFF, ABERDEEN, GLAS-
COW, BIRMINGHAM, MANCHESTER,
BOURNEMOUTH, NEWCASTLE,
BELFAST

HIGH-POWER STATION. (Chelmsford.)

RELAY STATIONS.

SHEFFIELD, PLYMOUTH, EDINBURGH,
LIVERPOOL, LEEDS — BRADFORD,
HULL, NOTTINGHAM, STOKE-ON-
TRENT, DUNDEE, SWANSEA

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LISTENERS' LETTERS.

Making Listeners Jump!

By G. K. CHESTERTON.

I HAVE been asked to give my own views about broadcasting, in this organ which is devoted to that science; and the gentleman who asked me made the exceedingly sensible remark that he did not want me to say that wireless telegraphy is a wonderful thing. In that sense he need have no fear.

In one sense, of course, wireless telegraphy is wonderful, and ordinary telegraphy is wonderful, and ordinary talking is wonderful, and being able to walk about on the solid world under the staring sun is so overwhelmingly wonderful that no words have ever expressed the wonder. But the danger in these cases is that we shall grow as used to the last marvel as to the first, and yet preserve a more conversational convention that survives its mood.

One man will say to another in a weary voice: "Wonderful invention!" and the other will reply, gloomily: "Oh wonderful!"; when neither are wondering at anything, or admiring anything, except, perhaps, the one man down the street who still has the moral courage not to talk about wireless.

But there is a much more practical sense in which the great discovery is also a great opportunity. And there is an equally practical sense in which that opportunity may only too easily be lost. It is this; that the older modes of communication, which are in their nature roads, have become also ruts. The conventional press, the conventional theatre, the conventional political platform, have become very conventional indeed. They have got into grooves, and the grooves are narrow. There is still a chance that broadcasting may really be broad.

I was once asked by a wireless enthusiast to consider what a wonderful and beautiful thing it was that thousands of ordinary people could hear what Lord Curzon was saying.

I replied that it would be much more beautiful if there were an instrument by which Lord Curzon could hear what thousands of ordinary people were saying. But that machine has not yet been invented; and until it is, there will be no true machinery of democratic government. It may be said that some moral qualities are (thank God) beyond the control of any machinery; and that the scientific mechanism that would make Lord Curzon listen to anything which he did not want to hear is beyond the visions of science. But without entering into this question, it may be said that that simple antithesis or reversal, implied in such an anecdote, is the real crux of the question.

We talk rightly enough of wireless telegraphy as a revolution; but in one sense it is only too much of a continuity and even a monotony. However wide may be its appeal, it is generally only the old and familiar voices that are appealing. It can only be the publication of public things. It can only concern itself with what is called the public life of those who are called public men. I am stating this fact primarily as a fact, and not as a complaint. I am certainly not implying in the complaint a proposal for the disregard of privacy.

I do not mean that I am thirsting to overhear Lord Curzon's playful conversation with the cat; or to listen to a Prime Minister's secret conferences with his maiden aunt. As a matter of fact, we have rather too much of that kind of thing already in the newspapers; and as I shall suggest in a moment, it is the whole danger of the broadcasting innovation that it may merely be an imitation of the newspapers. For we live in an age in which things of purely private interest are made public; as a sort of compensation for things of purely public interest being kept private.

We have a photograph of the politician
(Continued overleaf.)

Making Listeners Jump!

(Continued from the previous page.)

Playing with his puppy dog; but no photograph of the politician playing with the party funds, though the same is far more gay and fantastic and happens also to be of serious importance to the nation.

But my complaint, in so far as it is a complaint, is not concerned with any desire to hear the domestic asides as well as the public speech of a great statesman. It is rather a desire, a deep and earnest and sincere desire, not to hear the great statesman at all. I do not want to hear more of him, but less of him. I do not want to know more about his private life, but if possible less than I know already. In other words, the practical peril of the whole business of broadcasting is that it should bore people with the very things with which they are already infinitely bored.

Where Revolutions Happen.

The trouble with wireless telegraphy is that it is not a revolution. No mechanical appliances can be a revolution; any more than the guillotine by itself could have made the French Revolution. For revolutions happen in the soul.

One thing I should very frequently do if I were asked to arrange the programmes of the broadcasting business; and that is not to arrange them at all. Sometimes, I fancy, the one genuinely exciting programme would be no programme. I should let it be generally understood that during a certain considerable period of the audition, the auditors would have no notion whatever of what they were going to hear; and then I should let them hear things that would make them jump.

Yells, Screams and Expletions.

I should be very careful to put into this section all the things that could never by any possibility be said in newspapers or in political speeches. Rather than have the repetitions of the official or platitudinous point of view, I would cause to be heard loud voices in violent but obscure quarrels, yells, screams, explosions, loud and distinct though only partly intelligible threats of doom, pointed but wholly disjointed remarks preceded and followed by absolute silence, and so on.

I would have an organization of benevolent spies all over the country discovering the things and the people that really need to be discovered. Some of the most amusing ideas in the world occur to people while they are still undergraduates or errand-boys. Some of the best jokes in the world are invented in the course of a secret language for children or a secret society for schoolboys.

A New Art of Nonsense Words.

I do not insist that the waves of wireless should carry over the whole world words like "wakataboolah" or "kettleburyundell"; merely because they are lovely and melodious words that I know to have existed in the nonsense language of the nursery. I am not at all sure that we might not make what is called a New Art out of nonsense words for their merely euphonistic values; so that aesthetes should feel just that fine shade of emotional difference which escapes logical language in saying "golumphing" instead of "golumphing"; and so prove that in the world of wonderland there is a very decided difference between Tweedledum and Tweedledee.

I am sure the meaningless words of Lear and Lewis Carroll are much more like literature than many of the new pictures are like painting; and that there is a great deal more sense to be got out of jabberwocky than out of jazz.

But though I would not discourage this infant art of mere nameless noises in literature (especially if I have the honour to be the first to



MR. G. H. CHESTERTON.

propose it) I doubt if it is not an art too delicate and individual for the world-wide appeal of wireless; and suited rather to the silvery touch of late and zither-ern (whatever that is) than to the demagogic of the loud speaker. I would not exclude this nonsense language altogether from the new experiments. Now and again, in the primordial silence of the universe, a hollow voice saying "Grunk" might have beneficial effects. The voice of nobody in particular born on the breeze and murmuring "Ughluglug" might find its wandering way to many hearts that sermons cannot reach.

But it is not this extreme sort of novelty that I am seriously propounding for the consideration of the broadcasting business. That must be left to a small band of earnest prophets and pioneers. In this connection it is something of a digression. But what I do mean is that the organizers of the new mode of communication should try to communicate things that are almost as new and may seem to some at first sight almost as fantastic.

I do not propose at present that we should startle the world with nonsense words or nonsense rhymes. The thing that will startle the modern political and scientific world is not nonsense, but sense.

(The continuation of Mr. Chesterton's article will be published next week.)

Nigger Minstrels.

AS an old nigger minstrel, I was pleased to read the interesting article by Mr. Francis Gibble, but he is in error when he states that Mr. T. D. Rice first presented Negro minstrels in, or about, the year 1835. The first Nigger Minstrel troupe was not formed till about seven years after that date.

Mr. Rice, who was a talented actor, singer, and dancer, especially in Negro characters, first appeared at the Walnut Street Theatre, Philadelphia, and soon became very popular.

He came to England in 1836, and first appeared at the Surrey Theatre and later at the Adelphi, in a "black opera," written by himself, entitled "Bone Squash Diabolo," introducing "Jump, Jim Crow," which created a furore.

The first Nigger Minstrel troupe was formed by E. P. Christy and three other performers in Virginia in 1842, and toured the Southern States. By 1844, when several other troupes had sprung up, they were playing in the principal theatres of New York. On the death of E. P. Christy and George Christy, Pierce and Raynor brought the company to England in 1857.

Two years later, Mr. Pierce (the original singer of "Hoop De Doodle Do") died, and Mr. G. W. Moore came from America to fill the vacancy. He at once made a great hit with English audiences, and became proprietor of the company in 1865 in partnership with Moore, Crocker, Ritter, and Hamilton, and opened at St. James's Hall, Piccadilly.

They had many imitators, and made a record in the annals of public amusements by performing at St. James's Hall in an unbroken season of forty years' duration.

CHARLES HUGHES.

A Favourite Opera.

Broadcasting "Samson and Delilah."

ONE of the most tuneful of all the operas will be broadcast from Manchester and Chelmsford on Saturday, February 28th, namely, *Samson and Delilah*, by Saint-Saëns. It was first produced by Liszt at Weimar in 1877, and was at once acclaimed as an opera of real beauty.

The story is a simple one and follows the Bible narrative closely. Samson is captivated by Delilah, and she is urged by the high priest to betray him. This she does, and Samson is shown blind and in chains, and he finally overthrows the temple.

The charming and world-famous song "Softly Awakes My Heart," occurs in the second act; but although this is the most popular tune in the opera, nearly all the music is rich in melody.

Saint-Saëns was always rather "touchy," and there is a good story told of a practical joke played upon him by his brother-composer, Jules Massenet. One day a *so-called* rich called on Massenet, saying that he had heard that he was a clever pianist. Would he play a few pieces at a little party? He would be well remunerated. Massenet was much amused. "I suppose there'll be some dancing?" he enquired.

"Well, yes. Perhaps M. Massenet would not mind playing for the young people to skip about a bit as well?"

"Not at all," said Massenet. "What night?"

"Thursday."

"Thursday? What a pity. I am engaged then. But I can give you the address of a friend who can play all the modern dances beautifully."

So saying, Massenet gave his unwelcome visitor Saint-Saëns' address, and he called on Saint-Saëns, and was promptly kicked out. Saint-Saëns brooded over the incident a long time before he saw the joke.

Mr. Gay.

Writer of "The Beggar's Opera."

THE production, in January, 1728, of Gay's *Beggar's Opera* was so successful that for the time it drove Italian opera off the English stage.

The author was then in his forty-third year, and had experienced a life of varying misfortune and success. This lyrical drama excited great interest at the time.

Gay was born in Barnstaple in 1685. He was apprenticed, on leaving school, to a silk mercer in London. He soon abandoned this occupation, and after spending some time in the household of his uncle, a Nonconformist Minister, in Barnstaple, he again returned to London.

Little is known of his life until the publication in 1708 of "Wine," and it was not until "Rural Sports" was published, in 1713, that he hinted at the wasted years he had spent attending on courtesans, who were lavish with unfilled promises. Between that year and 1720 he published a number of works, which met with comparatively little success. It was not until he published in the latter year his "Poems on Several Occasions," that any of his efforts produced satisfactory financial results. In that year he invested all his money in South Sea Stock, and when the South Sea bubble burst, he found he had lost his all, and became dangerously ill. Influential friends, however, rallied to his aid, and after producing a tragedy, *The Captives*, four years later, he wrote another famous work in 1727. This was his "Fifty-one Pables in Verse," for the child of Prince William, afterwards Duke of Cumberland.

It was in the subsequent year that *The Beggar's Opera* brought him widespread fame.

This celebrated play will be S.B. from London to all stations except Chelmsford on Tuesday, February 24th.

In Defence of Jazz.

Interpreting the Spirit of the Age.

Is modern dance music worth while? Should it be broadcast on three nights in each week? I am not a dancer. I am not a musician. Like thousands of other long-suffering children, I was taught the piano when a small boy. My disciplinary training even extended to attendance at concerts of the classical order. Some of these raised me above my everyday self, others, frankly, bored me stiff.

Shortly before Christmas, rumour had it that the B.B.C. was going to curtail the broadcasting of dance music from London. This rumour, like the "Russians" myth of war-time, was carried, in the twinkling of an eye, to all corners of these islands, and believed.

The Soothing Waltz.

The story, for such it was in more senses than one, served a good purpose. It led to a plebiscite which, I am told by the Director of Programmes, went overwhelmingly in favour of a continuance of the 1924 dance schedule.

I repeat that I am not a modern dancer, and, having most of the prejudices of one on the far side of forty, I prefer the soothing effects of an old-time waltz. Still, I am pleased with the voting.

I am glad, because this synopsized form of musical expression has gripped young and old people in all classes of society.

There are many, of course, who will not accept the B.B.C. plebiscite. They will begin by arguing that the musical world would not trouble to take part in a plebiscite on such a subject and that, therefore, the returns are one-sided. My impression is, that those who believe themselves to be musical are not generally backward in airing their views. If they did not take part in the B.B.C. plebiscite, then, surely, one must question their fitness to champion the great musical cause.

Professors on "Ragtime."

We shall also be told that the present dance music is "foreign" to our nature. Is not the bulk of the music that really counts foreign to the Anglo-Saxon? May we not even trace some of our most treasured folk songs to Scandinavian and other "foreign" origins?

Synopsized music has my support because I feel that, whatever the origin, it as truly represented the spirit of the age as do folk songs represent the simplicity of the days when they first took shape. In two centuries learned professors of music will be quoting "Alexander's Ragtime Band" and the more recent "Last Night on the Back Porch" alongside the folk tunes of the Middle Ages as examples of important contributions towards musical development.

A Lasting Craze.

Another reason which lends this heretic to pin his faith to modern dance music is the fact that it has not yet proved a mere "flash in the pan"—the craze of only one or two seasons. If Ragtime had died out as suddenly as it appeared, then we might have written it off the musical balance-sheet as a form of musical madness, allied, perhaps, to cubism; but Ragtime and its subsequent modifications have been with us at least twelve years, and each year this new, brisk, rhythmic form of musical expression grows richer in tone. Synopsized dance music reflects the spirit of to-day much as the waltz reflected the sentimentality of the nineteenth century.

Modern dance music is refreshing when taken in reasonable doses. The B.B.C. have no placed it in their programme that it does not become obtrusive. It is radiated only at hours outside those usually observed in the concert world. May it long continue! D. W.

The Indivisible is Divided.

A Famous Scientist Discusses the Atom.

"WHEN Bishop Berkeley said: 'There was no matter,' and proved it, 'twas no matter what he said." Or again: "What is mind? No matter. What is matter? Never mind."

This, however, is not Sir William Bragg's attitude, and because he believes that we not only can, but should, take an interest in such a fundamental as the composition of matter, and, further, that we really are quite ready to do so, he delivered six lectures to children at the Royal Institution a year ago. Later, he gave them to a much greater audience, altered in style, but similar in substance, in a series of broadcast talks from London and all other centres. Now his lectures in amplified form are published so that we may read for ourselves.*

A Fascinating Topic.

It was significant that so eminent a scientist should choose to lecture to children on so abstruse a subject. Among other things, it indicated a belief in his own ability to make the subject intelligible and interesting. We know that he held his young audience spellbound, and we know that his wireless talks were greatly appreciated, too.

Hard and persistent effort is required in the sphere of physical discovery. To this there must usually be superadded the outgoings of a vivid imagination before the hidden things are brought to light. But to communicate the import and the terms of discovery so that he who runs may read, must read, in fact, and reading comprehend, requires high qualities of an order too rarely found in association with those others which have achieved the result. Possession in marked degree of these qualities is what makes Sir William Bragg's treatment of this subject both arresting and fascinating. The subject itself is one of such common application that we do well to follow him.

An Intriguing Mystery.

He deals with what was, till late, one of the deepest and most intriguing mysteries of the physical universe—atomic structure, the system by which we find that every sort of known substance is built from about ninety different kinds of atoms, themselves but variations of one elemental form.

From the "De Rerum Natura" of Lucretius to the "Concerning the Nature of Things" of Bragg there is a gap of nearly two thousand years, and in the meantime, though not lately, the idea of the entity of the atom has been dispelled: the indivisible is known to be divisible. In other words, the final division of a substance would not be an infinitely small particle or atom of that substance at all, but something different and elemental.

Upsetting our Notions.

The most momentous of recent penetrations be attributed naturally to the discovery of X-rays which increase our keenness of vision ten thousand times, and to radio activity, both of which are lucidly explained. He tells us that he was subject to two particular embarrassments: the first the amazing minuteness of the orders he was to describe; the second, the difficulty of grasping arrangements in space.

It is good that we be troubled, if not awed, by the contemplation, on the one hand, of the atom as a solar system in miniature, and on the other, vice versa, by the idea of vast empty spaces inside the structure of an atom, the average size of which is a hundred-millionth of an inch. We begin to realize how relative are all our fixed notions.

* "Concerning the Nature of Things," by Sir William Bragg, K.C.B., D.Sc., F.R.S. (G. Bell and Sons, Ltd. 7s. 6d. net.)

The various conclusions seem to evolve themselves spontaneously as we read; the style is engaging and delightful, and it appears as if the distinguished author were himself participating in the wonder of the final consummation. Analogies in homely terms abound. Atoms, which may be combined in innumerable ways to form the molecules of every known substance, he compares to the letters of the alphabet which may be put together in equal variety to form words.

Perpetual Motion.

Perhaps he might have carried the simile a step further, and said that as the letters themselves are but variations of a pencil line upon paper, so we find the ninety odd atoms to be essentially similar in their positive electron, and differing only in the number of negative electrons which compose the system and gives an atom of carbon or nitrogen or oxygen.

From this he develops the ideas and facts of perpetual motion within the substance, the molecule and the atom, connects it up with temperature, and explains the difference between solids, liquids, and gases.

The book is for the man in the street who is moved to inquire into some of the great fundamentals of existence, and I should say that an intelligent boy or girl of fifteen could read it with ease. But it can also be read without irritation or boredom by the intelligent of any age. Naturally, the writer, with an easy grace, asks us to take a good deal on trust, and provides many a convenient short cut to conclusion. How else could he be intelligible?

Science Books.

Some day perhaps he will tell us something about the primary electrons themselves; though I expect we are more likely to hear about that when we discuss the problems of the ether. If I have a fault to find with the book, it is one which will, no doubt, elsewhere be regarded as one of its peculiar assets. I should like to have seen his imagination given rein in speculation about the electron, the attainment of the absolute zero of temperature, a little philosophic musing on this overwhelming conception of a world in every atom. Where science ends, or, rather, is temporarily suspended, philosophy may well take up the burden.

Just take a trifling handful, O philosopher,
Of magic matter; give it a slight toss
over

The ambient ether—and I don't see why
You shouldn't make a sky.
So said a poet. A great scientist said: "A sky as vast as ours and as good in appearance could be formed from a quantity of matter which might be held in the hollow of the hand." I hope the poet said it first.

J. C. W. R.

BOOKS FOR LISTENERS.

ONE of the most readable books on broadcasting that has been produced so far is "Broadcasting for Everyone," by Norman Edwards (Herbert Jenkins). It is designed for the novice, not the expert, and contains a mass of information, couched in simple language so that it can be understood by anyone.

The book also contains some interesting chapters on the general aspects of broadcasting. That containing the opinions of well-known people upon the subject of wireless is particularly readable.

Another volume that should find its way on to the shelves of keen listeners is Pitman's "Radio Year Book" for 1925. It forms a compact and convenient work of reference.

Official News and Views. GOSSIP ABOUT BROADCASTING.

Mr. George Grossmith—An Important Announcement.

IN response to an invitation from the British Broadcasting Company, Mr. George Grossmith has accepted the appointment of Advisory Director of Programmes. It is hoped that this appointment will further develop that liaison with the Entertainment Industry which the present negotiations have begun. None of Mr. Grossmith's theatrical commitments are in any way affected by his acceptance of this new post. He has, in fact, been acting as an unofficial adviser to the B.B.C. since the beginning of the year. His official position has now been defined. He has always made a point of identifying himself with new movements in entertainment, such as revue and cabaret, of both of which he was a pioneer sponsor in London. And now he has taken up the latest development in entertainment.

He joins the Company opportunely. He will advise on all matters of programme development, and will specialise on the lighter and more popular side. He will also undertake the organization of periodic special programmes, and may do a certain amount of microphone work himself.

Two Important Innovations.

Two additions are shortly to be made to the "civil" services which form part of the programmes. These are expected to appeal strongly to rural workers and to navigators in home waters.

They consist of a morning weather forecast compiled from data received by the Meteorological Department of the Air Ministry shortly before breakfast time, and a weekly summary of basic prices in the home markets, prepared by the Board of Agriculture.

From the Transmitting Station.

The hour of transmission for the weather forecast and the date of beginning have yet to be fixed. It will probably be between 9 a.m. and 10 a.m., in which case, in order to avoid the necessity for a complete duplication of engineering and announcing staffs, it will be read from the transmitting station instead of from the studio, by the engineer on duty, and the old-time carbon granule microphones will be used instead of the more sensitive studio microphone. Speech will be clear, but perhaps not up to studio quality.

The market prices will be read each Thursday evening at 6.30 p.m., immediately before the usual talk under the auspices of the Board of Agriculture.

A Novel Experiment.

Listeners to the Cardiff Station will participate in an interesting experiment on Friday, March 6th, when an attempt will be made to relay the concert broadcast from various stations on the Continent. The programme will be in the nature of an experiment, but if conditions are favourable, it is hoped to relay Radiola, Paris, Rome, Cassel, Berlin, Madrid, Brussels, and anything else that happens to come along, so that listeners with crystal sets may share the joys of distant reception. During the tuning preliminaries, a programme will be given from the Cardiff Studio by the Station Orchestra and Mr. John Peery, tenor.

An Unusual Programme.

A romantic Italian scene, specially designed by Mr. Sydney Russell, of the B.N.O.C., and produced by Mr. R. E. Jeffrey in collaboration with him, will be given at the London Studio on March 6th. The programme will be unusual, with a story running through it which will introduce an Italian concert in a small hall in an Italian village, together with the murmur

of the audience, the applause and even the interruption of a revolutionary skirmish in the street outside. Miss Marie Bennett, coloratura soprano, Miss Enid Croickbank, contralto, and Mr. Sydney Russell, tenor, will be the principal artists.

A Birthday.

Glasgow Station celebrates its second birthday on Friday, March 6th. The band of the 7th (Hlythwood) Battalion, the Highland Light Infantry will contribute to the programme.

Miss Doris Vane will celebrate in song, and the Anglo-Hawaiian Guitar Players will add plaintive melody. Mr. Herbert A. Carruthers will play some of his own pianoforte works, and the Glasgow University Students will wax prophetic and broadcast a programme as it may be done in 2,000 A.D.

"A Sister to Assist 'Er."

As the Edinburgh Station is relaying the Glasgow Birthday Programme on Friday, March 6th, the local evening programme arranged for that date will take place on Monday, March 2nd. An evening of variety will then be presented, and among other items the popular sketch *A Sister to Assist 'Er*, by John Le Breton, will be performed by Mr. Jay King and Mr. Arthur Nelson. The same evening a number of glees, madrigals, etc., will be rendered by St. Stephen's Choir, under the direction of Mr. David Bayne, while some flute solos will be played by Mr. George Johnstone.

Later Broadcasting.

During the period covered by this issue the following stations will be broadcasting until 11 p.m.: Cardiff, February 26th; Manchester, February 23rd; Newcastle, February 27th.

Cross Words by Radio.

A Radio Cross-Word Puzzle will be given from theournemouth Station on February 27th. The diagram will be found on page 402. The Announcer will read out clues, and novelty will be lent to the idea by the inclusion of the cross-word puzzle in the song or instrumental piece. In the case of the instrumental piece, the cross word will be found in the title, and in the case of the song, the word will be slightly accented by the singer.

National Dances.

"Dancing Round the World" is the title of a programme to be given from the Cardiff Station on Saturday, March 7th, by the Station Orchestra and Mr. John Collinson, tenor. The performance will include the national dances of Spain, Japan, Poland, Russia, Czechoslovakia, Finland, and other countries.

Women and Rural Problems.

Mr. R. Hart-Symon, B.A., of St. John's College, Oxford, who is giving a series of Talks from the Bournemouth Station in the Women's Hour on the English Rural Problem and its Importance to Women, will, on February 23rd, tell how women, both in town and country, can contribute to a more profitable agriculture.

St. David's Day.

On Sunday, March 1st, an appropriate St. David's Day programme will be given at the London Station by some members of the London Welsh Male Choir. Miss Gwladys Naiah, soprano, Mr. Madoc Davies, baritone, and Mr. Percell Jones, violoncellist, all well-known Welsh artists, will contribute to the programme.



MR. GEORGE GROSSMITH.

Almost all the items will be by Welsh composers and many of the songs will be sung in Welsh.

At 8.15 p.m. a special St. David's Day service at Llandaff Cathedral will be relayed from the Cardiff Station.

Classical Music for Children.

Three afternoon concerts of classical music are to be a weekly feature of the Dundee programme. The Children's Corner at Dundee every Thursday will now include talks on various scientific subjects.

"Herbs and Fairies."

Miss Eleanour Sinclair Rohde, an authority on old English Herb Gardens and Herbs, will talk on Wednesday, March 18th, at 7.10 p.m., from London, on "Herbs and Fairies."

Jubilee Celebration.

A special Jubilee Celebration programme, in honour of the 85th birthday of Mr. Harry Freeman, deputy leader of the Birmingham Station Orchestra, has been arranged by that station for Wednesday, March 4th. A special item will be the Violin Concerto in A Major by Mozart, played by Mr. Freeman.

The second half of the programme will consist of ballads, Miss Nora Delmarr and Mr. Sydney Coltham being the soloists.

An Appointment.

Mr. H. W. Litt has been appointed Engineer-in-Charge of the new High-Power Station now in process of erection at Daventry. He has been closely associated with the engineering developments of the B.B.C. for a considerable time. As Superintendent Engineer for the Southern Area he was in charge of the erection of the Nottingham, Stoke-on-Trent, and Swansea Relay stations. Whilst engaged in survey work in 1913 he reached the source of the Essequibo River, British Guiana. It is believed that until then, no other Englishman had been there.

Padarewski's Pupil.

Mr. Julien Rosetti, who will be broadcasting a pianoforte recital from the Aberdeen Station on February 27th, is well known in the north of Scotland, and especially in Aberdeen, where he twice during the winter season gives extensive recitals. A pupil of Padarewski, his playing, as well as that of his Trio, which he sometimes brings to the Aberdeen Station, is greatly appreciated by listeners, and invariably after a broadcast many requests are received for a repetition.

A Microphone on Strike.

A curious incident was responsible for the changing of the Sheffield programme on a recent evening. A programme should have been transmitted from the Albert Hall, Sheffield, and before the performance was due to start, the microphone was tested and found to be in order. The microphone was suspended in such a position that whilst the hall was occupied it was out of reach.

When the performance was due to start, a preliminary test was carried out, and then it was found that no transmission was being made. Consequently, instead of the Albert Hall transmission, another programme had to be broadcast from the studio. At the conclusion of the Albert Hall performance, the microphone was examined, and it was then found that mice had chewed the moving coil and most of the wood.

For Lovers of Shakespeare.

Shakespearean excerpts are always popular, and a programme of these will be produced by Mr. R. E. Jeffrey at Chelmsford on March 3rd. Incidental music will be provided by the Snow String Quartet, and settings of Shakespearean lyrics will be sung by Mr. Dale Smith.

PEOPLE YOU WILL HEAR NEXT WEEK.



An Australian "Nightingale."

MELBOURNE, Australia, would be a remarkable city if only because it has produced so many distinguished singers. The home of Melba, Ada Crossley, and Florence Austral, it was also the birthplace of Miss Gertrude Johnson. She will sing at Glasgow on February 22nd and Belfast on February 27th. At the age of six she sang in the Melbourne Town Hall to an audience of 2,000 people, and nine years later

A Fine "Macheath."

MR. FREDERICK RANALOW was chiefly associated in the public eye with his inimitable performance of "Captain Macheath" in *The Beggar's Opera* during his recent successful run at the Lyric Theatre, Hammersmith. He had, however, a distinguished record prior to this engagement. Born in Dublin and educated at Westminster School, he studied music under Mr. Arthur Oswald and Signor Randegger at the Royal Academy of Music. He had the honour to be chosen by Dame Melba as the only other singer to accompany her to one of her tours throughout Australia and New Zealand.



MR. FREDERICK RANALOW in the character of Captain Macheath.

When *The Beggar's Opera* is broadcast on February 24th, the principal part of Polly Peachum will be played by Miss Kathleen Hillard. Above is the leading lady in the stage production.



MR. ERIC CORRIE, composer, whose works will be performed at London on February 26th. For many years he was principal viola player in the Queen's Hall Orchestra.



MR. MAURICE COLE, the famous pianist, who appears in the London programme on February 26th. He studied under the Belgian pianist, de Greef, and gave his first London recital at the Wigmore Hall, in 1922.



MISS GLADYS PALMER.

and after touring Australia and New Zealand, chiefly in heavy operatic parts, she came to this country, where her qualities aroused the interest of Mr. Robert Radford, who introduced her to Mr. Percy Pitt. As a consequence, she was engaged to sing with the British National Opera Company.

A Useful Warning.

THANKS are due to Miss Florence Ellinger, of the Francis Holland School, in Baker Street, for warning Miss Gladys Palmer, as a girl, not to sing until she was of a trainable age. Miss Palmer, who will sing at Cardiff, Birmingham, London and Manchester next week, has a voice of more than ordinary beauty, which was trained in Paris by Chynault, who was himself a pupil of Jacques Bouhy. Miss Palmer is a student of languages, and in this connection she has given a recital of Lieder for the Goethe Society.



MISS GERTRUDE JOHNSON.

was fortunate enough to come under the attention of Dame Melba, who supervised her training. She quickly attracted attention.

A Famous Bass.

MR. ROBERT RADFORD, who appears in the London programme on February 22nd, has a reputation which cannot be dealt with in one paragraph. It has been said that his name will be noted in the records of posterity as the type of English singer who does the things that are expected of him, only rather better. He is one of the greatest bass singers of this country, and though intended by his father, a lace manufacturer of Nottingham, to be a chartered accountant, deserted from his first profession to enter the Royal Academy of Music. Since 1905 he has sung in grand opera. In that year he took the part of the Commendatore in *Don Giovanni*.



MR. ROBERT RADFORD.



MR. J. H. EQUIRE, Musical Director of the Adelphi, Apollo, Playhouse, and St. John's Theatres. His *Chamber Odelet* will be broadcast from various studios next week.



MISS ANNE THURSFIELD, who will broadcast from London, February 22nd, sings in six languages, besides English.



MR. JOHN ANSELL is Musical Director, Winter Garden Theatre. Some of his compositions will be broadcast on February 26th.

Pieces in the Programmes.

A Weekly Feature Conducted by Percy A. Scholes.

HAYDN'S "THE CREATION."

(LONDON, CAMBRY, GLASGOW, ABERDEEN, MANCHESTER, AND ALL RELAY STATIONS, SUNDAY.)

THIS was the first Oratorio Haydn ever wrote, and he was sixty-four years old when he began it. He was a rapid composer, as may be gauged from the fact that his output includes 150 Symphonies, nearly eighty String Quartets, over fifty Sonatas, nearly forty Trios, thirty Concertos and a great many other things. But rapid as he was, he "took his time" over *The Creation*, spending about two years over what he regarded very seriously as a religious offering.

The proposal for such a work is said to have been made to him during one of his British visits. Handel's Oratorios, which were written in Britain, for British performers and British audiences, attracted his attention. It is said that his admiration for Handel's *Messiah* led directly to the desire to compose a work of similar kind and value, and if so, the intention to some extent succeeded, for, in this country, at any rate, the really popular oratorios have been Handel's *Messiah* (1743) and Haydn's *The Creation* (1798-8), later added to by Mendelssohn's *Elijah* (1845) and still later by Wagner's *Der Ring des Nibelungen* (1900).

STORY OF ITS COMPOSITION.

As to Haydn's choice of subject, one story is that Bartholomew, a well-known London violinist, being asked for a suggestion, handed him a copy of the Bible, saying: "There! take that and begin at the beginning."

Another story is that Salomon, another London violinist (and the impresario who was responsible for Haydn's importation—if one may use that word), put into the composer's hands a libretto originally made up for Handel by one Liddell, or Lidley, out of passages from Scripture and from Milton's *Paradise Lost*. The last story is known to be authentic, and the first is not altogether incompatible with it.

With the Liddell libretto in his trunk, Haydn journeyed back to Vienna, and here twelve noblemen banded themselves together to guarantee the composer the sum of 500 ducats on the completion of his work.

The first performance was a private one, before certain members of the Austrian nobility in a palace in Vienna (April 29th, 1798); the next was a public one in a theatre in Vienna (March 16th, 1799).

The score was published in 1800, and two leading London musical organizers, the Salomon already mentioned and one Ashley, who carried on a series of Lenten Oratorios in Covent Garden Theatre, competed with one another in the attempt to get an early copy and arrange a performance. Ashley was smart enough to enlist the help of a "King's Messenger" who was bringing despatches from our Ambassador in Vienna. By this means, he beat Salomon, and after six days spent in copying the orchestral parts and in rehearsal of the work, it was performed on March 28th, 1800.

THE LIBRETTO.

The libretto of *The Creation* is naive in its wording. Remember, as a partial explanation, that it is an English libretto translated into German and re-translated into English.

The work falls into three parts, the first telling of the work of the first four days, and the second of the remaining two days.

The Third Part presents what may be called the dawn of the great Sabbath, a seventh day, when the restless perpetuation of truth and beauty feeds, while it exalts, our ever-growing wonder; but rest is not inactivity, animate

and inanimate nature pass on their ceaseless course of growth and decay, mountains and seas arise and disappear, species come into being and pass out of existence, human genius penetrates further and further into the awful mystery and finds it still unfathomable, and yet the law which governs all is never broken.—(Macdaniel.)

SOME POINTS OF INTEREST.

Note the following points of special interest mentioned here in the order of their occurrence:

(1) The Introduction depicting "Chaos"—strangely Wagnerian in places! (2) In the short Chorus, "And the Spirit of God moved on the face of the waters," the magnificent sudden outburst at, *And there was Light*; (3) In the Air *Now vanish before the holy beams* (and elsewhere throughout the work), the beautiful passages for Wood Wind; (4) In the same Air at the words *Affrighted fled*, and elsewhere in many places throughout the work the realism; (5) In the well-known and tuneful Air, *With verdure clad the lovely passages* for Horns and Wood Wind; (6) In the Second Part, where animate life begins, the big, sweeping phrases set in the Eagle, the Charismatic treatment of "the merry Lark," the cooling Bassoon representation of the Dove, the Flute representation of the Nightingale—and so forth. (7) In Part Three, note what an admirable artistic scheme that of *The Creation* proves to be in its general line, inasmuch as it culminates in the introduction of human interest and of the praise of God by Man. *The Creation* ends with a big fugue chorus—*Sing the Lord, ye Voices all*.

THE BEGGAR'S OPERA.

(LONDON, TUESDAY.)

The Beggar's Opera was first heard and first published in 1728—nearly two centuries ago.

The libretto (with spoken dialogue) was by the poet, John Gay, the music consisted of popular airs of the day, collected and arranged by Dr. Pepusch, a German musician who settled in London as a young man.

The plot of the opera is not easy to tell, and is not of importance in connection with the present performance, which is to be a concert performance without dialogue.

Since *The Beggar's Opera* was first heard, it has never been off the London stage for more than (say) twenty or thirty years at a time. The latest revival was in 1920, when the opera had a long run, under Mr. Nigel Playfair's direction at the Lyric Theatre, Hammersmith. Mr. Frederick Austin arranged the accompaniments, etc., for that revival, and his arrangements are to be used to-night.

What was it made *The Beggar's Opera* in its own day so great a "draw"? It is no good answering—the political allusions, for that "day," it must be remembered, lasted a century or more, and its hints at Ministers and Court soon ceased to be topical, just as the subject matter of a great deal of Gilbert and Sullivan has ceased to be topical. Nor is it possible to suppose that, as drama, the thing caught the public imagination, for the actual plot is of the feeblest.

Surely, Gay and Pepusch captured and retained their public, just as Gilbert and Sullivan captured and retained theirs by a happy mixture of frank farce and simple, but sound, tune. A good tune will go anywhere and last any length of time: Sullivan had to make his own tunes; Pepusch could pick up such things in the street, for a good many of the sixty-nine he used were current coin everywhere in his day.

Listeners' Letters.

All letters to the Editor to be acknowledged must bear the name and address of the writer. Anonymous contributions are not considered.

The New Tuning Note.

DEAR SIR.—I do not think that the new method of broadcasting the tuning note by means of piano playing is as efficient as the old method of a single note. By the original one-note tuning the task was comparatively easy, as attention was concentrated on the set and not on the tuning note. Now, however, one is apt to listen too much to the piano, and the collection of notes or tune played does not allow one to fix one's mind on the job that matters—viz., gaining the best result from the set.

Moreover, the one tuning note has only one volume of sound, whereas piano playing is apt to increase or decrease in volume rather than maintain a sameness. The "rests" necessary in piano playing between notes cause the listener to become distracted, especially if the "rest" be a long one—even of one second—but if the note be "held" tuning is simplified, and correct results are gained in less time.

Yours, etc.,

Winchmore Hill.

P. J. P. S.

[The present tuning note will be continued for a short time in order to see if the opinion of the general public coincides with that of our correspondent. If it does, the B.B.C. will obviously revert to the old tuning note.]

Samuel Pepys's Music.

DEAR SIR.—The interesting paragraph appearing in *The Radio Times*, relative to the two solos lately played by Mr. Percy Prossick on the Viola d'Amore from the Bradford Station, induces me to suggest that the occasional broadcasting by the B.B.C. of old-time music played on the actual ancient musical instruments of the sixteenth and seventeenth centuries (clavichord, viola da Gamba, lute, recorder, etc.) would not only be of the greatest educational value, but a great pleasure to many amateurs interested in this particular branch of music.

It would be, perhaps, a revelation to many people to listen to the music they cultivated in the times of our old friend, Mr. Samuel Pepys, and allow them to imagine the comments which this caustic critic would have made had he been called upon to compare the delicate music of his time with the noisy efforts of to-day.

Yours, etc.,

Liverpool.

M. R. G.

Broadcasting versus Braille.

DEAR SIR.—Will you allow me space for a few remarks on the subject of Captain Fraser's article on "Wireless for the Blind"? Nobody, of course, would deny the inestimable boon that broadcasting has been to many who, like myself, cannot see to read; but surely it is not possible to compare that boon with the immeasurable advantage that the blind enjoy from the use of Braille. I was nearly forty years of age when I first began to read that type, and although I am not at all a proficient reader, I owe many hours of daily happiness to the National Library for the Blind.

To my mind, broadcasting can no more supersede Braille for the blind than it can supersede type and handwriting for those who can see. Reading books is not merely a hobby, or a means of filling in a few spare minutes; it is an occupation not only interesting but useful, and for that reason I am bold enough to champion Braille even against such a powerful friend to the blind as wireless.

Yours, etc.,

Farnham.

C. H. C. (Major).

(Continued on the facing page.)

WIRELESS PROGRAMME—SUNDAY (Feb. 22nd.)

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

2LO LONDON. 365 M.

3.0-3.30. Oratorio.

"The Creation."

(Hofner.)

S.B. to other Stations.

Gabriel STILES ALLEN
Viol SPENCER THOMAS
Harp ROBERT RADFORD
THE WIRELESS ORCHESTRA AND
CHORUS:

Conducted by PERCY PITT.

5.0-5.30—CHILDREN'S CORNER. S.B. from Manchester.

6.15. Service.

THE SALVATION ARMY.

Hymn, "O Happy Day That Fixed My Clods."

8.21—Address by Mrs. GENERAL BOOTH.

8.30. BANDMAN BARKER.

Solo, "When the Sky is Blue."

8.40. THE INTERNATIONAL STAFF BAND.

Bandmaster, G. FULLER.

March, "Spanish Chant."

8.45. THE BAND VOCAL PARTY.

Song, "The Lord is My Shepherd."

9.50. The Band.

Selection, "Memories of Childhood."

Message from GENERAL BOOTH.

The Band.

Selection, "Russeau."

CASANO'S OCTET.

EDA BENNIE (Soprano).

THE WESTMINSTER SINGERS.

9.0. The Octet.

"Valse Tynde" Sibeliu

"Warum?" ("Why?") Schumann

"Sappho Ode" Brahms

Eda Bennie.

"From Afar" Cyril Scott (4)

"Affinity" Percy Kohn

"High Upon the Hill" Sanderson

The Octet.

"Wedding Day at Troldhaugen" Grieg

Westminster Singers.

Glee, "The Nighty Composer."

Wolfe (11).

Irish Air, "The Meeting of the Waters."

arr. Harper Kearton

Plantation Song, "My Old Kentucky Home."

The Octet.

"Liedchen" ("The Love Death") (from

"Tyndal") Wagner

Eda Bennie.

"Soft Footed Snow" Sigurd Lie

"Twilight It Is" John Nightman

"There's Someone in the Orchard"

Harold Austin

The Octet.

"Slamher Song" Greg

"Scrapards" Greg

"Frotigue" Greg

10.0. TIME SIGNAL FROM GREENWICH.

WEATHER FORECAST and

GENERAL NEWS BULLETIN. S.B.

to all Stations. Local News.

10.15. The Octet.

"Carnaval," Part I Schumann

(Prelude; Present; Adagio; Valse

Nocturne; Capriccio.)

Westminster Singers.

Glee, "Tell Me, Bubbly Echo"

(17-18) Parton (25)

Glee, "By Cytha's Arkour" Horley

Part Song, "Ladybird" P. Cowen

The Octet.

"Carnaval," Part II. Schumann

(A.S.C.H., S.C.H.A., Chorale; Recon-

naissance; Valse; Allez-Vous; Passey.)

"O Rest in the Lord"

10.45—Close down.

5IT BIRMINGHAM. 475 M.

3.0-3.30. Chamber Music Programme.

THE STATION PIANOFORTE

QUINTET

FRANK CANTELL (1st Violin);

ELSIE STELL (2nd Violin);

ARTHUR KENNEDY (Viola);

LEONARD DENNIS (Violoncello);

NIGEL DALLAWAY (Pianoforte).

Strong Quartet.

Quartet No. 2 in D Major Borodin

Nigel Dallaway.

"Moonlight Sonata," Op. 27, No. 2 Beethoven

String Quartet.

Two Movements from Quartet in B Flat,

Op. 67 Brahms

Nigel Dallaway.

Nocturne in E Minor, Op. 72, No. 1 Chopin

"Carnaval Jest from Vienna," Op. 26 Schumann

String Quartet.

"The Nigger" Quartet in F, Op. 96 Debussy

5.0-5.30—CHILDREN'S CORNER. S.B. from Manchester.

8.0-8.45. Religious Service.

Conducted by

Bishop HAMILTON BAYNES.

Relayed from the Cathedral

FRANK CANTELL (Violin).

HARRY FREEMAN (Violin).

NIGEL DALLAWAY (Pianoforte).

8.45. Suite Antique for Two Violins and

Piano Albert Starnes

(N.B.—This is the first time of performance

in England.)

THE STATION ORCHESTRA.

GEOFFREY DAMS (Tenor).

JAMES HOWELL (Baritone).

9.5. The Orchestra.

Overture, "Saul" Beethoven

Intermezzo Coleridge-Taylor

James Howell.

"The Vagabond" Vaughan Williams

"Bright is the Ring of Words" (Songs of Travel) (1)

"The Roadside" (1)

Fire Geoffrey Dams.

"Come Away, Come

Sweet Love" Debussy—1597

"Awake, Sweet Love,

Thou Art Returned" Vaughan Williams

"Fair, Sweet, Cruel" (1)

"Since First I Saw

Your Face" (1)

The Orchestra.

Ballet Music, "Rosamunde" Schubert

Geoffrey Dams.

"Cradle Fair of All My Sor-

rows" Schumann

"Sorrow is Song" (1)

"A Traveller's Song" (1)

James Howell.

"Let Beauty Awake

Youth and Love" (1)

"In Dreams" (1)

"The Infinite Shun

ing Heaven" (1)

The Orchestra.

Finale from Symphony No. 2 in D Major

10.0.—WEATHER FORECAST and NEWS.

S.B. from London. Local News.

10.15. The Orchestra.

"The End" Schumann

10.20.—Close down.

MM BOURNEMOUTH. 385 M.

3.0-4.30. BAND OF 2nd BATT. THE ARGYLL

AND SUTHERLAND HIGHLANDERS.

WINIFRED THOMAS (Mezzo-Contralto).

Relayed from

South Parade Pier, Southsea.

4.30-4.45. JULIETTE FOLVILLE

(Pianoforte Recital).

Chaconne in G Major Handel.

Prelude in E Flat Minor (No. 3, Book 1,

from the 48) Bach

Rhapsody in E Flat (Op. 118, No. 4) Brahms

4.50-5.0. Juliette Folville.

Ballade in A Flat Major Chopin

Capriccio in E Minor, Op. 13, No. 3 Mendelssohn

5.0-5.30—CHILDREN'S CORNER. S.B. from Manchester.

8.30. Choir of the

Puncheon Memorial Wesleyan Church.

Chairman, C. Thornton Turner.

Hymn, "Praise to the Holiest" (No. 62,

Wesleyan Methodist Hymnals).

8.35.—The Rev. J. COURTENAY JAMES,

M.A., B.D., of Puncheon Memorial Wes-

leyan Church: Religious Address.

8.45. Choir.

Anthem, "Come Unto Him" (Canon (11)

Hymn, "Christ for the World We Sing"

8.50. Organ Recital.

Relayed from

Mitchelgrove House.

(By kind permission of Mr. Walter Child-

Clark.)

Overture, "Phedra" Massenet

"In a Monastery Garden" (1)

Offertory On Two Christmas Hymns" (1)

"Baldgung's March" Wagner

9.30-10.45.—Programme S.B. from London.

5WA CARDIFF. 351 M.

3.0-5.0.—Programme S.B. from London.

5.0-5.30—CHILDREN'S CORNER. S.B. from Manchester.

8.30. The Choir of

St. Stephen's Church, Cardiff Docks.

Hymn, "Ye Holy Angels Bright" (A. and

M., No. 545).

Anthem, "H Ye Then Be Risen With

Christ" (1)

Religious Address by The Rev. THOMAS

H. POINTNEY, Vicar of St. Stephen's,

Cardiff Docks.

Hymn, "O Saviour, Lord, to Thee We

Pray" (A. and M., No. 63).

Handel Programme.

GLADYS PALMER (Contralto).

THE STATION SYMPHONY

ORCHESTRA.

Conductor, WARWICK BRATHWAITE

Orchestra.

9.0. Overture in D Minor (1)

Glady's Palmer.

"He Was Despised" ("The

Messiah" (1)

"Weeping for Ever" (1)

"He Shall Feed His Flock" (1)

Orchestra.

"Water Music" Handel, arr. Unity

Glady's Palmer.

"Ombra mai fu" ("Largo") (1)

"Ye Verdant Hills" (1)

Orchestra.

Overture, "Aida and Galates" (Handel (11)

10.0.—WEATHER FORECAST and NEWS.

S.B. from London.

Local News.

10.15. Orchestra.

Overture, "Deborah" Handel (11)

10.30.—"The Silent Fellowship."

10.45.—Close down.

2ZY MANCHESTER. 375 M.

3.0-5.0.—Programme S.B. from London.

5.0-5.30—CHILDREN'S CORNER. S.B. to all Stations.

A number against a musical item indicates the name

of its publisher. A key list of publishers will be found on

page 405.

WIRELESS PROGRAMME—SUNDAY (Feb. 22nd.)

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

- 8.5.—S. G. HONEY: Talk to Young People.
 8.25.—Methodist Hymn, No. 360, "And Can It Be That I Should Gain."
 Religious Address by The Rev. R. W. THOMPSON, M.A., B.D., of St. George's Road Congregational Church, Bolton.
 Methodist Hymn, No. 957, "Eternal Father, Strong to Save."

8.45. 5.00.

THE ADAMSON MILITARY BAND.
 Conductor, W. HALLIWELL.
 ROY HENDERSON (Baritone).

- 4.5. The Band.
 March, "The Nibelungs" Wagner
 Overture, "Zanetta" Ansel
 Selection, "La Bohème" Puccini
 Roy Henderson.
 "What Are These?" Arthur Sandford
 "The Knight of Bethlehem" J. C. Thomas
 "As With Gladness Men of Old"
 Arthur Sandford
 The Band.
 Oboe Solo, Andante and Polonaise Demare
 Hungarian Rhapsody, No. 2 Liszt
 Roy Henderson.
 "Evening Hymn" Purcell
 "Passing By" Purcell
 "Nymphs and Shepherds"
 10.0.—WEATHER FORECAST and NEWS.
S.B. from London. Local News.
 10.15. The Band.
 Ballet Music, "Romeo and Juliet" Gounod
 Hymn, "Evening"
 10.30.—Close down.

5.00. NEWCASTLE. 400 M.

- MARY JAHRED (Contralto).
 CROSSE'S MILITARY BAND.
 The Band.
 Overture, "The King of Yvetot" ... Adam
 Suite, "The Rhos" Ansell
 Mary Jarred.
 5.20. "Alleluia" O'Connor-Morris (1)
 "In This Obscure Tomb" Beethoven
 The Band.
 5.30. Selections of Songs by Sanderson (1)
 "Two Little Dances" Finch
 Mary Jarred.
 5.50. "Thanksgiving" Cowen (1)
 "Ombra mai fu" Handel
 The Band.
 6.0. Miniature Concert Suite Coleridge-Taylor
 Extr'acts, "The Parade of the Ten
 Soldiers" Ferrel
 "Kiss-to" Chapuis
 Slavonic Rhapsody Friedmann
 6.30.—Close down.
 6.0-6.30.—CHILDREN'S CORNER. *S.B. from
 Manchester.*

- 8.30. THE NEWCASTLE CATHEDRAL
 QUARTET.
 Hymn, "Our Blest Redeemer" (A. and M.,
 No. 307).
 Address by the Rev. J. W. BOTTOMLEY,
 Vicar of St. Silas, Byker.
 Hymn, "Abide With Me" (A. and M.,
 No. 27).

- 7.0. ERNEST SHARP'S
 STRING QUARTET.
 Orientale, Interlude, Valse Glazounov
 Cathedral Quartet.
 5.15. "In This Hour of Soften'd Splendour"
 Pizzetti (11)
 "O Peaceful Night" German (11)
 "Busher and Briars"
 Vaughan Williams (12)

- 8.25. String Quartet.
 Nocturne Borodin
 Scherzo
 9.35. Cathedral Quartet.
 "It's O! To Be a Wild Wind"
 "As Torrents in Summer" Elgar (11)
 "Feasting I Watch"

- 9.45. String Quartet.
 "Aubade" Martin Shaw
 "Sally in Our Alley" Frank Bridge
 Minuet and Fugue, Op. 76, No. 2 Haydn
 10.0.—WEATHER FORECAST and NEWS.
S.B. from London. Local News.
 10.15. Cathedral Quartet.
 "Love Wakes" Parry (11)
 "Sleep, Gentle Lady" Bishop (11)
 "An Analogy" Elgar (11)
 10.25.—Close down.

2.30. ABERDEEN. 495 M.

- 5.0-5.0.—Programme *S.B. from London.*
 5.0-5.30.—CHILDREN'S CORNER. *S.B. from
 Manchester.*
 8.30. Church Service.
 Relayed from Saint Machar Cathedral
 Minister, The Rev. A. W. SCUDAMORE
 FORBES, B.A., West Parish Church.

- 9.30. GEORGE SHORT (Solo Pianoforte).
 "Variations on a Highland Folk Theme"
 Huntcock

- 9.40. JAMES MacMILLAN (Baritone).
 "Sleeps the Noon"
 "Ballad of McNeil"
 "Aspen Tree" Kennedy-Fraser (1)

- 10.0.—WEATHER FORECAST and NEWS.
S.B. from London. Local News.

- 10.15. George Short.
 "Rune of St.
 Columba" Kennedy-Fraser (1)
 "Lona Lullaby"
 "Fairy Music"
 "Bridal Procession"
 10.20. James MacMillan.
 "The Peat Fire"
 "Flame" Kennedy-Fraser (1)
 "Kishmull's Galley"
 "The Island Herd"
 "maid"
 10.30. Sextet.
 Selected Hymns.
 10.35.—Close down.

5.50. GLASGOW. 420 M.

- 5.0-5.0.—Programme *S.B. from London.*
 5.0-5.30.—CHILDREN'S CORNER. *S.B. from
 Manchester.*

- 8.30.—Choir: Hymn, "Be Still, My Soul"
 (Church Hymnary, No. 222).
 The Rev. GAVIN K. McKAY, M.A., Dal-
 riel Parish Church, Motherwell: Reli-
 gious Address.
 Hymn, "Sing to the Lord a Joyful Song"
 (Church Hymnary, No. 9).
 Prayer.
 Hymn, "The Radiant Morn Hath Passed
 Away" (Church Hymnary, No. 368).

9.0-9.30. Song Recital

- By
 GERTRUDE JOHNSON (Coloratura
 Soprano).
S.B. to Edinburgh and Dundee.
 "Voi che Sapete" Mozart
 "Ah! Le So"
 "Orpheus With His Lute" Sullivan (1)
 "Where the Bee Sucks" Arne (1)
 "The Lass With the Delicate Air" Arne
 "When Love Is Kind" A. L. (1)
 "The Primrose" Grieg
 "Selvig's Song"
 "The Rivals" G. Oldroyd (4)
 "Immortality" Cyrell Scott (4)
 "To Phillis, Milking Her Flock"
 "Over the Land is April"
 Roger Quilter (4)

- 9.30-10.45.—Programme *S.B. from London.*

A number against a musical item indicates the name of its publisher. A key list of publishers will be found on page 495.

High-Power Station Programme.

6XX. 1600 M.

SUNDAY, February 22nd.

- 3.0-6.0.—Programme *S.B. from London.*
 5.0-5.30.—CHILDREN'S CORNER. *S.B.
 from Manchester.*
 8.15-10.45.—Programme *S.B. from London.*
 MONDAY, Feb. 23rd., FRIDAY, Feb. 27th.
 5.30-6.15.—CHILDREN'S CORNER. *S.B.
 from London.*
 6.40 onwards.—Programme *S.B. from London.*

TUESDAY, February 24th.

- 6.30-6.15.—CHILDREN'S CORNER. *S.B.
 from London.*
 6.40-7.30.—Programme *S.B. from London.*
 KEIGHLEY DUNN (Tenor).
 MABEL FITZGERALD (Entertainment).
 ARTHUR HAYES.
 THE WIGGLE ORCHESTRA:
 Conducted by DAN GODFREY, Junr.
 7.00. The Orchestra.
 March, "Devil May Care" Linde
 Waltz, "Artist's Life" Strauss
 Selection, "Coppélia" Debussy
 8.0 (approx.). Arthur Hayes.
 Sam Weller's Valentine ("Pickwick Papers")
 Dickens

Mabel Fitzgerald.

- A Few Stories:
 "Worms" McAlister
 "Daisy" Van Toller
 The Orchestra.
 Ballet Music, "Bacchus" Massenet

- 8.30 (approx.). Keighley Dunn.
 "The Boatmen's"
 Song (From "Four Songs of
 "The Feast of Borneo") W. J. Work
 Harvest"
 (Accompanied by the Composer.)
 Mabel Fitzgerald.

- "Dusky Maid" Vere Smith
 "Alfred's Mother" Cecile Fort
 "Two Little Girls" Sam Walsh (13)

- 9.0 (approx.). The Orchestra.
 "Hungarian Patrol" Gabriel-Morin
 Descriptive Piece, "Wild Hawk" Ketelbey
 Keighley Dunn.

- "At Dawning" Cadogan (1)
 "My Queen" Bloch

- 9.30-10.0.—Programme *S.B. from London.*
 10.0. The Orchestra.
 Suite, "La Française" Foulds
 Arthur Hayes.

- "Justice Starkeigh and Sergeant Bos-
 Fox" Dickens
 The Orchestra.

- March, "Le Regiment de Sambre et Meuse"
 Tosti

- 10.30.—THE SAVOY DANCE. *S.B. from
 London.*

- 11.0.—Close down.

WEDNESDAY, February 25th.

- 5.30-6.15.—CHILDREN'S CORNER. *S.B.
 from London.*
 6.40-10.30.—Programme *S.B. from London.*

THURSDAY, February 26th.

- 5.30-6.15.—CHILDREN'S CORNER. *S.B.
 from London.*
 6.40-7.30.—Programme *S.B. from London.*

- 7.30. THE HALL ORCHESTRA:
 Conducted by HAMILTON HARTY.

- Relayed from
 The Free Trade Hall, Manchester.
 Overture, "Russian and Ludmila" Gluck
 Symphony No. 4 in B Flat ... Beethoven

- 8.30. Organ Recital.
 Dr. DAVAN WETTON.
 Relayed from
 The Foundling Hospital, London.

- 9.30-11.0.—Programme *S.B. from London.*

SATURDAY, February 28th.

- 5.30-6.15.—CHILDREN'S CORNER. *S.B.
 from London.*
 6.40-7.30.—Programme *S.B. from London.*

- 7.30-9.30.—Programme *S.B. from Manchester.*
 10.30-12.0.—Programme *S.B. from London.*

WIRELESS PROGRAMME—MONDAY (Feb. 23rd.)

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

2LO LONDON. 365 M.

5.15-3.45.—Transmission to Schools: Mr. GEOFFREY SELWY on "Music."

4.0-5.0.—Time Signal from Greenwich. "Vogues and Varieties," by Carvers of Cockaigne. Music performed during Afternoon Tea at the "Foyotiers." "Slogans," by Agnes Herbert.

5.30-6.15.—CHILDREN'S CORNER. A Story by E. Le Breton Martin. "The Dragon on the Bunsford," from "The Children's Magazine."

6.40-6.55.—Mr. N. HARDY WALLIS, M.A., "The Majesty of Milton."

7.0.—TIME SIGNAL FROM BIG BEN. WEATHER FORECAST and 1ST GENERAL NEWS BULLETIN. S.B. to all Stations.

Mr. A. K. TOTTEN, M.C., Dept. of Zoology, Natural History Museum, "The Sea Shore: Corals and Coral Reefs." S.B. to all Stations.

Local News.

The Barnardo Musical Boys.

Instrumental Music on a Peal of Ninety Handbells; Sleigh Bells, Xylophones, Tubophones, Marimbaphones, Muscledines, Miniature Chimes, Bagpipes, Auto-Harp and Ocarinas.

7.30.—Handbells, "Bite à Beac" ... F. Conte Sleigh Bells, "The Green Hills of Tyrol" ... Rosamund

Matelolines, "Jesamine Polka" ... H. J. Ellis

Miniature Chimes, "Glen of Erin," Introduction "Dulcis Jug," "Song of Saffron" and "Paddy, Will You Now" ... J. J. Fletcher

Xylophones and Tubophones: "On the Road to Moscow" (Descriptive of a Sleigh Ride) ... Paul de Loets (12) Handbells with Gong Oblongato, "In a Monastery Garden" ... Kettley (6) Highland Bagpipes, "Crusaders' March"; "The Highland Wedding";

Fairy Bells and Auto-Harp, "Those Enchanting Chimes";

Ocarinas, "If Winter Comes" ... H. M. Tennant

Marimbaphone, "Autumn Leaves" ... Delmar

Handbells, Overture, "Post and Pansy" ... Suppl

Vocal and Instrumental Music

by FRÉDÉRIC D'ENLANGER, WILLIAM PRIBROSE and The COMPOSER.

5.15.—Concerto for Violin (First Movement).

ANNE THURSFIELD.

Group of English Songs.

"En Sonatine."

"Dream."

"Alone."

"Toccata."

"Au Son des Harpes."

Anne Thurfild.

Group of English Songs.

"L'Abandon."

"Chanson Légère."

William Pribrose.

"Préface."

Maurice Cole and The Composer.

Duets for Two Men.

"Larghetto."

"Duo des Claviers."

"Cortège Danseur."

5.30.—TIME SIGNAL FROM GREENWICH.

WEATHER FORECAST and 2ND GENERAL NEWS BULLETIN. S.B.

to all Stations.

Topical Talk.

Local News.

R. VAUGHAN WILLIAMS PROGRAMME.

10.0. THE LONDON MALE VOICE OCTET. Original Compositions.

Three Elizabethan Songs:—

"Sweet Day."

"The Willow Song."

"O Mistress Mine."

Folk Tune Arrangements.

"Ward the Fawc."

"The Turtle Dove."

"Jack the Sailor."

"The Winter is Gone."

"The Farmer's Boy."

10.30.—Close down.

5IT BIRMINGHAM. 475 M.

1.30-4.30.—Locella Picture House Orchestra. Laura Pearson (Soprano), Anna Sanders (Contralto).

5.0-5.30.—WOMEN'S CORNER: Sidney Rogers, F.R.H.S., "Growing Antislavery." Janet Macfarlane (Soprano).

5.30-6.30.—CHILDREN'S CORNER.

6.30-8.45.—"Tones' Corner: Norman E. L. Guest, B.A., History Talk, No. 8, "Chaucer: Pilgrimages and Early Education."

7.0.—WEATHER FORECAST and NEWS. S.B. from London.

Mr. A. K. TOTTEN. S.B. from London. Local News.

Variety Programme.

THE STATION ORCHESTRA.

GLADYS PALMER (Contralto).

THE STATION COMPANY OF PLAYERS.

The Orchestra.

March, "Tannhäuser" ... Wagner

Selection, "In a Persian Garden" ... Lehmann

7.15.—Gladys Palmer.

"Who is Sylvia?" ... Schubert

"Thou Art My Peace" ... Schubert

"The Trout" ... Schubert

"The Almighty" ... Schubert

8.5.—"HANDY ANDY."

A Play adapted from the Story by Samuel Love.

Squire Egan ... FRANK V. FENN

Andy Rooney ... WILLIAM MACREADY

Edward O'Connor ... DONALD POWIS

Fanny Egan ... HILDA POWIS

Mr. Murphy ... GEORGE ROBERTS

Name ... EDNA GODFREY-TURNER

Omah ... EDNA GODFREY-TURNER

Produced and Directed by WILLIAM MACREADY.

Scene 1.—Squire Egan's Dressing-Room.

Scene 2.—A Country Lane.

Scene 3.—Squire Egan's Dining-Room.

Scene 4.—A Street.

Scene 5.—Squire Egan's Drawing-Room.

9.0.—The Orchestra.

"Serenade to Columbine" ... Pierni (15)

"Rose Muet" ("Monsieur Benuecaire") ... Messager

"Dance of the Apprentices" ("The Mastersingers") ... Wagner

"Suite Pastorale" ... Ansell

"When the Hawthorn Blooms"; "Poppies and Cornflowers"; "The Autumn Moon"; "Holly and Mistletoe."

9.30.—WEATHER FORECAST and NEWS. S.B. from London.

Principal ALFRED RAYES, "The Life of Alexander Pushkin."

Local News.

10.0.—Gladys Palmer.

"The Cradle of the Living God" ... D. Stewart

"The Time for Making Songs Has Come" ... Rogers

"Evening Song" ... Bantock

"Tintagel" ... Adamson (21)

10.15.—The Orchestra.

Selection, "Cavalleria Rusticana" ... Mascagni

10.30.—Close down.

6BM BOURNEMOUTH. 385 M.

3.45-5.0.—Talk to Women by Mr. R. Hart-Symon, Bursar of St. John's College, Oxford. The "6BM" Trio. Vera Vivian (Contralto).

5.0-6.0.—CHILDREN'S CORNER.

6.0-6.30.—Schools' Half Hour: "Sir Thomas Graham and the Royal Exchange," by G. Guest, B.A., J.P.

6.30-6.45.—H. G. D. Turnbull on "Our First Arctic Explorers."

7.0.—WEATHER FORECAST and NEWS. S.B. from London.

Mr. A. K. TOTTEN. S.B. from London. Local News.

"With Hounds."

THE WIRELESS ORCHESTRA.

Conductor: Capt. W. A. FEATHERSTONE.

Capt. W. G. POPPELSTONE, M.B.E. (Story and Readings).

CHARLES WREFOED (Entertainer).

JOHN HUNTINGTON (Baritone).

THE WESSEX GLEE SINGERS.

7.20.—Orchestra.

Overture, "Der Freischütz" ... Weber

7.40.—Capt. W. G. Poppelstone.

"My Best Run with Hounds."

7.50.—John Huntington.

"The Hunter in His Career" (Air about 1627) ... arr. Somerell

"The King's Hunt is Up" (Air 16th Century) ... arr. Somerell

7.55.—Orchestra.

Descriptive Piece, "A Hunting Scene" ... Bantock

8.5.—Capt. W. G. Poppelstone.

Reading from Jerrocks.

8.10.—Glee Singers.

Hunting Song, "Waken, Lords and Ladies Gay" ... Mendelssohn (11)

Hunting Song ... Granville Bantock (2)

"The Hunt is Up" ... J. L. Hutton (11)

8.20.—Orchestra.

Hunting Chorus from Operas.

"Der Freischütz" ... Weber

"The Lily of Killarney" ... Benedict

"Dorothy" ... Cellier

8.30.—Capt. W. G. Poppelstone.

Reading from Jerrocks.

8.35.—Glee Singers.

Hunting Song.

"The Chase" ... Laurent de Rille (11)

"Come Away to the Chase" ... Vincent Wallace

"The Country Side."

8.45.—Orchestra.

Suite, "Three Country Sketches" ... Hoggill

9.0.—John Huntington.

"The Vagabond" ... Faughan

"The Roadside Fire" ... Williams (1)

9.5.—Charles Wrefoed.

"The Hunt Dinner" ... John Storer

9.15.—Glee Singers.

"John Peel" Traditional, arr. P. Fletcher (2)

"Over the Fields at Early Morn" ... Adam Gabel

9.20.—Charles Wrefoed.

"The Coach Wheel"

9.30.—WEATHER FORECAST and NEWS. S.B. from London.

Topical Talk.

Local News.

Half-Hour of Comic Opera.

10.0.—Orchestra.

Overture, "Isolante" ... Sullivan

John Huntington.

"Four Jolly Sailors" ("A Princess of Kensington") ... German

"A Jovial Monk" ("La Poupee") ... Audran

"The Yeomen of England" ("Merrie England") ... German

Orchestra.

Selection, "The Emerald Isle" ... Sullivan and German

10.30.—Close down.

A number against a musical item indicates the name of its publisher. A key list of publishers will be found on page 405.

(Feb. 24th.)

page 403

of its publisher. A key list of publishers will be found on

A number against a chemical item indicates the name of its publisher. A key list of publishers will be found on page 005.

THE CHILDREN'S CORNER, CONDUCTED BY THE AUNTS AND UNCLES.

The Fire Pit of Kilauea.

How will be very interested to this, to about one of the in the world?

Far away at the far side of the Pacific Ocean there lies a group of beautiful islands that are been thrown up from beneath the waves by the eternal fires that burn within the earth.

For hundreds of years this work of building has been going on and the Hawaiian Islands are still in the making. Every now and then the Fire Pit of Kilauea bubbles over, hurrying forth molten rocks to add to the mountain's height and pouring out streams of white-hot lava that rush to the sea and there create new landlands of volcanic rock.

Saved by a Princess's Hair

Outside Hilo, the end of town of the island of Hawaii is a track a mile wide. Fifty-five years ago was a river of flame rolling down the mountain side to the sea. It is the only palm-fringed town. It is easy to imagine the state of mind of the people who watched that stream of molten rock heading for their homes. Nearer and nearer it came, till the fragrance of Hilo's exquisite gardens was blotted out by the foul sulphurous stinks of the lava. Then, with a roar from the city gates, the river suddenly stopped dead. Why? What caused that sudden stop, you ask.

Well, in those days the natives believed that a beautiful but terrible goddess called Pele, dwelt in the fiery crater of Kilauea, and that it was she who, in her wrath, flung down the rocks and sent the flame to destroy him. So the Ancient Princess begged the Princess Kamehameha to follow the ancient custom and cast a lock of her hair

into the stream and thereby propitiate the goddess. No sooner had she done so, than the lava stopped and ceased to flow.

But now the islanders no longer worship Pele; their belief in her powers has been destroyed by the brave notion of a woman chieftain named Kapuni. She resolved to break the superstition of her people by defying the dread goddess. And you may believe



THE BARNARDO MUSICAL BOYS.
These clever young musicians will broadcast from London on Monday, February 23rd.

as Pele; but if I come back, you must believe in God." Thus saying, and heedless of the warning of the priests, Kapuni took the sacred Ohelo berries and ascended the path that led to "Halemauahu" or "The Pit of Everlasting Fire." There, on the brink of that awful crater, she ate the scorching berries and threw stones into the fiery waves, crying: "I do not fear thee, Pele, and I now defy thee, knowing that the true God will save me."

Then she turned back, and the people, seeing she was safe, gave a great shout of triumph and joined in singing hymns to the true God.

Although called a mountain, Kilauea Volcano doesn't look in the least like one, being a vast barren plain, with a great cup-like depression in the centre, enclosed by walls of lava that are about 200 to 700 feet high.

In the middle of this cup is Halemauahu, the Fire Pit, an angry lake of red-hot lava, now a range, now falling like mercury on a her sister. Sometimes a thin fountain of flame leaps fifty feet or more into the air and falls again with a terrible splash that reverberates like

Wonderful Colour Effects.

Stand near a white row of red-hot lava, and you will see the island that dot the surface of the fiery lake. Always the molten lava seethes and bubbles like a boiling sea. Low in a white canyon and the smell of sulphur fills the air. You can watch the sand crust crack and as the rocks melt in the terrific heat, like butter in a frying pan, and, most fascinating of all, you will see the wind blowing "Pele's Hair"—glassy fibres blown from the liquid lava and carried over the edge of the crater so that the whole neighbourhood is often covered with powdered glass.

The colour effects are very wonderful, especially at night, when the fires glow their brightest against the deep-blue sky.

Evidently, the Goddess of the Volcano delights in vivid colouring, but in those places in Hawaii where she has not yet flung her burning rocks, the colour is very different. The lava is a deep red, and the smoke is a deep blue. The lava has been called "The Volcano and the Wonderful of the World."

JACK, THE CRAB, AND THE CONGER.

By A. COLEMAN HICKS.



Jack was a little boy who lived with his father and mother in a small house on the beach. He was a very clever boy, and he was very fond of fishing.

So the three friends rose slowly through the water. Jack said he could go by himself if he promised not to get out of his depth—and of course Jack promised.

Once in the water, though, he found that the waves were very deceptive; they did not look large, but now and then a big fellow took him by surprise, and almost off his feet, in fact of extra size suddenly came along and went

over his head! He went down and down until at last he touched the sandy bottom, and just missed breaching on a big crab, who seemed very cross about it.

"Mind where you're coming!" squeaked the crab. "I just escaped being caught in a crab-pot—there was a beautiful cod's head inside, and I was ravenous; but I saw the trap just in time, and not the first I've seen, either!" and he dug his claws spitefully into some seaweed pods, which went off "pop!"

Jack had seen the crab and lobster pots on the beach, of course, and Bill, the fisherman, had promised to take him out one day to pull them up, full of shrimps, from the bottom of the sea, but he did not tell the Crab this for fear of hurting his feelings.

"I must be off," said the Crab. "I promised to call on the Conger-Fish. Would you like to

come?" Jack replied, and off they went, the Crab leading, and talking away as though he and Jack were old friends.

"When I was a youngster," he said, "I used to go with Master Conger, or he would send me out several dozen of my brothers and sisters, but it was just as well, as it leaves more food for me—they were such greedy beggars."

Presently they came to a rocky ledge, around which hundreds of shrimps were jumping, making Jack wish he had brought his shrimping net. The Crab called to the chief Shrimp:

"Hi, Sidney! Is Master Conger at home?"

"Yes," piped Sidney, keeping at a safe distance, "and he's in an awful temper!"

"Ah, here he comes!" Jack said, looking out for the Crab, who was a long black head with wicked-looking eyes, and rows of sharp teeth showing, appeared from under the ledge, followed by a long wave like a snake.

Good morning, Master Conger, said the Crab. "I've brought my menu down to you."

Just as well he's a friend of yours, growled the Conger, "or I might have had a taste of his egg. I'm getting tired of shrimps," he informed them, "and could do with a nice fat sole, or a few hermit-crabs, if I could catch one or two out of their shells."

Just then a Joid of silver fish dashed by and were gone in a second.

"Herings," grumbled the Conger. "Too quick for me. Let's go up and see if there are any jelly fish floating on the top. Hang on to my tail, and give the old Crab your hand; he won't bite you," he added, and so the three queerly assorted friends rose slowly through the water.

"You're ad right now, boy," said the bathing attendant, as he rubbed away with rough towels at Jack, who found himself lying in the bathing tub, "but don't you ever go out by yourself again when there is a sou'westerly swell on the sea."

And Jack never did.

WIRELESS PROGRAMME—THURSDAY (Feb. 26th.)

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

2LO LONDON. 365 M.

1. The Concert of New Gramophone

3.15-3.45. Transmission to Schools: "Children

4. The Concert of New Gramophone

5. The Concert of New Gramophone

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10.30. THE SAVOY ORPHEANS AND

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5NO NEWCASTLE. 400 M.

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5IT BIRMINGHAM. 475 M.

3.30-4.00 The Station Orchestra Quintet

4.00-4.30 The Station Orchestra Quintet

4.30-5.00 The Station Orchestra Quintet

5.00-5.30 The Station Orchestra Quintet

5.30-6.00 The Station Orchestra Quintet

6.00-6.30 The Station Orchestra Quintet

6.30-6.45 "Teena" Corner: Frank Jones

7.0-11.0. Programme S.B. from London.

6RM BOURNEMOUTH. 385 M.

3.30-5.00 The Station Orchestra Quintet

5.0-6.0. CHILDREN'S CORNER

6.0-6.30 "Scholar's" Half Hour: "Football and

6.30-6.45. Farmers' Talk "Agricultural Holdings

7.0-11.0. Programme S.B. from London.

SWA CARDIFF. 351 M.

3.0-4.30. Constance M. Burgess (Messa)

4.30-5.00. The Station Orchestra Quintet

5.0-6.0. CHILDREN'S CORNER

6.0-6.30. Boy Scouts (Local) News Bulletin

6.30-6.45. The Station Orchestra Quintet

7.0-11.0. Programme S.B. from London.

ZZY MANCHESTER 375 M.

11.30-12.30. Concert by the "ZZY" Quartet

4.30-5.00. WOMEN'S HALF HOUR.

5.0-6.0. CHILDREN'S CORNER

6.30-6.45. Boy Scouts (Local) News Bulletin

6.45-7.00. The Station Orchestra Quintet

7.0-11.0. Programme S.B. from London.

WEATHER FORECAST and NEWS

Radio Society Talk S.B. from London.

French Talk S.B. from London.

Local News

A Light Programme.

THE J H SQUARE ELEMENT OF

Light Programme.

HELENA MILLAIS (Entertainer)

ANDREW WATSON (Solo Violoncello)

THE WIRELESS ORCHESTRA

8.30. Selection, "The Quaker Girl" Munkton

8.45. In Light Songs and "Fragments from Life."

"Keep a Little Time for Love" Gidon (7)

"Are You London?" ... Painter (5)

9.0. "Broken Melody" ... Van Bie

9.15. "The Quaker Girl" Munkton

9.30. WEATHER FORECAST and NEWS

S.B. from London

Mr A. R. BURNOWS S.B. from London

Local News

10.0. Andrew Watson

Sonata in G Major

Locality—1655-1728, arr. Solomon

"La Campanella" ... Gabriel Moss

10.30. THE SAVOY BANDS S.B. from London

11.0. Close down.

SSC GLASGOW. 420 M.

3.30-4.00. The Wireless Quartet. Jack Nel

(Entertainer). Afternoon Topics

5.0-6.0. CHILDREN'S CORNER

6.0-6.30. Weather Forecast for Farmers

6.30-6.45. Mr Harry Townsend S.B.

7.0-8.30. Programme S.B. from London

Some Old Favourites.

S.B. to Dundee

ORCHESTRA

Selection, "The Quaker Girl" Munkton

8.45. PETER HADEN (Entertainer)

A few Remarks.

Orchestra

Selection of Chevalier's Caster Songs (13)

9.15. JOHN R. KIPPY (Entertainer)

9.30. WEATHER FORECAST and NEWS

S.B. from London

Mr A. R. BURNOWS S.B. from London

Local News

10.0. More Remarks.

10.10. The Quaker Girl

Down Among the Dead Men "Old English"

"The Two Grenadiers" ... Schumann

10.30. Selection, "Gipsy Love" ... Zohar

10.30. THE SAVOY BANDS S.B. from London

11.0. Close down

A number against a musical item indicates the names of its publisher. A key list of publishers will be found on page 485.

WIRELESS PROGRAMME—FRIDAY (Feb. 27th.)

The following programmes are broadcast on the following frequencies:

2LO LONDON. 365 M.

First Signal from Greenwich (Concert and Baton)

Programme from the "Legation of Egypt" by F. H. B. (Concert)

4.0-4.30.—"The Station Wagon" (Concert)

4.30-5.0.—"The Station Wagon" (Concert)

5.30-6.15.—"The Station Wagon" (Concert)

6.40-6.55.—"The Station Wagon" (Concert)

7.0.—"The Station Wagon" (Concert)

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5IT BIRMINGHAM. 475 M.

4.0-4.30.—"The Station Wagon" (Concert)

4.30-5.0.—"The Station Wagon" (Concert)

5.30-6.15.—"The Station Wagon" (Concert)

6.40-6.55.—"The Station Wagon" (Concert)

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6.0-6.30 CHILDREN'S CORNER

6.30-7.0.—"The Station Wagon" (Concert)

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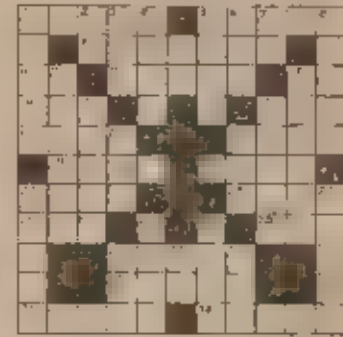
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The first correct solution opened was the

not later than the last post on Feb. 28th.

7.30. The A. ... which will be ... long or an ... which will ... Word. In the ... the Cross W. J. will be found in the ... In the ... the word will be slightly ... the finger

7.30. Cross Word Competition will ... Those who ... not interested ... Cross Word Puzzles will ... from the song and music which will be rendered in the usual concert ... The Announcer will read the ... order considered to be the most helpful towards the solution.

8.30. WEATHER FORECAST and NEWS. S.B. from London. R. G. STAPLEDON S.B. from London. Local News.

10.0. Overtures. "Ma. ... Rosen. ... Stradella"

10.30.—Close down.

5WA GARDIFF. 351 M.

3.0-3.30.—Transmissions to Schools. E. Theo Mansfield, "The Queen of the Medley."

3.30-4.0.—"The Station Trio"

4.0-4.45.—"The Carlton Orchestra, relayed from the Carlton Restaurant."

4.45-5.15.—"5WA'S 'LIVE ON LOCKS'."

5.15-6.0.—"CHILDREN'S CORNER."

6.0-6.55.—"Mr. R. ..."

6.55-7.0.—"WEATHER FORECAST and NEWS."

7.0.—"The Station Wagon" (Concert)

7.0.—"The Station Wagon" (Concert)

7.0.—"The Station Wagon" (Concert)

6BM BOURNEMOUTH. 385 M.

7.0.—"The Station Wagon" (Concert)

7.0.—"The Station Wagon" (Concert)

7.0.—"The Station Wagon" (Concert)

A number against a musical sign indicates the name of its publisher. A key list of publishers will be found on page 485.



All Brandes products carry our
guarantee. If you are not
satisfied, we will return the
product within 10 days of its purchase.
This really means...



every one of these ad-
vertisements will show an added
advantage in the construction
of Brandes Headphones.

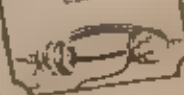
Matched Tone means a technical improvement in telephone construction which should at once grip your attention. If you are intent on better broadcast reception, if you wish to gather the more distant signals with increased strength and clarity, then Brandes Superior *Matched Tone* Headphones are certainly what you want. Matched by ear, the two receivers of ordinary headphones cannot gain an exactly similar degree in tone and volume by a margin of eighty degrees. Brandes, matched by special apparatus, obtain corresponding sensitivity and volume in each receiver to within five degrees and a consequent increase of tone purity, accuracy and strength. For just home stations or trans-atlantic and trans-continental telephony, get Brandes *Matched Tone* Headphones. Ask your Dealer for Brandes.



Brandes

The Name to know in Radio

"The same
sound in both
ears"



Superior "Matched Tone" Headphones

TRADE MARK

British Made
B.B.C. Stamped

An Aerial Racecourse.

The Lure of Pigeon Racing. By D. Tressider.*

PIGEONS do not carry messages from their homes to elsewhere—they only fly to their own homes. The homes, or pigeon houses, the competing pigeons are all over England, Scotland and Wales.

It, therefore, follows that pigeon keepers who live near to one another form clubs and their races to their own members, who must

The pigeons competing in a race are handed by their owners to the race committee of the Club. The committee then places on the leg of each bird an unmarked rubber ring which is double and has an inside and outside number, and a number is also stamped on the wing, a reliable mark.

In Special Railway Vans.

Each bird is then put into a basket belonging to the Society, these baskets are of uniform size provided with litter—and have a special door at the side for liberation. They are, too, each provided with a drinking trough.

When all the birds are marked, rung and collected in these baskets—there may be three or four hundred or three or four thousand—they are carried by rail in special railway-vans to their destination, accompanied by a man, or men, in charge, whose duty it is to feed and give them water en route, or on arrival, and who superintend the actual release or liberation of the pigeons all together. These men are called conveyors.

Special v. liberations in races of three hundred miles or beyond take place about 5 to 8 a.m. so that the pigeons may reach home in daylight. If one does not fly at once and is overtaken by darkness, they rest on a barn or haystack until daylight next morning, when they fly on towards their homes.

Timing the Arrivals.

When the pigeons have been released, the conveyer or secretary despatches to each owner or competitor in the race a telegram, stating the time of liberation. From this information each competitor is able, roughly, to judge the approximate time of the arrival of his race birds. They do not all come home together, but they arrive separately.

For the purpose of determining the actual time of each pigeon's arrival, every competitor is supplied with a special automatic timing clock. This clock is so constructed that it cannot be opened and the time cannot be varied.

On the arrival of a race pigeon, it is caught and the rubber ring on its leg is removed, and inserted into the clock and as the bird is turned which records the day, the hour, the minute and the second of arrival and at the same time takes the numbered rubber ring away from the competitor—beyond recovery—the clock, so to speak, swallows the rubber ring.

As each pigeon which is raced must have a metal ring—bearing the year of birth and a number which is issued by the National Homing Union, the governing body of the sport—it is easy by reference to the records on the race-sheet to trace the particular rubber ring which each bird had placed on its leg, for each race. So, you see, it is no good putting a dummy rubber ring into the clock.

After having checked the race pigeon, the owner is compelled to despatch a telegram from a station telegraph office—the one nearest his house—giving the wing stamp and the time, as shown by his clock, when he timed in.

The object of this is to prove that his clock is really at his home and not half way nearer to the place of liberation. For the result of the race depends upon the time taken to fly a given

distance—namely, from the race point to each pigeon's house.

To determine this in every race, every competitor is measured from the race point to his own pigeon house to the nearest yard, and his distance may be 299 miles, 1,273 yards. This is called his flying distance.

The time each pigeon takes is recorded on his clock, this time is corrected by the clock office in accordance whether the clock has gained or lost, and so ultimately we arrive at the actual number of seconds each bird has taken in the race.

Bound to be Honest.

The time is divided into the flying distance and the result is expressed in velocity of yards per minute.

For instance—

1,780 yards velocity—60 miles per hour

1780 60
117 4

The speed of each race varies in accordance with the wind—whether it is favourable or otherwise. So that in a modern pigeon race you are bound to be honest, because every competitor is taken against your being dishonest. Each competitor only sends to a race of 400 or 500 miles three or four pigeons which have been especially prepared for this race a long time before. They are usually pigeons of considerable experience and three or four years old, and it takes a great deal of time and expense to replace them when lost. Every bird sent to such a race is worth at least ten pounds.

Affected by the Weather.

The pigeons, when despatched to a race, are taken great care of, the cocks are placed in one basket, and the hens in another. Each basket only contains a few birds, so that all may have room to move about and to get food and water easily.

The results of long races are greatly dependent on the weather—the speed, on the force and direction of wind, but fog and much rain lead to disaster. Therefore, before liberation in nearly all long races, the conveyer not only gives a forecast of the likely conditions of weather, which he has to translate into pigeon flying probabilities, but he also receives reports from places along the line of flight.

In certain races, the route presents definite geographical difficulties. For instance, from San Sebastian, in Spain, there are the forests, south of Bordeaux, and then the English Channel. From Lerwick, in the Shetland Isles, there is, as Lord Jellicoe found, the bad visibility of the North Sea, with drizzle, and the Highlands of Scotland.

Wireless is much appreciated in Labrador, and Eskimo boys are now able to hear concerts from New York. This is one of the changes which a missionary who has worked there for thirty-three years has put on record. There can be few people more cut off from the rest of the world than the Eskimos, but now even they thanks to wireless, are brought into touch with peoples of other lands.

The Chief of Radio Communications of the French Army, General Ferrie, recently said that out for the advent of wireless, the famous Eiffel Tower in Paris would long since have been demolished.

The Tower would have been of little value if it had not been discovered that it formed one of the finest masts for a radio aerial in the world.

* In a talk from London.

Do You Like Radio?

By Robert Magill.

ONE peculiar thing about wireless is the fact that, although everybody likes it, no two people have the same reason for doing so. Thus, the Joneses think it is also a nice idea for dancing. They've got a loud-speaker about the size of a foot later on an Atlantic liner, and they can hardly wait until the local news is finished before they begin to step it out. The other night they had a gorgeous fox-trot to a weather forecast rather than well.

On the other hand, the man who lives on the floor beneath them isn't enthusiastic about the Navy Orphan. He is an author, and, apart from the noise the Joneses make dancing, he hates finding pieces of plaster from the ceiling falling into his inkpot while he is working.

Wanted: A Crying Baby.

You may think it strange that he writes all night, but he finds that listening stimulates his brain. Or, at least, he says it does. Personally, I believe that he listens all day when he ought to be working, and has to make up for it at night.

His sister keeps a radio for him, and although she loves wireless, but not because it is stimulating. On the contrary. It is because it is so restful. You've no idea how peaceful it can be to listen while you darn a pair of socks, and read over a recipe for a cake, and watch to see the kettle doesn't boil over, and stroke the cat, and poke the fire, and take the earphones off to do fifty other things during the course of the evening. Only a woman can realize it, and all it needs to make it perfect is a baby crying in the nursery at the same time.

The Robinsons also have a set, and Mrs. Robinson is very keen on it, although she dislikes lectures, and has so little ear for music that she mistakes a sawmill for a jazz band. She likes it because it keeps Robinson at home at nights, and prevents him from going off to his club.

Listening in Self-Defence.

Robinson is glad he got it, and he works hard at it nearly every evening, without much success, but he perseveres, and some day he may discover that it will work again if he doesn't get a cat-walker and the crystal to eliminate the weak. He bought the thing in self-defence. Since the boom in wireless started all the men going up in the train with him have ceased to talk about gardening or politics, and they discuss anodes, rheostats, and grids instead, and he felt out of it. Now he can join in. He knows nothing about it, but for that matter, they don't know much more.

A Youthful Export.

His ten-year-old son, however, does. He knows nearly as much about wireless as Senator Marco, Captain Eckerley, and the man in the shop put together. He hates to spend a joke by telling Dad what is wrong with his set, but he's got three sets of his own, all made by himself. He likes wireless because he can swank about clearing the Eiffel Tower one night on a set he made from a mouse-trap, an old electric light bulb and a bottle of hair-oil.

Talking of the man at the shop, he likes wireless. No, he has never listened. He never gets time, because people are always coming round after hours to him for spare parts as a favour, and on Sundays he counts his money. When he looks at his pass book he thanks Heaven he gave up lending bicycles on hire, and likes wireless very much indeed.

And me? I like wireless. I like the sound of the music, the talks, the jazz bands, and even the weather forecasts, and I like to be able to enjoy them without leaving my own fireside. Then, I'm one of those low-browed creatures and there are probably a lot of people about like me, if only they'd admit it.

The Nerve-Centre of Broadcasting.

Methods of Amplification and Control. By P. P. ECKERSLEY, M.I.E.E.

It was pointed out in my last article that a broadcast "pick up device," more commonly known as a microphone, had to possess certain qualities which militated against its efficiency as an aid to electric impulse converter. Thanks to the quality of the ordinary carbon microphone, it gave impulses strong enough to be converted into sound by ear telephones directly, without the need of amplification. Resonance, however, must be eliminated from the "pick up device" intended for reproduction of music, quality of voice, and so on, and thus the devices lack inherent sensitivity.

A Wonderful Invention.

In a certain type of pick-up device an aperiodic coil, free to move in a magnetic field, moves sympathetically with the impulses which are to be converted into sound. It is probably no greater than the order of thousandths of an inch. We have, however, to make these tiny movements control many horse-power—and all without distortion.

A little more than a decade ago the achievement of such a system would have seemed impossible, but a new tool—forged in the hands, first of pure research workers, later adapted by inventors, and finally put into concrete and practical form by engineers and technologists—has been given us, by means of which we can achieve this distortionless amplification. The thermionic valve has probably great potential uses, but its present achievements are enough to rank it among the greatest inventions of science. By its proper use, we are able to magnify electric impulses, so feeble at their birth as to be inaudible on the most sensitive earphone, to an intensity which makes their presence felt in a room of thousands of square miles.

Controlling With Discretion.

Thus, with our particular pick-up device, of whatever sort it may be, we have to amplify by means of low frequency valve amplifiers. The pick-up device stands in the studio, as left on the table of the banquet, lies lonely on the footlights of the theatre stage, and when must be connected to an amplifier. But it is obvious that the intensity of the sounds impinging upon the armature of the device may vary tremendously—from an orchestra in full blast, to the hoarse whisper of the stage comedian.

Our wireless transmitter cannot deal with intensities greater than a certain fixed amount. Obviously, if we were "controlling up to the full" or "modulating the waves" to the maximum of sound which could be sent out in the air, and seeing that power must be limited, would result, not in a modulated wave, but in a steady state of distortion and possible breakdown. It is necessary to control the amount of the impulse

applied to the set, and to control it with discretion.

In earlier arrangements the controlling engineer sat in a little box just off the studio, gazing into the latter through a sound-proof glass window. He could watch all that went on, could be alarmed to, in dumb show by the announcer, and could keep in touch with all that was going on.

The system of control later adopted by the B.B.C. is unique and not as far as I know, used elsewhere. Briefly, in our more modern installations a separate control room is arranged where all switching and controlling is centralized. It is the nerve centre of the business. It is often impossible to put this room next to the studio; firstly, because frequently the arrangement of the building forbids such a scheme, and secondly, more important, because a duplication of studios renders such a scheme impossible if existing buildings are to be adopted. Lastly, if an "outside broadcast" is made, the collection of sounds from some place other than the studio—is going on, there is frequently little hope of the controlling engineer having a sight of the performance.

"Too Many Cooks."

The centralization of all control makes for efficiency in organization, the easier tracing of faults, and, most important, the impossibility of lack of reason. It is easy to see that if the engineer at the place of outside broadcast is doing a little "controlling," if the man at the transmitter thinks he ought to do a bit, and if there is a third man in the control room, chaos may ensue. The judgment of over-control is only possible by reading actual meters, not by ear alone, and it

is impossible to control by this means unless a system of centralization is adopted.

It is essential with our scheme to split up the amplification. The pick-up device cannot be further than, perhaps, 50 feet away from the first amplifier, otherwise electric disturbances, due to power mains, etc., may mar the purity of the amplified impulse. Even in the studio premises the central control room may be 300 feet away from one studio; in an outside broadcast pick-up device a control room may be separated by several miles, so that wherever we take our microphone, so must we bump our head against a corner.

Complicated But Simple.

The output of this A amplifier (as it is called), whether it be at an hotel, a theatre, or in our studio, terminates on a pair of wires which run to the control room. In London two hundred pairs of cables come into our control room, each one reaching to some place where we may wish to collect an outside broadcast.

The second stage of amplification now requires consideration. This is controllable in intensity and in front of this B or variable amplifier sits the controlling engineer, his hands always being on the controls. The output of this amplifier can be split up, one path to the transmitter, another to headphones in the office, a third, perhaps, to the S.B. board for distribution throughout the country. The input of this B amplifier terminates on a plug such as you see in any telephone exchange. This plug is hardly to insert into several jacks or holes on which terminate these same wires I have been speaking about, one reaching to the N. 1 studio, another to N. 2, another to Big Ben, another to the Savoy. We do not, however,

bring to this board all the other wires from all over London, but three blanks are left which on any particular night may be connected with any one of our two hundred lines to the particular place of outside broadcast.

The Magic Plug.

Thus, see the simplicity! We have finished our studio transmission and wish to go over to the Savoy. The announcer finishes, and immediately the control handles of the B amplifier are turned to the position for practically no amplification. The studio "info." is dead.

Quickly the engineer changes a plug over from the Studio hole to the Savoy hole. Meanwhile, at the Savoy the Outside Broadcast Engineer has switched on his A amplifier, and the sounds of the Savoy are passing over the line. At the Control room the plug up, his B amp. is at zero and only faintly can the sounds be heard. Clearly he raises the magnification and from the far (Savoy) comes the sound.

But a moment later we were at the Studio; and we are dancing—and all by shifting one small plug!



Ambitious Ether Explorer "It's getting on my nerves, getting nothing but the B.B.C. night after night!"



Look to your Valves

GENERAL PURPOSE VALVES:

Type R. 11/- each

Filament voltage 4 volts
 Filament current 0.7 amp.
 Max. plate voltage 100 volts

Type B 3. 10/- each

Filament voltage 4.5 volts
 Filament current 0.5 amp.
 Max. plate voltage 80 volts

*Type B 5. 21/- each

Filament voltage 2.83 volts
 Filament current 0.06 amp.
 Max. plate voltage 80 volts

POWER AMPLIFYING VALVES:

Type B 4. 50/- each

Filament voltage 5.6 volts
 Filament current 0.25 amp.
 Max. plate voltage 120 volts

*Type B 4. 30/- each

Filament voltage 3 volts
 Filament current 0.12 amp.
 Max. plate voltage 120 volts

*Type B 7. 32/- each

Filament voltage 6 volts
 Filament current 0.06 amp.
 Max. plate voltage 120 volts

*For use with dry cells



They are chiefly responsible for the quality of reproduction. Badly exhausted valves, otherwise "soft" valves, are short-lived and give poor results. "Soft" valves cost less to make than "hard" valves, but they are expensive and unsatisfactory in use. B.T.H. Radio Valves are exhausted by a special B.T.H. process which produces an exceedingly high vacuum.

FIT B.T.H. VALVES & MAKE YOUR SET A GOOD SET

From all Electricians and Radio Dealers

B.T.H. RADIO VALVES

Made in Rugby, England

Note new reduced prices of all types

Advertisement of The British Thomson-Houston Co. Ltd.

Dundee Programme.

2DE 331 M.

Week Beginning Sunday, February 22nd

SUNDAY, February 22nd.

9.0-9.30. SONG RECITAL. S.B. from Glasgow. Conducted by the Rev. D. D. SMYTH, of Ward Road Baptist Church.

MONDAY, February 23rd.

9.0-9.30. Kilmarnock Hall Picture House Or.

9.0-9.30. WOMEN'S TOPICS.

7.0-10.30. Programme S.B. from Glasgow.

TUESDAY, February 24th

6.40-9.00. Boys' Brigade Notes.

7.0-11.0. Programme S.B. from Glasgow.

WEDNESDAY, February 25th.

1.30-1.40. Kilmarnock Hall Picture House Or.

9.0-9.30. WOMEN'S TOPICS.

15.0-15.15. CHILDREN'S CORNER.

15.15-15.30. Boys' Brigade Notes.

7.0-10.30. Programme S.B. from Glasgow.

THURSDAY, February 26th.

9.0-9.30. Recital of New Gramophone Records.

15.0-15.15. CHILDREN'S CORNER.

15.15-15.30. Mr. Harry Townsend. S.B. from Glasgow.

FRIDAY, February 27th

9.0-9.30. Kilmarnock Hall Picture House Or.

15.0-15.15. CHILDREN'S CORNER.

15.15-15.30. Boys' Brigade Notes.

7.0-10.30. Programme S.B. from Glasgow.

SATURDAY, February 28th.

9.0-9.30. CHILDREN'S CORNER.

9.30-10.00. Programme S.B. from Glasgow.

Edinburgh Programme.

2EH 465 M.

Week Beginning Sunday, February 22nd

SUNDAY, February 22nd

9.0-9.30. Programme S.B. from Glasgow. Religious Service conducted by the Rev. G. W. WYLLIOT, M.A. of St. James Episcopal Church, Glasgow. Choir under the direction of Mr. J. H. WYLLIOT.

9.0-9.30. SONG RECITAL. S.B. from Glasgow.

MONDAY, February 23rd.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. Programme S.B. from Glasgow.

9.40. Mr. GEORGE MACDONALD. (S.B. from Glasgow.)

10.0-10.30. Programme S.B. from Glasgow.

TUESDAY, February 24th.

11.30-12.30. Gramophone Records.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A.

7.0-10.30. Programme S.B. from Glasgow.

WEDNESDAY, February 25th.

11.30-12.30. Gramophone Records.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A.

7.0-10.30. Programme S.B. from Glasgow.

THURSDAY, February 26th.

11.30-12.30. Gramophone Records.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A.

7.0-10.30. Programme S.B. from Glasgow.

FRIDAY, February 27th

11.30-12.30. Gramophone Records.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A.

7.0-10.30. Programme S.B. from Glasgow.

SATURDAY, February 28th.

11.30-12.30. Gramophone Records.

9.0-9.30. The Station Pianoforte Trio.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A., and Mr. H. Morrison, B.A.

7.0-10.30. Programme S.B. from Glasgow.

Hull Programme.

6KH 335 M.

Week Beginning Sunday, February 22nd

SUNDAY, February 22nd.

9.0-9.30. SONG RECITAL. S.B. from Glasgow.

9.30-10.00. Music relayed from the B.B.C. Picture House.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Boys' Brigade Notes.

7.0-10.30. Programme S.B. from Glasgow.

TUESDAY, February 24th, and THURSDAY, February 26th.

9.0-9.30. Gramophone Records.

9.30-10.00. Music relayed from the B.B.C. Picture House.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. Boys' Brigade Notes.

7.0-10.30. Programme S.B. from Glasgow.

FRIDAY, February 27th

9.0-9.30. Music relayed from the B.B.C. Picture House.

9.30-10.00. WOMEN'S HALF HOUR.

10.0-10.30. CHILDREN'S CORNER.

10.30-11.00. WEATHER FORECAST and NEWS.

7.0-10.30. Programme S.B. from Glasgow.

Local News.

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Local News.

Five Reliable Valves for all Requirements

AR *A fine general purpose valve for amateur use. Filament voltage 4; plate voltage 30-80. Old price 12/6; new price 11/-*

These five cover every need of the wireless amateur. They give long and consistent service because they embody the finest traditions of British workmanship and design and are made by a firm whose wireless experience began with the building of the first thermionic valve.

R *Similar to AR, giving rather greater amplification. Filament voltage 4; plate voltage 50-100. Old price 12/6; new price 11/-*

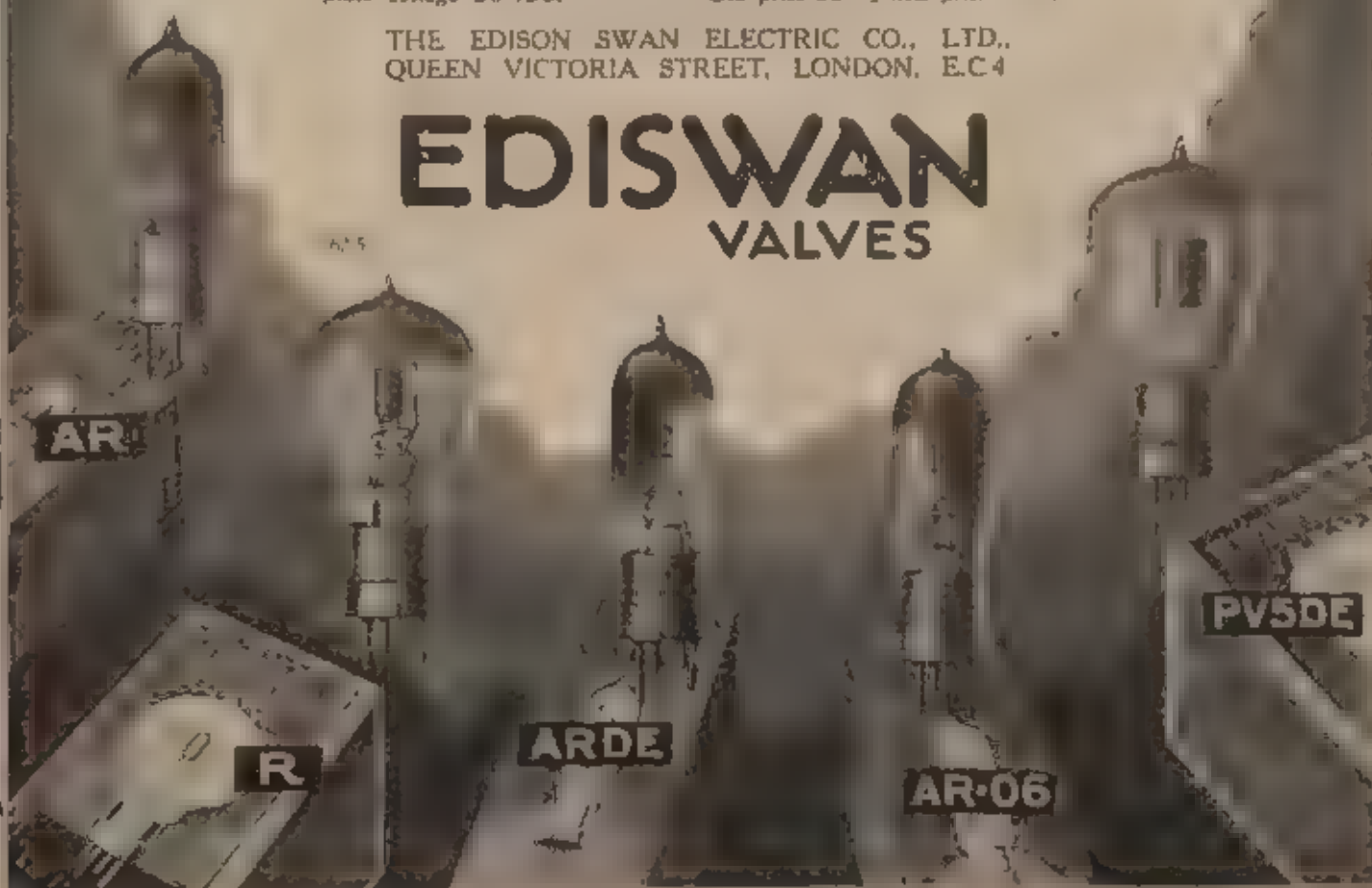
ARDE *A sensitive dull emitter of very long life. Operates on single cell accumulator with resistance. Filament voltage 1.8-2.0; Plate voltage 20-100. Old price 21/-; new price 18/-*

AR-06 *An economical, low temperature detector and amplifier that will operate on a dry cell. Filament voltage 2.5; plate voltage 20-100. Old price 25/-; new price 21/-*

PV5DE *A dull emitter power valve giving exceedingly good results as the last stage of low frequency amplification for loud speaker work. Maximum filament voltage 5; plate voltage 50-150. Old price 35/-; new price 30/-*

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QUEEN VICTORIA STREET, LONDON, E.C.4

EDISWAN VALVES



Leeds—Bradford Programme.

21.5 346 M. 310 M.

Week Beginning Sunday, February 22nd.

SUNDAY, February 22nd.

3.0-5.30.—Programme S.B. from London
relayed from Queen's St.
Congregational Church Leeds
9.0-10.45.—Programme S.B. from London

MONDAY, February 23rd, and SATURDAY, February 28th.

2.40.—Gramophone Records
2.45.—The Station Trio.
1. CHILDREN'S CORNER
More practice by L. Harvey, Equestrian
in Charge, Leeds Bradford School
4.40.—Scouts' Letter (Monday)
7.0 onwards.—Programme S.B. from London

TUESDAY, February 24th, and THURSDAY, February 26th.

11.30-12.30.—Gramophone Records.
2.30-4.30.—Signor Calman and his Orchestra,
relayed from the Scala Theatre, Leeds.
4.45.—CHILDREN'S CORNER
More practice by L. Harvey
6.45.—"Rugby" on "Cycling and Its
Associations"
7.0-11.0.—Programme S.B. from London

WEDNESDAY, February 25th.

11.30-12.30.—Gramophone Records.
2.30-4.30.—Signor Calman and his Orchestra,
relayed from the Scala Theatre, Leeds.
4.45.—CHILDREN'S CORNER
More practice by L. Harvey
6.45.—"On My Anvil" by the S. B. Choir.
7.0-10.30.—Programme S.B. from London

FRIDAY, February 27th.

1.30-2.15.—Gramophone Records.
3.0-4.0.—A Talk to Local Schools
4.45.—Signor Calman and his Orchestra
4.45.—CHILDREN'S CORNER
More practice by L. Harvey
6.40.—Councilor Stanley Borer on "The
League of Nations."

7.0-7.30.—Programme S.B. from London

7.30-11.0.—LEEDS LYRIC MALE QUARTET

F. E. STARTIN (Alto)

JOHN W. SHAW (Baritone)

H. C. MORTIMER (Tenor)

O. HEMINGWAY (Bass)

JOHN CAREY (Variation in Harmony)

LISSIE LOCKE (Solo Flute)

POWELL'S MANHATTAN DANCE BAND

The Quartet

Part 1 "Kelly in Our Alley" (Bryan) (11)

Songs "Mary of Angels" (Nelson) (2)

"In Absence" (Buck) (11)

Close Lock

Fantasia for Flute, "Silvery Sounds"

Solo Solo, "The Love & Fantasy"

A. A. Brewer

John Carey

Songs and Recitals

The Quartet

Part 2 "Kelly in Our Alley" (Bryan) (11)

Songs "Mary of Angels" (Nelson) (2)

"In Absence" (Buck) (11)

Close Lock

Fantasia for Flute, "Silvery Sounds"

Solo Solo, "The Love & Fantasy"

A. A. Brewer

John Carey

Songs and Recitals

The Quartet

Part 3 "Kelly in Our Alley" (Bryan) (11)

Songs "Mary of Angels" (Nelson) (2)

"In Absence" (Buck) (11)

Close Lock

Fantasia for Flute, "Silvery Sounds"

Solo Solo, "The Love & Fantasy"

A. A. Brewer

John Carey

Songs and Recitals

The Quartet

Part 4 "Kelly in Our Alley" (Bryan) (11)

Songs "Mary of Angels" (Nelson) (2)

"In Absence" (Buck) (11)

Close Lock



Perfect Range

concrete reason for the marvelous range of tone

wind pipes demands perfect harmony

This perfect range of tone in an organ is produced by what is known as "voicing," or the special treatment of the mouth of the pipe. In the Radiosun Loudspeaker perfect range of tone is produced in exactly the same way.

The Radiosun is voiced like an organ. Every note is faithfully reproduced in music and speech.

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Perfect Range of Tone,

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For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20
For 4 volt A	10	15	20

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ANNOUNCEMENT OF THE M.O. VALVE CO. LTD.



THE VALVE
IN THE PURPLE BOX!

Liverpool Programme.

6LV 315 M

Week Beginning Sunday, February 22nd.

SUNDAY, February 22nd

10.15.—Programme S.B. from London

11.45.—Programme S.B. from London

MONDAY, February 23rd.

10.15.—Programme S.B. from London

11.45.—Programme S.B. from London

TUESDAY, February 24th.

10.15.—Programme S.B. from London

11.45.—Programme S.B. from London

12.15.—Programme S.B. from London

1.45.—Programme S.B. from London

3.15.—Programme S.B. from London

4.45.—Programme S.B. from London

6.15.—Programme S.B. from London

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9.15.—Programme S.B. from London

10.45.—Programme S.B. from London

12.15.—Programme S.B. from London



We want a title for this appealing picture

—suggest one and win a Brown Loud Speaker or Headphones.

Prizes:

First Prize:

One H1 Scotch Loud Speaker 4,000 ohms, value £5.10.0.

Second Prize:

One H3 Scotch Loud Speaker 4,000 ohms, value £2.10.0.

Six consolation prizes

of 5000 Featherweight Headphones 4,000 ohms, value 25/- each.

THIS charming child study by St. George Hare, R.I., R.O.I., is just typical of the tens of thousands of little ones of Brown Featherweight Headphones.

Such a fascinating and expressive picture deserves a good title—can't you suggest a suitable one and win a superb Brown Loud Speaker? Even if you don't win the first prize you may still get one of the half-dozen pairs of 5000 Featherweight Headphones—similar to those worn by the laddie in the picture. An extra pair of Headphones is always useful, particularly if they are Brown Featherweight—weighing but six ounces, none are so comfortable or so popular among children and grown-ups alike.

Send in your suggestion to our Head Office to-day—a post card will do. Closing date Feb. 28th.

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HEADPHONES AND LOUD SPEAKERS

Adm. Ad. 221a

MR. E. F. BENSON ADVOCATES PELMANISM

Popular Author Shows How Famous System Benefits Every Type of Mind—Some Remarkable Results.



MR. E. F. BENSON.

THE celebrated novelist, Mr. E. F. Benson, a son of a former Archbishop of Canterbury, is a great admirer of Pelmanism.

"I cannot hesitate about recording my confidence in the soundness of the system," he writes, "and in the results which anyone who honestly and consistently follows it may

be entitled to expect.

But," he adds, speaking of these results, "the last word that I should apply to them would be marvellous, because the training is entirely based on simple and well-known laws.

"Miracles imply a suspension of natural laws: the Pelman system works in accordance with them.

"It is an apotheosis of Common Sense, and I know no higher praise than that."

One secret of the immense popularity and success of Pelmanism is that it is not a cast iron, inflexible system.

Adaptable to Individual Needs.

Pelmanism is anything but that.

One mind differs from another as one tree differs from another, and Pelmanism takes account of these differences.

That is why the Artist as well as the Artisan, the Clergyman as well as the Clerk and the Shop Assistant all find in Pelmanism the training that suits their particular needs.

Mr. E. F. Benson lays stress on this important fact. He writes—

"It is distinguished by its flexibility and its adaptability to individual needs, and I can conceive of no method which will not find in the Pelman system the tonic to cure its particular ailment."

Letters from all Classes.

A glance through the thousands of letters received by the Pelman Institute from Pelmanists in every quarter of the globe bears out the truth of this.

They come from men and women of all classes, all ages, and all types of mind. They come from the Professional Man, from the Business Man, from the Artist, from the Society Leader, from the Shopkeeper, from the Manufacturer, from the Mechanic and Artisan. There are letters from Managing Directors, from Painters, Doctors, Clergymen, Teachers, and from celebrated Generals and Admirals; there are also letters from Junior Clerks, from Chauffeurs, from Working Miners, from Privates and from Able Seamen.

And all these letters praise Pelmanism for the way it has enabled their writers to overcome various business, social, and other difficulties, to secure promotion, to add to their incomes, and to equip themselves more efficiently for the struggle and competition of life.

Here are a few extracts taken at random from the thousands of similar letters received by the Institute. And many more will be found in the book entitled "The Efficient Mind," which you can obtain free by writing for it to-day to the Pelman Institute, 95, Pelman House, Bloomsbury Street, London, W.C.1.

A Clerk states that "I have made good progress since commencing your Course. I am now able to deal with matters which would have floored me a few months ago."

A Director writes: "I have made good progress since commencing your Course. I am now able to deal with matters which would have floored me a few months ago."

An Assistant Works Manager reports that he has secured a promotion with a 40 per cent. increase in salary.

A Botany Student writes "I find Pelmanism of inestimable value in my work. Pelmanism's practical psychology is far ahead of that taught by lecturers at college."

A Shop Assistant reports a Promotion and a development in self-confidence.

A Clerk states that he has been made secretary of the company for which he worked and "I attribute my promotion to a very large extent to the benefits I have received from studying Pelmanism."

A Salesman writes that he finds "Pelmanism" a wonderful tonic for the mind.

A Teacher writes that his life has been altered "from a mechanical to a systematic routine of action." He describes the results of Pelmanism as "wonderful."

A Manager states that he has secured a 20 per cent. increase in salary.

A Shop Assistant writes that he has secured a new position with three times the scope and twice the salary.

A Lady Clerk writes: "I have derived great benefit from the Course, and have since greatly improved my position."

An Assistant Manager writes that he has secured promotion. "Once," he writes, "I thought your advertisements confined, to put it mildly, a quantity of bluff. Now I know I was mistaken."

A Clerk reports an increase in salary of 50 per cent. "My success I attribute to the self-confidence which the Pelman system of training has developed in me."

A Mining Engineer writes "Pelmanism has benefited me tremendously. I have just secured a promotion with a 25 per cent. increase in salary. I have never before been so confident and self-reliant. I have a great deal to thank you for in myself. Yours gratefully."

A Doctor writes: "If I were asked the one great thing that Pelmanism has taught me, I should say it was the way it has shown me how to observe instead of merely seeing. That alone is worth the price of the Course. The principles inculcated in Pelmanism become a habit, and I find I remember better, even when I have made no conscious effort to do so."

Thousands of similar cases could be quoted. Many more will be found in "The Efficient Mind," which will be sent to you gratis and post free, on writing for it to-day.

Look at the following description of the famous Pelman system, and shows you how you can enrol for this splendid Course on the most convenient terms, paying for it, if you like, by instalments. The book is sent to you post free, on writing for it (using the adjoining coupon) to the Pelman Institute, 95, Pelman House, Bloomsbury Street, London, W.C.1. Write or call to-day.



Well, dear you were absolutely right. That Course of Pelmanism was the finest thing I ever took up. I was made Manager to-day."

WHY HE WAS MADE MANAGER

HE was young and ambitious. He took his work seriously. On the advice of his wife he took up Pelmanism and spent an interesting half an hour every evening with the "Little Grey Books." His efficiency, enthusiasm, and mental alertness attracted attention. He became confidential secretary to the Managing Director. He made several valuable suggestions which were adopted in the business. As a consequence, he was promoted over the heads of several of his seniors to the position of Manager. In the evening he returned home, treading on air, to tell his wife what this wonderful Course of mind-training had done for him.

Hundreds of such cases could be quoted from the reports received by the Pelman Institute. Some will be found in the book you can obtain free at large to-day.

Practise Pelmanism for half an hour every evening—or on three nights a week—and you will develop just those qualities which will mark you out for speedy promotion.

You will develop Self-Confidence, Concentration, Judgment, Power of Speech, Will Power, Memory, and a host of other qualities which handicap so many of our fellow-workers. Write to-day to the Pelman Institute, 95, Pelman House, Bloomsbury Street, London, W.C.1.

There is nothing difficult about Pelmanism. Indeed, it is a most fascinating mental recreation just the thing for the evenings when more arduous studies are apt to be distasteful. The fee is small, can be paid, if desired, in instalments, and will be repaid to you over and over again in your increased Earning Power.

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95, Pelman House, Bloomsbury Street, LONDON, W.C.1.

SIR,—Please send me, gratis and post free, a copy of "The Efficient Mind" and particulars of the offer enabling me to take the Pelman Course on especially convenient terms.

NAME

ADDRESS

All Correspondence is Confidential.

Nottingham Programme.

5NG 322 M.

Week Beginning Sunday, February 22nd.

SUNDAY, February 22nd

MONDAY, February 23rd.

11.30-12.30. Picture Review
1.00-1.30. The Scala Picture Theatre
1.30-2.0. WOMEN'S TOPICS
2.0-2.15. Teena Corner
2.15-2.30. Station Topics
2.30-3.0. Mr. A. Redford, B.Sc. (Home
Prizes and the Cost of Living)
3.0-3.15. N.B. from London

TUESDAY, February 24th.

11.30-12.30. Picture Review
12.30-1.0. WOMEN'S TOPICS
1.0-1.15. CHILDREN'S CORNER
1.15-1.30. Teena Corner
1.30-1.45. Mr. V. De Silva P.O. M.A. on
Shakespeare's Othello
1.45-2.0. Programme S.B. from London

WEDNESDAY, February 25th

11.30-12.30. Picture Review
12.30-1.0. WOMEN'S TOPICS
1.0-1.15. CHILDREN'S CORNER
1.15-1.30. Teena Corner
1.30-1.45. Mr. V. De Silva P.O. M.A. on
Shakespeare's Othello
1.45-2.0. Programme S.B. from London

THURSDAY, February 26th

11.30-12.30. Picture Review
12.30-1.0. WOMEN'S TOPICS
1.0-1.15. CHILDREN'S CORNER
1.15-1.30. Teena Corner
1.30-1.45. Mr. V. De Silva P.O. M.A. on
Shakespeare's Othello
1.45-2.0. Programme S.B. from London

FRIDAY, February 27th.

11.30-12.30. Picture Review
12.30-1.0. WOMEN'S TOPICS
1.0-1.15. CHILDREN'S CORNER
1.15-1.30. Teena Corner
1.30-1.45. Mr. V. De Silva P.O. M.A. on
Shakespeare's Othello
1.45-2.0. Programme S.B. from London

A Popular Concert.

LUCY GOODWIN (Soprano)
PATRICIA CARY (Baritone)
WALTER ATTENBOROUGH

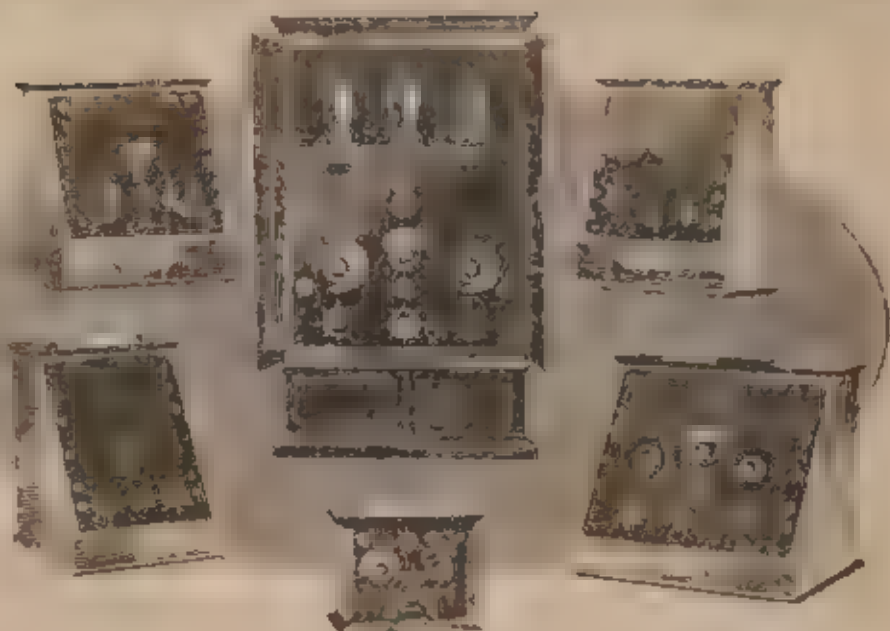
MARJORIE CORRIE (Sole Pianoforte)
BERNARD JOHNSON, B.A., Mus. Bac.

12.30 WEATHER FORECAST and NEWS
S.B. from London

Local News

SATURDAY, February 28th.

11.30-12.30. Picture Review
12.30-1.0. WOMEN'S TOPICS
1.0-1.15. CHILDREN'S CORNER
1.15-1.30. Teena Corner
1.30-1.45. Mr. V. De Silva P.O. M.A. on
Shakespeare's Othello
1.45-2.0. Programme S.B. from London



Fellows Facilities.

Having a wireless set gives a user every day.
If you live in London, come and visit the well-equipped show-rooms of Messrs. Yeates, Ltd. There you can hear any of a wide range of Fellows Sets in comfort and make your decision.

If you do not live in London write to me direct at Park Royal specifying what type of set you require, for, in addition to the sets illustrated here, we have others which might suit you better. The list illustrated folder which you will receive gives full details and prices, and you can then make your choice either through your agent or direct from us. You should certainly make full use of these facilities of ours as they go a long way towards turning the problem of buying a wireless set into a pleasure, especially as all our products are

Quality apparatus at low cost.

The FELLOPHONE GRAND.

A handsome three-valve cabinet by means of dual amplification on one valve the effect of a four valve circuit is obtained. Complete with Batteries, Headphones, Aerial and Insulators £220
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A useful two-valve receiver at a very moderate price. Complete with H.T. Battery, 6-V Accumulator, Headphones, Aerial and Insulators £111.
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SUPER TWO AMPLIFIER.

£86. Marconi Tax 25/- Valves extra.

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A powerful three valve set. Complete with H.T. Battery, 6-V Accumulator, Headphones, Aerial and Insulators £144
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SUPER THREE AMPLIFIER.

A two valve Amplifier for use with the three valve set. £65.10.0
Marconi Tax 25/- Valves extra

FELLOCRYST SUPER.

A most efficient crystal receiver mounted in a handsome black leatherette cabinet. Complete with Headphones, Aerial and Insulators £217.6
Or in mahogany case

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Note these exclusive features of C.A.V. Wireless Accumulators:

1 The *Crescent-shaped* Glands prevent "creeping" of Acids. Each terminal is provided with a gland which in use is always closed and the fluid is thus prevented from leaking out. This is a feature of C.A.V. Batteries which is not found in other types. The glands are made of a special material which is not affected by the acid. The glands are made of a special material which is not affected by the acid. The glands are made of a special material which is not affected by the acid.

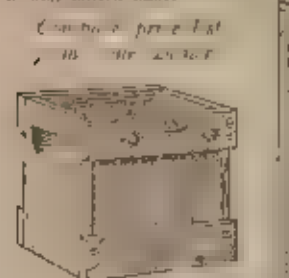
2 The special recessed "Basket-plate" design. In this type the plates are held in a special frame which is made of a special material. This is a feature of C.A.V. Batteries which is not found in other types. The baskets are made of a special material which is not affected by the acid. The baskets are made of a special material which is not affected by the acid. The baskets are made of a special material which is not affected by the acid.

3 The *Sealed Battery Construction*. Each C.A.V. Battery is made up of a special material which is not affected by the acid. This is a feature of C.A.V. Batteries which is not found in other types. The batteries are made of a special material which is not affected by the acid. The batteries are made of a special material which is not affected by the acid. The batteries are made of a special material which is not affected by the acid.

4 The *Efficient Separator between Plates*. This effectively prevents "shorts" between plates and ensures the most efficient separation of the plates. This is a feature of C.A.V. Batteries which is not found in other types. The separators are made of a special material which is not affected by the acid. The separators are made of a special material which is not affected by the acid. The separators are made of a special material which is not affected by the acid.

5 *Hot-air Process*. Each accumulator is effectively freed from acetate fumes (which affect the plates) by special treatment. This is a feature of C.A.V. Batteries which is not found in other types. The batteries are made of a special material which is not affected by the acid. The batteries are made of a special material which is not affected by the acid. The batteries are made of a special material which is not affected by the acid.

6 *Price*. Although guaranteed power in every detail that makes for LONG LIFE, freedom from trouble and satisfactory operation, C.A.V. Accumulators are sold at a price which is well below that of any other makes.



C.A.V. H.T. Accumulators.

Preferred by many to the usual dry Batteries—require recharging only every 4 to 6 months—give continued service in use.

In many cases Batteries are looked upon as unimportant by the enthusiast installing a set; yet they are as important to the correct, trouble-free running of the set as the lighting equipment is to a car. . . . Read about these outstanding features of C.A.V. Batteries, and always

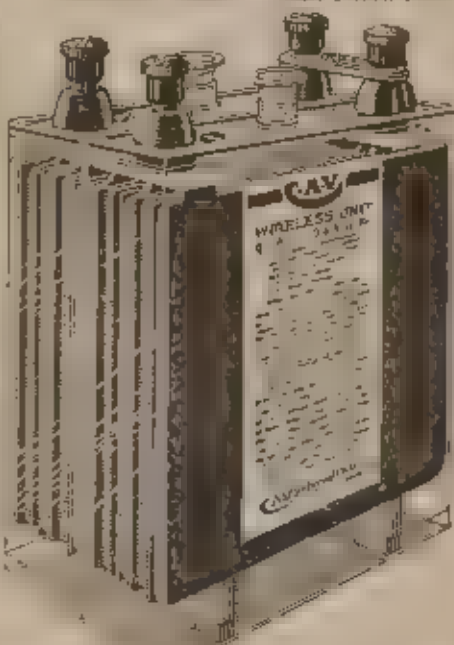
Ask for C.A.V.

Accumulators

Produced by a Firm with over thirty years' experience in Battery manufacture, and specially designed for Wireless Work.

Obtainable from all Radio Dealers. Illustrated List on application to your Dealer or to

C.A. Vandervell & Co. Ltd.
WARRLE WAY ALTON LONDON W.3
120, Service Station, Delivery from Stock.



The latest loudspeaker—and the best.

You can get all the best music from the R.I. loudspeaker, and in a way you have never thought possible. No other instrument can produce the same depth of tone and richness of quality; no other instrument can reproduce the personal inflexions and peculiarities of the living artist!

It will deal with a large volume of power without chattering.

This loudspeaker is indeed the extension of modern radio reproduction. It possesses a more sensitive adjustment than anything you have ever heard, and finally it is the only medium in general use that can be said to do real justice to the power of the microphone.

The unique system of altering the air gap by the sliding of one prism on another is the secret of the fine tone and perfect adjustment that can be regulated to a millionth of an inch, eliminating that sudden jump when the sensitive spot is reached.

Hear one before purchasing, we leave the rest to you.

Write to us now for free R.T. brochure, and ask your dealer to demonstrate one.

Price £6:6:0

Messrs.
Radio Instruments, Ltd.,
12, Hyde Street, London, W.C.1.

Contractors to the
Admiralty and all
Government Departments



12 Hyde St. New Oxford St. London. W.C.1

Plymouth Programme.

SPY 338 M.

Week Beginning Sunday, February 22nd.

SUNDAY, February 22nd

7.0-8.30.—Programme S.B. from London.
 8.30-9.0.—Saturday Evening Song.
 Organised from
 St. Andrew's Parish Church.
 Hymn, "Praise to the Highest" (A. and M. No. 112).
 Anthem, "Nearer Thy Children's Feet."
 Sermon by the Rev. B. WHITFIELD, Vicar of St. Andrew's Parish Church.
 Hymn, "Praise, My Soul, the King of Heaven" (A. and M. No. 112).
 9.0-10.30.—Programme S.B. from London.

MONDAY, February 23rd.

3.30-4.30.—Ernest Manning and his Orchestra, relayed from the New Palladium Cinema.
 4.30-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 7.0-10.30.—Programme S.B. from London.

TUESDAY, February 24th.

3.30-4.30.—Ernest Manning and his Orchestra.
 4.30-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 7.0-10.30.—Programme S.B. from London.
 Education in the South-West of England (II).

7.0-11.0.—Programme S.B. from London.

WEDNESDAY, February 25th.

3.30-4.30.—Ernest Manning and his Orchestra, relayed from the New Palladium Cinema.
 4.30-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 7.0-10.30.—Programme S.B. from London.

THURSDAY, February 26th.

4.0-5.0.—Albert Fullbrook and his Trio, relayed from the Royal Hotel.
 5.0-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 7.0 onwards.—Programme S.B. from London.

FRIDAY, February 27th.

3.30-4.0.—Talks to Smokers: Mr. C. W. Jackson. "Women of Insect Life."
 4.0-4.30.—Mr. H. J. Epper. "How Letters Are Dealt With by the G.P.O."
 4.30-5.0.—Albert Fullbrook and his Trio.
 5.0-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 6.30-7.0.—J. C. Tregarten. "No. 10 History Talk, 'The Badger'."
 7.0-10.30.—WEATHER, FORECAST and NEWS.
 G. A. A. WILKINSON. S.B. from London.
 Local News.

Military Band Night.

7.30.—THE BAND OF THE 2ND BATT. THE SOUTH STAFFORDSHIRE REGIMENT.
 By permission of Lt. Col. P. R. C. Cummings, C.M.G., D.S.O., and Officers.
 MAY BRILLICHS (Song).
 W. N. B. COLLIER.
 H. R. G. V. L.
 CONSTANCE BOLT FINNEY.
 (Composer-Finney).

9.30.—WEATHER FORECAST and NEWS.
 S.B. from London.
 Prof. R. G. STAFLEDON. S.B. from London.
 Local News.

10.0.—Grand Night Programme (Circus).
 11.30.—Chorus down.

SATURDAY, February 28th.

4.0-5.0.—Albert Fullbrook and his Trio, relayed from the Royal Hotel.
 5.0-5.30.—WOMEN'S TOPICS.
 5.30-6.30.—CHILDREN'S CORNER.
 7.0-10.30.—Programme S.B. from London.
 10.30-11.0.—ROYAL HOTEL DANCE ORCHESTRA, relayed from the Assembly Rooms.
 11.0-12.0.—SAVOY BANDS. S.B. from London.

CAIN WAS A TILLER OF THE GROUND

Name ?

Something that was bestowed on you at your christening to identify you from your neighbour. Later, you possibly had another, but that was a nickname; and again on attaining an age of responsibility or the right of a pay envelope, you had a title of courtesy, but nothing to define your utility to man . . . as . . .

Cain was a tiller of the ground.

Mullard . . . a maker of valves.

Mullard . . . THE maker of valves.

Mullard . . . THE maker of MASTER valves.

A Master Valve for every wireless circuit.

Obtainable from all dealers.

Mullard

THE MASTER VALVE

Advertisement—The Mullard Radio Valve Co., Ltd. (R.T.),
 Nightingale Works, Nightingale Lane, Betham, S.W. 12.

Sheffield Programme.

6FL 301 M

Week Beginning Sunday, February 22nd.

SUNDAY, February 22nd.

8.15-9.00. Programmes S.B. from London

MONDAY, February 23rd, to THURSDAY, February 26th.

11.00. Gramophone Records (Monday)
1.00. Time Signal relayed from the Cuckoo.
1.15. 40. Gramophone Records.

5.0-5.20. WOMEN'S CORNER

5.30-6.00. CHILDREN'S CORNER

6.00-6.30. Talk M...

7.0-7.30. Programmes S.B. from London

FRIDAY, February 27th.

11.20-12.30. Gramophone Records

12.40. Time Signal relayed from the Cuckoo

1.30-4.30. Programmes S.B. from London

5.0-5.20. WOMEN'S CORNER

5.30-6.00. CHILDREN'S CORNER

6.40. W. Percival Westcott: "Wonderland Nature Talks: At the Gates of the Forest"

7.0-7.30. Programmes S.B. from London.

MABEL BAKER (Soprano)

W. H. WELLING (Baritone)

ALAN SMITH (Violon)

IVY SMITH (Piano)

OSWALD SMITH (Cello)

STANLEY STEPHEN

7.30-8.00. Selection from "Samson and Delilah"

Sarah Sadie, arr. Alce

Mabel Baker

Down in the Forest

Love, I Have Won You

The Winds are Calling

W. H. Welling

Soft Water Melancholy

Part of Many Ships

Myself

First Movement from Trio in C Major

Hungarian Dances, Nos. 7 and 8

First Movement

First Movement

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BURIED TREASURE



We always stories of buried treasure with their old and yellowed charts, their strange tales from the lips of stricken men, their cryptograms, their expeditions, their hopes and failures.

But in the world of practical affairs there is only one sure and certain way of finding buried treasure

BURY IT YOURSELF

Don't bother about pickaxe or spade, just get a block of wood and a hammer. Choose a suitable location in the main body of earth near the window of the room in which your wireless set is situated and drive home one Climax Radio Earth until the cap is just above the ground. If you like elaboration, make a bowl shaped depression round the cap. Run a good short earth lead to your set and the job is done.

The capital required for the expedition is five shillings plus your personal expenses if any. But, beware of pirates who may bring your expedition to failure. Look for the name CLIMAX RADIO on the cap of the earth tube. Accept no substitutes. Decline all imitations politely or otherwise as it pleases you. Remember, if you cannot obtain the genuine Climax Radio Earth from...

I five shillings direct to us and we will send you a genuine Climax Radio Earth by return, post free.

The CLIMAX COPPER EARTH is the best form of direct earth. It is ready for immediate use. The specially designed armoured point allows it to be easily driven into the ground. The perforated tube enables water to be easily introduced into the surrounding earth. It takes up little space, and is not obtrusive. It is far better than the old fashioned earth with its ugly and inefficient wire trailing through the house followed by a bad joint on to a wandering water pipe.

If you are troubled with

Weak signals, Intermittent signals, Electric mains disturbances, Local Set Interference, Muddy reception,

the probable cause of the trouble is an inefficient earth, get a better earth to-day. Get a Climax Copper Earth.

Price 5/-

The enormous success of the CLIMAX RADIO EARTH has given rise to a flood of imitations of doubtful efficiency. Beware of these cheap imitations. They will only lead to disappointment.



Any radio dealer can supply. If difficulties are put in your way, or substitutes offered you, please send your 5/- direct to us, and we will send you the genuine CLIMAX RADIO EARTH by return, post free.

INSIST ON THE NAME

CLIMAX PATENTS LTD.

182, Church St., London, W.8.

Telephone: PERK 1823.

CLIMAX
RADIO



THE WORLD'S GREATEST RADIO CRYSTAL.

Testimony.

Bob
I have just received a letter from you and I am very glad to hear that you are all well. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.

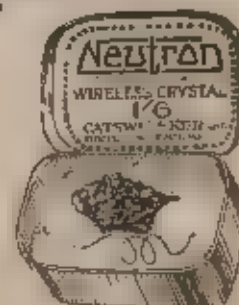
London, E.C.
I have a personal story to tell that I have been told by a friend of mine. I have been told that you are all well and happy. I am well and hope you are the same.

John
I have just received a letter from you and I am very glad to hear that you are all well. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.

Tom
I have just received a letter from you and I am very glad to hear that you are all well. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.

York
I have just received a letter from you and I am very glad to hear that you are all well. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.

John
I have just received a letter from you and I am very glad to hear that you are all well. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.



Sole Distributors

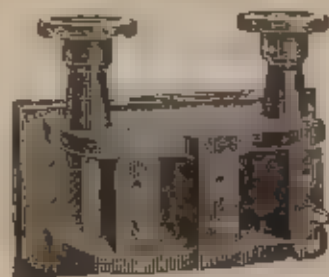
STOCKED BY ALL RADIO DEALERS.

Look at our NEUTRON in the black and yellow box or send us 2/6 and this wonderful crystal will be sent to you by return post.

NEUTRON LTD.,
Mellish House, Southampton
New London W.C.1
Phone Museum 2877

V. ZEITLIN & SONS,
44, Theobalds Road, London W.C.1
Phone Museum 6841

WARNING



Coil Holders

Two-way and Three-way

LETTERS PATENT
NUMBER
193150.

I have come to your knowledge that a certain number of people are being deceived by the use of the word 'WARNING' in their advertisements. I have been thinking of you very much lately and hope you are all happy. I am well and hope you are the same.

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BURNDIPT LTD., Aldine House, Bedford Street Strand, London W.C.2

Wireless Weekly

6d

The Paper for You!

Every keen wireless man reads WIRELESS WEEKLY and wouldn't think of missing a single number. Up to the minute in wireless progress, and filled from cover to cover with the work of the foremost writers on wireless. The fact that it is edited by an expert, John Smith Taggart F.R.S.E. is reason enough for most people to read it. It contains all the latest news of the wireless world, and is a must for every wireless man. It is a paper that is worth its weight in gold. Buy or order it to-day.

Published by Radio Press, Ltd., Bush House, Strand, W.C.2.

"A 50-per-cent better Crystal"

-this enthusiast says:



SYLVEX and your search for full sensitiveness in a Crystal; it is sensitive all over and right through, and in addition, carries the finest possible guarantee, which is made possible by our exceedingly stringent methods of selecting, testing and re-testing. You can rely upon it that whenever you see the distinctive hand-and-crystal Trade Mark the Crystal, packed under it is fully efficient and already tried out on actual Broadcasting before being sealed in its airtight container.

In airtight container with Special "Landscape" and full price tag.
If you cannot obtain Sylvex from your Radio Dealer send "O" this to your Dealer's name and address and we will send the crystal, by return post free. Remember when you buy Sylvex it is from your Dealer or direct from us at 2/- each. It is not a return of your money but a return of your money.

2/-

Sylverex
RADIO CRYSTAL
Silver-Toned Silver Alloy

Produced by
SYLVEX LTD.,
25, Victoria Street, London,
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Trade enquiries invited



Look for the distinctive red, gold and blue colour in your Dealer's window

THE WAVES THAT ARE TIRELESS "REVO" FOR WIRELESS

SOMETHING TO BE PROUD OF

A man is usually proud of his family, especially when they hold his reputation and aspirations. That is why we are proud of our family of

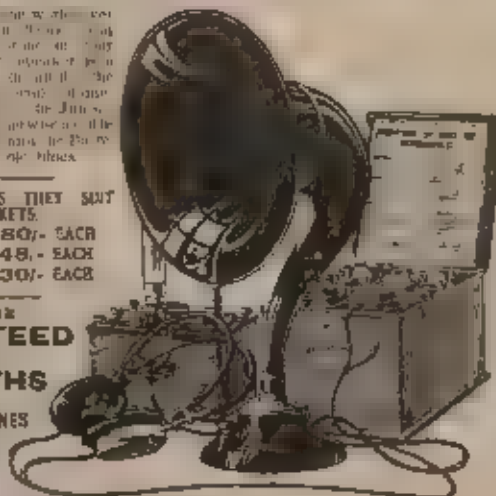
REVO LOUD SPEAKERS

The Revolver Loudspeaker is a new and revolutionary design. It is a true loudspeaker, not a mere amplifier. It is a true loudspeaker, not a mere amplifier. It is a true loudspeaker, not a mere amplifier.

NOTE THE PRICES THEY SUIT ALL POCKETS.
SENIOR - 80/- EACH
JUNIOR - 48/- EACH
BABY - 30/- EACH

THEY ARE GUARANTEED FOR 12 MONTHS
REVOLVING HEADPHONES 21/- EACH

on the ground of complete satisfaction.



IF UNOBTAINABLE LOCALLY PLEASE APPLY DIRECT TO -
THE CABLE ACCESSORIES CO. LTD. Tipton, Staffs.
LONDON DEPOT: 38, SHOE LANE, E.C. 4.



THE CHASEWAY (JUNIOR)

HOME BATTERY CHARGER
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RELIABLE, SAFE, EFFICIENT, PRACTICAL

It is a life saver in the home. Recharge your car battery in the house. No need to go to the garage. Your safeguard.

Large model 24/-
Small model 12/-
Price includes delivery and postage.

SEND STAMP FOR DETAILS AND ILLUSTRATED CATALOGUE OF OTHER CHASEWAY NOVEL NECESSITIES.
LOOK OUT FOR "CHASEWAY" ALTERNATING CURRENT CHARGER - IT'S WONDERFUL.
CHASE ELECT. MFG. CO. LTD.,
25, FINE ST. LONDON E.C. 4.



PERCY SCHOLE'S FIRST BOOK OF THE GRAMOPHONE RECORD.

The best book for those who want to know all about the great music that they like to hear. It contains notes on fifty records from Byrd to Beethoven. 3/6 net.

WRITE FOR A POPULAR LIST.

OXFORD UNIVERSITY PRESS, E.C. 4.

Swansea Programme.

55X 485 M

Week Beginning February 22nd, 1925.

SUNDAY February 22nd

MONDAY, February 23rd, and
WEDNESDAY, February 25th

10.0. The Castle Cinema Orchestra, to give
from the Castle Cinema. Musical

10.5.15. WOMEN'S TOPICS
11.0.0. CHILDREN'S CORNER

TUESDAY, February 24th.

10.0.0. CHILDREN'S CORNER
11.0.0. Programme 8 B from 1

THURSDAY, Feb. 26th, SATURDAY, Feb. 28th

10.0.0. The Castle Cinema Orchestra
11.0.0. CHILDREN'S CORNER
10.0.0.0. Programme 8 B from 1

FRIDAY, February 27th.

10.0.0. W. H. Hoare's Trio
11.0.0. WOMEN'S TOPICS
11.0.0. CHILDREN'S CORNER

WYI DEWY SANT

WYSON CYMRAG

ANNI LLOYD'S

DAVIDES (Contract

DAVID HARRY (T

THOMAS LEWIS

JONES JONES

JOHN JONES

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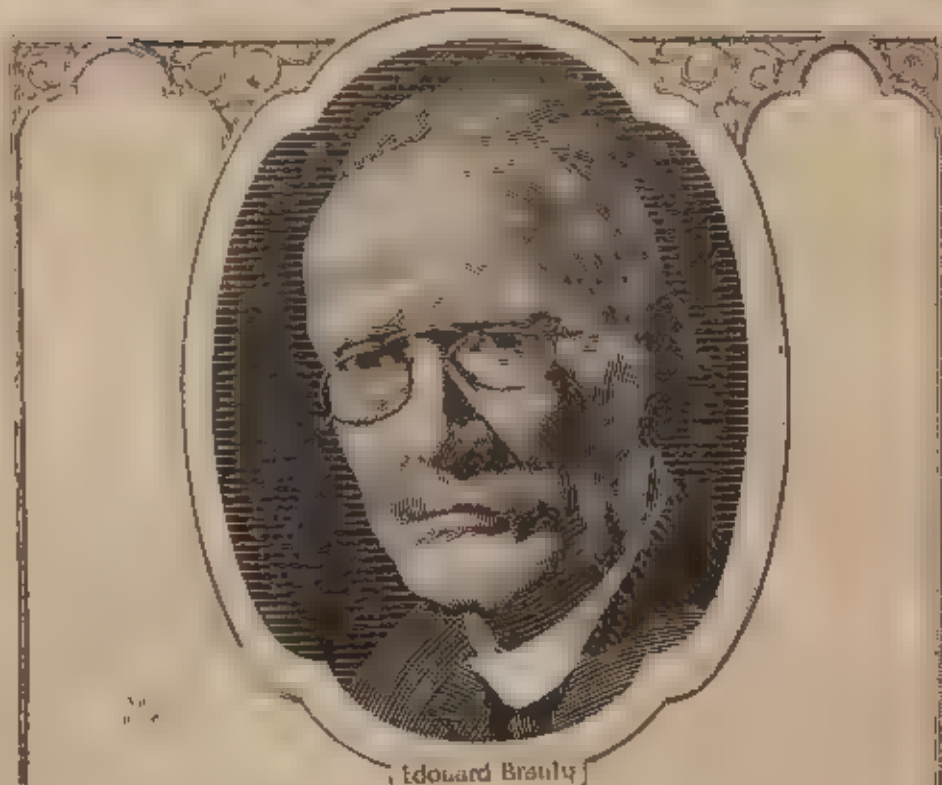
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Edouard Branly

A new use for iron filings!

JUST over thirty years ago that great old man of Science, Edouard Branly invented one of the first detectors ever used for wireless. In those days, of course, Wireless was little more than an inventor's dream, the very greatest distance that signals had ever been transmitted without the aid of wires was only a few yards. With Branly's iron filings detector—afterwards called the coherer—a new era dawned.

A few years later as we now know signals were successfully transmitted—the wonderment of the whole world—from Cornwall to Newfoundland and received on the Coherer. Surely of the most remarkable uses for iron filings ever discovered. It is a big step forward from Branly's Coherer to Dr. Lee Forest's three electrode valve.

It is a big step forward from Branly's Coherer to Dr. Lee Forest's three electrode valve. It is a big step forward from Branly's Coherer to Dr. Lee Forest's three electrode valve. It is a big step forward from Branly's Coherer to Dr. Lee Forest's three electrode valve.

small is its filament consumption in fact, that a very small portable 2 volt accumulator will run the average 2-valve set more than a fortnight without recharging. And the cost of a recharge is only a few coppers.

But low operating cost is only one of the many exclusive Wincell advantages. In volume sensitivity, long life, freedom from microphonic noises, it is fully the equal of Cossor Bright. Before you select your Dull Emitter Valves, get our large illustrated Fold, describing the Wincell, from dealer free of charge or send a postcard for one.

All Cossor Valves are now reduced in price.

Cossor Valves

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Supremacy Maintained



We are pleased to inform you that the prices of Ericsson Headphones have been reduced as under. At the same time the well-known supremacy of this headphone is being maintained.

A Few Ericsson Headphone Virtues.

Clarity of reception for Speech and Music.

The utmost volume procurable.

Long life at maximum efficiency.

Look for "Ericsson" stamped on each earpiece. If absent the telephones offered you are of foreign manufacture—in which this Company is not interested. Back in 1909 the Admiralty adopted Ericsson British Telephones as Standard. In 1917, in the gruelling tests of war, the R.A.F. did the same.

Selling Agents	
120 ohms	2,000 ohms
4,000 ohms	22/6.

Prices

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Write or call on our agents for further information.

The British L.M. Ericsson Mfg. Co., Ltd.,
67/73, KINGSWAY, LONDON, W.C.2.

Ericsson
(BRITISH)
Telephones



Buy British Goods Only

The Perfect Battery for Wireless Work

ASK YOUR
DEALER
FOR



CELLS



FULLER PLATE TYPE BATTERIES IN EBONITE CASES.

These accumulators are thoroughly reliable and well constructed units, of which many thousands have been supplied for radio work. The ebonite cases are strong and fire-proof; non-corroding terminals are fitted.

We manufacture Wireless Batteries of all types including L.T. and H.T. Block Batteries, Sparta L.T. and L.Dry Batteries, Jost Cells, etc., etc.

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FULLER'S UNITED ELECTRIC WORKS, LTD.,

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Get a FULLER'S
—you get the best.

H. T. EFFICIENCY AS IT "WASN'T ON WEDNESDAY"

As a rule, the most efficient of all the H.T. valves is the one that has been used for the longest time. The H.T. valve that has been used for the longest time is the one that has been used for the longest time. The H.T. valve that has been used for the longest time is the one that has been used for the longest time.



R. MOLBACK,

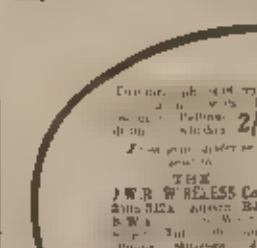
Ask your dealer for them

1/6
per doz.

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dealers
or direct



Enduring Sensitivity



When you first use D.L.5 Crystal its amazing sensitivity is at once apparent. The "concert broadcast" "come through" with a remarkable degree of sustained volume. Yet perhaps its most advantageous feature is the longevity of its sensitivity. Long after you expect it to deteriorate it is rectifying with the same degree of voluminous clarity. Get a box of D.L.5 to-day and discover how good crystal reception can be.

GET A BOX TO-DAY,

**D.L.5.
CRYSTAL**

and

"Palladium" Catwhisker

That Straight Line Protects You

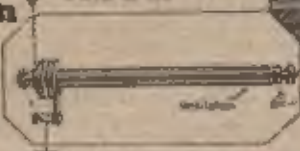
WHEN your lightning-arrestor puts the aerial lead and the earth in a straight line your aerial is a definite protection to your house.

2 houses with an aerial and a Pressland Safety Lead-in to their main earthing point.

The Pressland Safety Lead-in

It is a self-contained distribution and protection for all external wiring. It is automatically slanted inwards to prevent lightning from striking the aerial lead.

It is a safe way to connect aerial and earth terminals on your roof, or to adopt any device that does not connect aerial to earth outside the house. Lightning will not follow angles. It takes a straight line.



Inquiries are invited from all sections of the Trade.

Manufactured by PRESSLAND ELECTRIC SUPPLIES, LTD., HAMPTON-ON-THAMES.



Abbey masts give you distance!

Ask any radio engineer how much a good aerial will improve your reception. Nine times out of ten he will tell you—almost as good as a stage of H.F. Abbey Steel Masts are made in 10 ft. sections. Light, strong and easily erected, they provide the easiest possible means of obtaining perfect aerial efficiency. They can be obtained in the following sizes: 10 ft. 28", 20 ft. 37", 30 ft. 50", 40 ft. 60", 50 ft. 90", 60 ft. 106", 70 ft. 127". Complete with all accessories. All prices carriage paid.

For confined spaces specify the "ABBEY" Outdoor Directional Frame Aerial.

Send a card for illustrated list.

ABBEY ENGINEERING CO., WATTON, NORFOLK.

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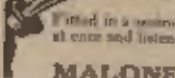
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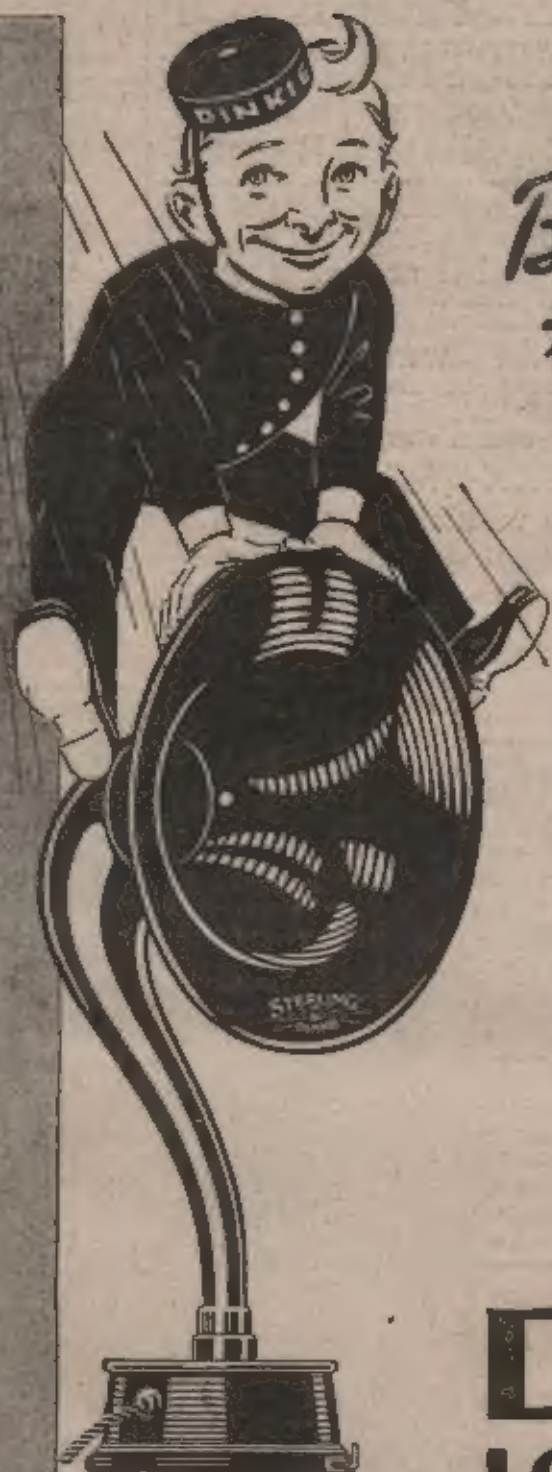
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