



THE OFFICIAL ORGAN OF THE B.B.C.

Vol. 4. No. 45.

[Registered at the G.P.O. as a Newspaper]

EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES OF THE BRITISH BROADCASTING COMPANY.

For the Week Commencing
SUNDAY, AUGUST 3rd.

LONDON	CARDIFF
ABERDEEN	GLASGOW
BIRMINGHAM	MANCHESTER
BOURNEMOUTH	NEWCASTLE
SHEFFIELD (Relay)	
PLYMOUTH (Relay)	
EDINBURGH (Relay)	
LIVERPOOL (Relay)	
LEEDS—BRADFORD (Relay)	

SPECIAL CONTENTS:

ART AND THE WHEEL ELEMENT.
By E. Temple Thurston.

BY RADIO FROM THE STARS.
By Joseph H. Elgie.

CHEMISTRY AT THE PRESIDE.
By Professor R. M. Caves.

OFFICIAL NEWS AND VIEWS.

RATES OF SUBSCRIPTION to "The Radio Times" (including postage): TWELVE MONTHS (Foreign), 13s. 8d.; TWELVE MONTHS (Domestic), 13s. 6d.

The Wireless of the Future.

By The Rt. Hon. TOM SHAW, M.P.
(Minister of Labour).

TO sit and meditate on the future of wireless sound transmission is indeed a fascinating pastime. Even now in its very infancy, wireless is having a profound effect on National Life. Every village institute with a loud speaker is a centre of active interest, and the village and the capital city, formerly divided by a great gulf, meet on common ground. But what of the future?

When Shakespeare made Puck say that he would "put a girdle round the earth in forty minutes," he had given full flight to the most glorious imagination England has ever produced. But forty minutes, to the modern wireless magician, is a long time. Forty seconds suffices now to do what Shakespeare only dreamt of.

What is to follow? Who can say that there is not as much yet to do as already has been done? Who would assert that wireless conversations in the future will not be as easy to conduct as modern telephone communications are now? And even now who can estimate what wireless means to the human race?

Let me give a small example to show what I mean. A few months ago one of the principal means of communication in a certain large city was stopped. By an arrangement made late at night it was found possible to restart the morning after. Under the old conditions hundreds if not thousands of people would have left home hours before it was necessary in order to arrive at their work in time. But wireless was called into play—and the interest and convenience of thousands of people were served.

If we recall the first days of the Great War and the burning anxiety of the people to know the latest developments, we shall not need much imagination to foresee what will be possible with an improved wireless system should such a calamity visit us again. Every town in the country—I am speaking of the small provincial

towns—will have its installation, and the latest news will be known in the villages as soon as it is known in London. But wireless communication does not finish its benevolent activities by the announcement of calamities. Think for a moment of its use at sea. So far as I know, no one has attempted to compute the lives it has saved "on the vasty waters." And it is only at the beginning.



MR. TOM SHAW.

There are limitless possibilities for good, there is a possibility that it may play its full part in avoiding the horrors of war. There may be differences of opinion as to the principal cause of wars. There can, however, be no difference as to the fact that misunderstandings and lack of knowledge form together one of the principal causes, if not indeed the principal cause. Our leading statesmen do not know each other well enough, they cannot by the very nature of their work meet often enough to exchange opinions.

The peoples are almost fantastically ignorant of the outlook and the methods of each other. For instance, only a few miles of sea separate this country from France, and yet the two peoples are not only strangers, but the average Frenchman's idea of the average Englishman is quite wrong, and the Englishman's idea of the ordinary Frenchman would be a screaming joke if International misunderstandings were not so serious.

(Continued overleaf in column 2.)

Stories of Sacred Songs.

Hymns That Made a Sensation.

EVERYBODY knows that there are songs and pictures which make a sensation when they are first heard and seen, but one does not associate sensationalism with hymns, as a rule. Nevertheless, there have been hymns the popularity of which can only be described by that word, hymns which have been sung everywhere, and frequently parodied into the bargain. Middle-aged folk, for instance, will call to mind "Hold the Fort!" which appeared, with its stirring tone, on the last page of the very first issue of the famous "Moody and Sankey" hymn-book, back in the seventies of last century. There was not a city work or a farm labourer who did not whistle it, and who did not know the words, and it was mercilessly parodied.

"Hold the Fort."

The late Lord Shaftesbury, in whose memory the famous fountain in Piccadilly Circus was erected, and the adjoining thoroughfare named, one of the greatest philanthropists this country has known, declared that if the two great American evangelists had done no more than teach the people to sing "Hold the Fort!" they had put the British Empire under a lasting obligation.

The origin of the hymn was sensational. P. C. Bliss, who wrote and set so many "Sankey" hymns, was at a Sunday School convention six years after the close of the Civil War in America, and one of the speakers told a story of a military post being surrounded by the enemy. Just when the position seemed desperate, an officer caught sight of a signal flag twenty miles away. From hill-top to hill-top flashed the message: "Hold the fort! I am coming. Surrender," and the situation was saved.

An Immortal Hymn.

This story immediately suggested the hymn to the receptive mind of Bliss. The next day he was holding a meeting at Chicago, and he wrote on a blackboard on the platform:—

Hold the fort, for I am coming,
Jesus signals still;
Wait the answer back to heaven,
By Thy grace we will.

He then sang the tune he had set to it, the audience joined in, and the hymn was started on its voyage round the world.

So far as the words are concerned, there could not be a less sensational hymn than the one beginning with the beautiful stanza:—

There were ninety and nine that safely
lay
In the shelter of the fold;
But one was out on the hills away
Far off from the gates of gold:
Away on the mountains wild and bare,
Away from the tender Shepherd's care,

yet few hymns have had a more sensational introduction to the world or a wider popularity. In the first place, the woman who wrote it would long since have been numbered with the "forgotten dead" but for this one immortal hymn.

The Singing Evangelist.

But Fra D. Sankey bought a paper at Glasgow, as something to read, as he entered the train. He found little, however, that interested him, and was just casting the paper aside when his eyes fell on some verses in an obscure corner of the paper, probably used as a "fill-up." They were unsigned, but subsequent investigation proved beyond doubt that they were written by Miss Elizabeth Cecilia Clephane, a daughter of the Sheriff of Fife.

Mr. Sankey read the verses, was greatly impressed by them, cut them out of the paper, and put the cutting into his waistcoat pocket. The two evangelists were en route for Edinburgh at the time, and on their second night there, Mr. Moody preached on "The Good Shepherd," afterwards asking Mr. Sankey if he could sing something appropriate. The singing evangelist was "stumped." He turned over the pages of the hymn-book in great perplexity, and then, suddenly, the words he had read in the train came before his mind's eye.

A Blind Hymn-Writer.

The very thing! But there was no music to the words, and how could he sing to an audience of five thousand with only a copy of verses before him? But Fra D. Sankey was a man of faith as well as song, and he straightway set the words on the music stand, played a few bars, and then improvised the famous tune to which it has been sung ever since. Its effect upon the audience was electrical.

Another hymn which had a sensational career is "Safe in the Arms of Jesus." It was written by Fanny Crosby, a woman who had been blind since she was a babe of six weeks, and who wrote not hundreds only, but thousands of hymns, many of which became popular, but none nearly so widely known as "Safe in the Arms of Jesus." Curiously enough, it was one of those hymns which were written to a tune already in existence.

Some Dramatic Incidents.

The tune was written by W. H. Doane, an American composer, who brought it to Mrs. Van Alstyne—the married name of Fanny Crosby—and asked her to write some words to it. The composer sat down to a small organ and played the tune over, and immediately the blind hymn-writer said: "That tune says, 'Safe in the Arms of Jesus.'" Fanny Crosby retired into a room apart for half an hour, and returned with the finished product as it has been sung by millions in half the tongues of the globe.

Of dramatic incidents connected with hymns there are many, such as the singing and playing by the band of "Nearer, my God, to Thee" when the Titanic was sinking. But here is one of a simpler kind which may not be so well known. On Armistice Day, a big army lorry was in the neighbourhood of the Home Guards Parade. It was filled with munition girls with whistles, hooters, and gay ribbons flying. At that moment a Red Cross ambulance came into sight covered with the Union Jack and six R.C.A. men walking beside it. The crowd stood bareheaded. The army lorry pulled up. The girls stopped their ragtime and sang: "Now the labourer's task is o'er." It was as moving an incident as one could see.

Brands Plucked From the Burning.

On the very night of the fire at Epworth Rectory which so nearly cost John Wesley his life at the age of five, his father, Samuel Wesley, had been in his study writing the well-known hymn, "Behold the Saviour of Mankind," the manuscript of which he left lying on his writing-table before he retired to rest. The little son and the hymn were both snatched from the flames, the one on the shoulder of a rustic standing on the shoulders of another, the other blown from the burning building and picked up a day or two later by a villager who happened to see a piece of paper blowing about. They were both "brands plucked from the burning."

PAUL PRESTON.

The Wireless of the Future.

(Continued from the previous page.)

Can wireless do anything to remedy this state of affairs? I am speaking as a layman, but it seems to me that it has a great rôle to play in the future. Let us begin with our own "wide Bung Empire." It is obviously almost impossible for men continually to travel the enormous distances between the different parts of the Empire to attend conferences, but it is vitally essential that consultations should frequently take place in order that the fullest possible understanding and good-will should prevail. I know what can now be done by cable and by telegraph, but that is not enough. Is it too much to hope that technical progress, within a few years, will allow, say, Canada, Australia, and Britain, to talk together, freely, as if in the same room, by means of wireless?

Think of the Prime Ministers, Viceroys, and Governors, all being able to attend an Empire Conference without leaving their posts! What is to prevent it? He would be a bold man who would maintain, with the present extraordinary development before his eyes, that the idea is impossible of realisation. What is to prevent, even now, if it were desired, a conversation between the leading statesmen of Europe? It is quite possible, it is indeed comparatively easy. It may be that no way has yet been found for preventing the tapping of the "wireless talk." Is it impossible to find a way of conducting these interchanges of thought in a privacy as great as they now enjoy? It is surely not beyond the wit of men who have imagined and realised so much to add another laurel to their crown. Would it not conduce to the good understanding between nations if their leading statesmen could easily and freely converse with representatives of all parties present, if necessary, to hear the conversation? And why not, in times of difficulty and danger of estrangement, the whole Parliaments listening to the debates on specific subjects in the "Chambers" of other countries?

The development necessary to make these things possible is apparently a mere detail in comparison with what has already been achieved. After all, in spite of what certain very superior persons may say, words are the very basis of all human life. A man's word is the foundation stone of all human intercourse, progress and commerce. A man's word has sent millions to death. Lister could not have saved millions if he had not been able to communicate his discoveries by means of words. Understanding and good feeling throughout the world must be registered in words. But you cannot discuss matters with a piece of paper, you cannot ask questions from a cable.

Can wireless bring the living word from one end of the world to the other to the service of good understanding and peace? I not only believe it can, but that it will, and that a few years from now the MacDonalds and the Herriots will be able frequently to exchange greetings and information, that merchants will be able to conduct commerce, that scientists will be able to make discoveries public, in a way quite unknown at the present time. And in the seeking and ensuing of peace amongst the nations I hope and believe that the wizard wireless will play his beneficent part. As science is making enormous strides we may even hope to see, as well as hear, all the "bringers of good tidings" to a somewhat weary world.

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Official News and Views. GOSSIP ABOUT BROADCASTING.

From Navy to Author.



MR. PATRICK MCGILL.

ONE of the most romantic of living novelists and poets is Mr. Patrick McGill, who was born in the wilder parts of Donegal, and was educated at a very elementary mountain school. Between the age of twelve and nineteen he worked as a farm-servant, hyre-man, drainer, potato digger, surface-man, and navvy. Just before the outbreak of war he achieved fame with his "Children of the Dead End." He is now a successful author of many publications, and a lecturer of no little charm. Listeners will have an opportunity of hearing him on August 9th, when he broadcasts at the London Station on "Irish Humour." This talk will be S.B. to all stations.

Broadcasting and Adult Education.

At a recent conference of the British Institute of Adult Education held at King's College, London, to discuss broadcasting in its relation to adult education, the delegates represented a very wide sphere of educational activity.

After a preliminary discussion the conference was joined by Mr. J. C. Stobart, our Educational Director. At the request of the Chairman, the Rev. F. E. Hutchinson, of Oxford, Mr. Stobart outlined the educational programme of the Company for the coming autumn.

Instruction Without Boredom.

Having sketched in detail the plans already formed, Mr. Stobart invited criticisms and suggestions. The Chairman expressed general appreciation of the potential educational value of broadcasting, and agreed with Mr. Stobart that instruction must be brought into the programme without undue stress and in such a manner as to interest and not to bore listeners. The best hours for transmitting the various series of talks were briefly discussed, the general opinion being that 6.40, 7.15 and 9.45 p.m. were suitable. The present hour of 4 p.m. was considered to be too early for workers and housewives; this being an invariably busy time for the latter.

Useful Suggestions.

Many interesting suggestions were made by the delegates regarding agricultural and rural broadcasting, general educational talks and language talks. The Chairman said that the Institute was anxious to be helpful, and, throughout the conference, it was clear that the delegates were desirous of rendering assistance and advice.

Talks on Agriculture.

The Agricultural Talks given during the spring from the Glasgow Station were received with great interest, particularly by farmers. As a result of inquiries and questions put to him, arising out of his previous talks, the lecturer has consented to give a second series. The lecturer who provoked this interest was Professor W. G. R. Paterson, B.Sc., N.D.A. (Honours), Principal of the Glasgow and West of Scotland Agriculture College. He comes of a highly-gifted family of Scottish farmers, and was born in Upper Annandale in 1875, and was educated at Moffat Academy. He left school at the age of fifteen, and worked for a number of years on his mother's farm. Later, he entered the

University of Glasgow and took all his examinations in the minimum time allowed, graduating B.Sc. in Agriculture in 1905. In the same year at Leeds he took the National Diploma in Agriculture with honours, a distinction gained by very few. He was immediately appointed Junior Assistant to Principal Wright, of the Glasgow and West of Scotland Agriculture College, and at the early age of thirty-three was unanimously elected Principal of that college.

The dates arranged for the second series are August 20th, October 17th, and November 7th.

A Wonderful Feat of Memory.

An Operatic Evening, consisting of Arias with orchestral accompaniment, has been arranged at the Cardiff Station for Sunday evening, August 10th, in which Miss Doris Lemon and Mr. William Michael will participate. Mr. Michael is probably one of the finest Beck-mers in the *Meistersingers* in England, and when Wagner's *Ring* was produced in London, he performed the extraordinary feat

of memorizing the whole of the difficult *Ring* of "Altorich" in two weeks.

Miss Lemon is also a first-class artist on the lighter side, and her rendering of "Cherubino" in *Figaro* was a remarkable achievement. Her performance in Dame Ethel Smyth's new opera, *Père Galante*, was a remarkably fine piece of work.

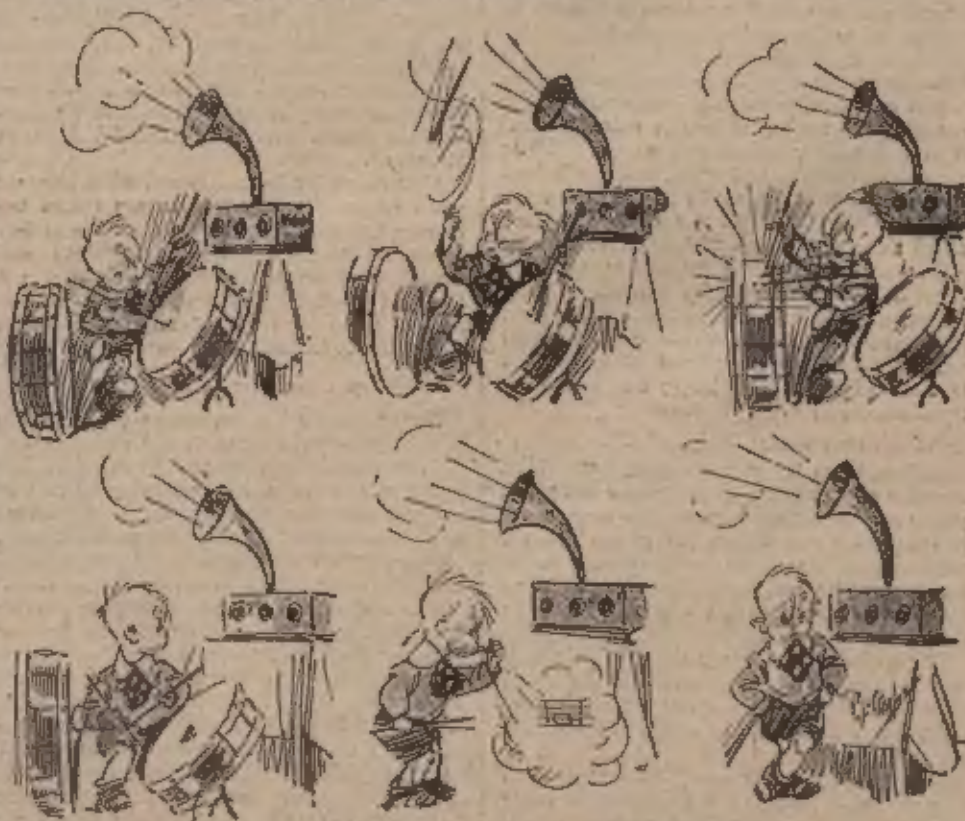
The Overture from the *Meistersingers*, performed by the Station Orchestra, will also be included in the programme.

A Napoleon Programme.

The anniversary of Napoleon's birth, in 1769, occurs on Friday, August 15th. It is to be celebrated at the Manchester Station by a special Napoleon programme on that evening. The programme itself is an attempt to perform enough music directly connected with Napoleon to last the full evening. Extracts from Thomas Hardy's "Dynasts" are to be recited, and notes on the music, and the period, will be prepared and read by Mr. Moses Barz.



Radio Voice: "The next number on the programme will be the jazz Orchestra playing 'The Limehouse Blues'."



"Just as I thought—they're flat!"

Chemistry at the Fireside.

A Talk from Glasgow by Professor R. M. Caven, D.Sc., F.I.C.

ONE day last winter you ordered a load of coal, and had it piled, heavy and black, in your coal cellar. Little by little, lump by lump, you brought it and put it on the fire. You were warm and cosy in the evenings, and in the mornings someone raked out the ashes and threw them away. Now your coal cellar is nearly empty. Where is your coal? What has become of it? What have you to show for it? You have nothing to show for it; nothing but the coal bill and the ashes!

What has become of the coal? The usual answer to this question is that the coal has been burnt up. The coal gives out its heat, and nothing else matters. But it does matter; it matters to chemistry what becomes of the coal when it burns.

A Plausible Theory.

Instead of coal you get heat. Is, then, coal turned into heat? It would seem so; and for a long time men thought it was so. They thought that all fuel, all combustibles, contained an element—the element Fire or Phlogiston—and when the fuel burnt the fire or phlogiston came away from it and made itself felt as heat. The burning coal gets less and less; evidently it is losing something; that something is heat. What could be simpler? Great chemists held this theory 180 years ago, so it is not to be despised; nevertheless it was wrong, because some important facts of the case were quite ignored; indeed, the essential chemistry of the process of combustion was not understood at all.

Everyone knows that without air coal will not burn. Coal is mostly carbon, a black solid; and in order to burn, this solid must have oxygen. The air supplies the oxygen, and burning is the chemical union of the element carbon with the element oxygen to form a compound of these two elements which is called carbon dioxide.

Combustion.

Combustion, then, is combination with oxygen; it is oxidation; the combination of carbon, of which coal chiefly consists, is the oxidation of carbon. That, however, is not quite enough to say. There is oxidation which would not usually be called combustion; for example, the rusting of iron is oxidation, but it is not usually called combustion. When oxidation is intense and rapid, and much heat is given out very quickly in the process, there is fire; and when with fire there are gases which shine with their own light, there is flame.

Now there comes an interesting question. Why is it that black, solid carbon, when it burns, produces invisible carbon dioxide gas? Or otherwise: Why is carbon dioxide an invisible gas? That question is not often answered in the teaching of chemistry; but I want to try to answer it.

How Atoms Form a Solid.

Carbon when it burns produces gas. Most common combustibles, such as paper and wood, yield gases when they burn because they consist of elements whose oxides are gases; but the metal magnesium, for example, when it burns, forms a solid oxide, which we call magnesia; this is seen as white smoke, and settles as white dust.

Our question therefore is this: Why is magnesium oxide, the product of combustion of solid magnesium, a solid, while carbon dioxide, the product of combustion of solid carbon, is a gas?

In magnesium oxide every magnesium atom has six oxygen atoms as neighbours, and every oxygen atom six magnesium atoms. This is true throughout the mass of the magnesium oxide fragment, except just at its surface, where the

outside atoms, whether of magnesium or of oxygen, are bounded by the air.

You will want to know how the different atoms stick together to form a solid. We need to say that the atoms of magnesium and oxygen were joined together, one atom of magnesium with one atom of oxygen to form a molecule of magnesium oxide, and that these MgO molecules were then united together by the force of cohesion to form a solid.

The Power of Attraction.

Now, we know that the atoms in a crystal are held together by the force of electrical attraction, for which the electrons, those tiny atoms of negative electricity, are responsible. Before they combine, the atoms of magnesium and oxygen are electrically neutral; but when they combine, the atoms of magnesium lose each two electrons, and so become charged with positive electricity, while the atoms of oxygen gain each two electrons, the two that have been lost by the atom of magnesium, and so become charged with negative electricity. And thus the positively charged magnesium atoms and the negatively charged oxygen atoms attract one another and cling to one another, and so the compound magnesium oxide comes to exist.

The attraction of each magnesium atom, however, is not for one oxygen atom, but for six; and similarly the attraction of each oxygen atom is for six magnesium atoms. So the power of attraction spreads from atom to atom, and a bit of solid magnesium oxide, compounded of untold millions of separate, electrically-charged atoms of magnesium and oxygen, is formed. That is why—or rather how—when magnesium burns it produces a solid powder, and not an invisible gas.

The Wonders of Carbon.

Now let us return to our coal fire, or rather to the carbon in it. Carbon is a wonderful element. It is the element which is the basis of the bodies of all living creatures, including man.

Carbon atoms are joined together firmly in a network—or space-lattice, as it is called—stretching out in every direction, and electrons are the actual cementing material between the atoms.

Now let us try to understand what happens when carbon burns, when oxygen enters the glowing fire, and passes through it. The carbon atoms are torn asunder and scattered; and carried off between two oxygen atoms; and they are carried off separately, they are not allowed to go in company. So carbon dioxide gas— CO_2 —is formed.

The Independent Molecules.

Carbon dioxide is a gas, because every particle of it is CO_2 —and only that. The molecules of CO_2 , each composed of one atom of carbon and two of oxygen, lead an independent and separate existence, moving very quickly about and never uniting into bigger particles, until they are tamed and brought together by cold and high pressure, and so made liquid or solid.

The carbon and oxygen in carbon dioxide are joined together by electrical attraction by means of electrons; but this attraction is local, and not diffused; it is satisfied and exhausted by simple union. That is why carbon dioxide is an invisible gas, for nobody can see separate molecules, made up of one atom of carbon and two of oxygen. That is why when coal burns it burns away and disappears leaving nothing to be seen. That is the story of combustion; part of the story of what happens as we sit by the fireside.

On Self-Expression.

Extracts from a Talk by the Very Rev. J. Gough McCormick, D.D., Dean of Manchester.

WHAT a jolly interesting thing life is! At five years of age it is an interrogation; at fifteen, a jig-saw; at twenty-one, an experiment with high explosives; and at fifty a battlefield, a watch-tower, and a reference library all in one!

And part of the jolliness of it is that you can be interested in it as a study even while you are living every minute of it. You need not join the ranks of the folk who are always pulling up the roots to see how they are getting on and then are surprised to find that the plant withers.

What, after all, is the modern teaching about life? You may sum it all up in the words "self-expression." The purpose for which we exist is to express ourselves. Private duty and social obligation must not be allowed to interfere. They occupy the position of the cow in the old story. It was in the early days of the train, and a Scottish engineer was asked what would happen if a cow got in the way of the train. The answer was to the point: "It would be so much the worse for the cow." If anything gets in the way of self-expression, so much the worse for it.

Children must never be checked or controlled. They must be persuaded. When it is time to go to bed they must be persuaded. And, of course, this teaching is carried much further. Youth is enjoined everywhere to live its own life. It is assumed that the great game of kicking over the traces is really the expression of the whole duty of man. If anybody finds traces the least bit boring, or producing the least sign of friction, he is exhorted to begin kicking at once. The thing that matters is that the expression of youth desires should be completely untrammelled. That is the way to live your life: that is the secret of happiness!

I don't take the ground of mere dull prudence—you might scorn that as unadventurous. But which gives you the better chance of expressing yourself—to squander all at the bidding of desire or to discipline yourself till you possess enough to enable you to choose according to your bent?

We must face all the facts. Personal pleasure is one of the facts of existence. But it is only one. To have a good time is one of the legitimate aims of life, but to make that the end-all and the be-all of life is to caricature your own human nature—not to express it. So we must face all the facts of life. And one of them is—the Tribes.

Whatever solution of life there is, it must take account of the other members of the human family. To live as if we were the only person in the world who matters is not to express ourselves, but to rob ourselves of part of our heritage as active members of the human family.

Seriously to pretend that the real way to self-expression lies in trying to break all the laws which interfere with our desires is completely childish.

There are hundreds of good folk who believe in self-expression as the great good in life—and cut out all the religious part of the human nature in order to express it properly. If I am going to express myself, it must be my whole self and part of that—and the highest part is that by which we remember that we are made in the image of God.

"What shall it profit a man if he gain the whole world and lose his own soul?"

Listeners' Letters.

EARLIER to the Editor to be acknowledged must bear the name and address of the sender. Anonymous contributions are not considered.

The High-Power Station.

DEAR SIR.—Since "5XX" commenced testing, I have listened daily, using a crystal set only, at a distance of approximately 100 miles, and the results are perfectly satisfactory, there being ample signal strength nearly equal to "3ET" fourteen miles away.

As "5XX" is at present only experimental, I presume arrangements are not final. I feel therefore constrained to suggest that, as the radius of efficient crystal-set reception (on efficient aeriads) is certainly not less than 125 miles, that the most economic situation for "5XX" would be near the centre of England, as it would then supply the needs of the greatest possible number of crystal-set users.

Yours faithfully,

CHARLES HENRY KIMBLE.

Beckwell, Warwickshire.

[It would seem obvious, replies Capt. Eekersley, that if we are desiring to serve the maximum number of people, we should put the high-power station symmetrically in the centre of the British Isles, but unfortunately this is impossible, technically.]

"We think that the high-power station is best served by a London programme. If the station were in the Midlands and the programme were in London, the connection between studio and transmitter would have to be by overhead land line. We feel, in view of the importance of the station, that this connection would not be sufficiently reliable for everyday working."

"Thus, it is proposed to feed the station by an underground cable, especially loaded to give no distortions. It is impossible to make this cable longer than about thirty to forty miles—hence the position of the station is fixed somewhere near London, and its final position can only be fixed in the light of existing facilities as regards buried cable."

Broadcasting in Ancient Times.

DEAR SIR.—Dr. George MacDonald, in his article, "Broadcasting in Ancient Times," says "the ancients had no device for the transmission of sound. They had no telescopes." But, as his "ancient times" go back no further than 490 B.C., I would like to mention that Homer, 900 years B.C., mentions in his *Odyssey* that not only was the mariner's compass and its use then unknown, but there is also the pregnant term, "ears of ether," which undoubtedly to the ancients was akin to the modern "listening" or "broadcasting."

Regarding the telescope, the invention of which is erroneously ascribed to Galileo Galilei, about A.D. 1609, this instrument had been known to the scientific colleges of ancient Egypt, at least fifteen thousand years before our present time!

This can be proved to anyone possessing the required knowledge of mathematics and astronomy.

And for ocular demonstration, there are at Benares, India, cut into the solid rock, models of astronomical instruments, which at a period of antiquity, higher than 900 years B.C., had been used for solar and lunar observations.

The Greeks were mere babies, when Egypt and Phenicia were highly scientific nations.

S.E.27.

W. A. VAUGHAN.

Receiving Chelmsford Abroad.

DEAR SIR.—I have the pleasure to inform you that I receive Chelmsford perfectly here. The transmission is as powerful as Radio Paris, and the modulation as perfect.

I wish to congratulate you.

Yours faithfully,

Morises (Gironde).

W. G.

PEOPLE IN THE PROGRAMMES

Mr. John Coates to Broadcast.



MR. JOHN COATES.

THE famous singer, Mr. John Coates, will shortly broadcast from London, and other stations, dates of which will be duly announced in *The Radio Times*. Mr. Coates has been a vocalist from his earliest boyhood. At the age of five years he was taken into the choir of Gillingham Church, near Bradford, of which his father was churchmaster. As a young man he studied under various music-teachers, and finally came to London. He was given a trial by D'Oyly Carte, and appeared in *Utopia Ltd.* at the Savoy, and toured America. For five years he sang in Comic Opera; but in 1901 he was singing at the Royal Opera, Covent Garden, in such roles as "Faust," and "Claudio" in Stanford's *Much Ado About Nothing*. He then determined on a further course of study, and placed himself under Bouhy, of Paris.

The First English Hoffmann.

After this, he was engaged as leading tenor at the Royal Opera House, Berlin, Hanover, Leipzig, etc. He has sung at all the great English Festivals, and has been closely associated with the choral works of Elgar. Many opera seasons followed, and tours in South Africa, Australia, and the United Kingdom.

Mr. Coates was the first to sing in England the principal tenor roles of D'Albert's *Tiefland* and Ethel Smyth's *The Wreckers*, as well as the first English Hoffmann, which role he sang nearly forty times in the Beecham production of *The Tales of Hoffmann*.

A Disciple of Isaac Walton.

A TALK of special interest to anglers will be given from London by Mr. William Hunter on August 5th. His subject will be "Fishing as a Holiday Sport," and he is well qualified to deal with it, as he is a fellow of the Zoological Society, Organizing Secretary of the Salmon and Trout Association, a member of the Fishing Club de France, and a Silver Medallist at International Casting Tournaments in Paris.

"I have caught salmon in Aberdeenshire, mackerel in Cornwall, roach in the Thames, bass on the South Coast, trout in Somerset, and pike in Wiltshire," he tells me, "and, better still, I count among my personal friends many of the foremost anglers of the day."

Pianist and Composer.



MISS DESIRÉE MACEWAN.

MISS DESIRÉE MACEWAN, who is to broadcast from Bournemouth on August 5th, is a composer as well as a pianist. An orchestral work of hers entitled "The Heights of Umvav" was performed by Sir Henry Wood at a promenade concert some time ago. Miss MacEwan began her musical career very early. She was only fourteen when she won the Ada Lewis Scholarship for piano playing at the Royal Academy of Music, where she was a pupil of Tobias Matthay. Later, she entered for, and obtained, the Josephine Troup Scholarship for composition. Soon after this, she was obliged, by the pressure of outside work, to resign the scholarship, which was for five years, and for some time she has been a professor on the staff of the Matthay School.

A Popular Soprano.



MISS DOROTHY ROBSON.

AN artist who is becoming increasingly popular with listeners is Miss Dorothy Robson, soprano. She originally studied the 'voice' in Paris, but relinquished this to take up singing. After studying in Vienna, she was engaged for a German Court theatre, but the outbreak of war prevented the fulfilment of her contract. She returned to England, and was for two years prima donna with the Carl Rosa Company. She left them in 1917 to devote herself to concert platform work, only returning to the stage to sing in the Mozart Festival at the "Old Vic" in 1921.

Miss Robson has sung in all the principal towns of Germany, Austria, and Holland.

A Popular Tenor.



MR. SPENCER THOMAS.

A TENOR who is becoming increasingly popular with listeners is Mr. Spencer Thomas, who will broadcast from London on August 5th. His first public appearance of note were at the Leeds and Gloucester Musical Festivals. Later he undertook a world tour as principal tenor of the Quinlan International Opera Company.

Mr. Thomas possesses a voice well suited for broadcasting, and he has a large repertoire of song.

"Whistling Words."

AN artist who is a favourite with listeners is Mr. Arthur Melrose, the originator of "word whistling." The other day he told me how he came to introduce this particular form of entertaining.

"When meeting friends," he said, "I was in the habit of greeting them by whistling 'How do you do?' and, in course of time, it struck me that this style of conversation might be successfully—and profitably, I hoped—worked up into a song. 'The Whistling Village' was the outcome, and it proved an instant success. Many and varied were the songs I subsequently wrote and which are included in my present repertoire. The novelty brought me many successful tours and bookings with the principal London and provincial houses, including Moss and Stoll Tours, Tivoli, Oxford, and others."

A Singer of Folk Songs.



MR. J. DALE SMITH.

ONE of Manchester's best known singers is Mr. J. Dale Smith, baritone, who is to give a short song recital at London Station on August 13th. Last year he gave a series of six recitals at Manchester, singing altogether about 150 songs.

Mr. Dale Smith studied at the Royal Manchester College of Music, where he was awarded a Hallam Scholarship and the Curtis Gold Medal. He is particularly well known as an interpreter of folk songs.

WIRELESS PROGRAMME—SUNDAY (Aug. 3rd.)

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

LONDON.

3.0. Time Signal from Big Ben.

Organ Recital.

S.B. to Newcastle.

Relayed from the Concert Hall of the National Institute for the Blind, Great Portland Street.
Solo Organ, H. C. WARRILOW,
Organist and Director of Music, National Institute for the Blind.

HAROLD WILLIAMS (Baritone).
FLORENCE LOCKWOOD (Solo Violin).
CHILTON GRIFFIN (Solo Pianoforte).

The Organ.

Minuet and Trio in B Flat..... H. G. Wood
Cassons in B Flat..... W. G. Wood
Festal Commemoration..... John B. West (11)
Violin Solo.

"Dance Orientale"..... Kormikov-Kreiser
"Ave Maria"..... Gounod
"The Bee"..... Schubert
Songs.

"Gazing Around" ("Tannhäuser")..... Wagner (1)
"Hear Me, Ye Winds and Waves"..... Handel (1)

Pianoforte Solo.

Prelude in G Minor..... Rachmaninoff
Study..... Arnsky
"The Bee's Wedding" (11)..... Mendelssohn
Prelude.....

3.45. The Organ.
"The Horse and his Rider" (Chorus from "Israel in Egypt")..... Handel
Romance in A..... Walling (20)
Triumphal March (Suggested by the Chorus "Nun Danket Alle Gott")..... Karg-Elert
Violin Solo.

Larghetto..... Weber-Kreiser
Tambourin Chinois..... Kreiser
Songs.

"The Southdown Shepherd" John Albys (5)
"My Father Has Some Very Fine Sheep"..... Herbert Hughes (5)

"The Happy Lover"..... H. Long Wilson (1)
"When Dull Care".....
Pianoforte Solo.

Study in G Flat.....
Mazurka in A Minor..... Chopin
Rhapsody No. 6..... Liszt

The Organ.

"Spring Song".....
Overture in C Major..... Hallé
Announcer: J. S. Dodgson.

5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*

5.30.—Anthem, "O Come Everyone"..... Mendelssohn (11)
(Sung by MALE VOICE OCTETTE.)

Hymn, "Praise My Soul, the King of Heaven" (A. & M. 291).

The Rev. H. L. C. V. DE CANDOLE,
Canon of Westminster. Religious Address.
Hymn, "Love Divine, All Loves Excelling" (A. & M. 320).

9.0. DE GROOT

and
THE PICCADILLY ORCHESTRA,
relayed from the Piccadilly Hotel.
S.B. to Newcastle.

10.0.—TIME SIGNAL FROM GREENWICH.
WEATHER FORECAST and GENERAL
NEWS BULLETIN. *S.B. to all Stations.*
Local News.

Announcements Concerning Forthcoming Programmes.

10.15.—Do Groot and the Piccadilly Orchestra (Continued).

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

BIRMINGHAM.

2.0-5.0. THE STATION QUINTETTE.
FRANK CANTELL (1st Violin).
ELAIN STILL (2nd Violin).
ARTHUR KENNEDY (Viola).
LEONARD DENNIS (Violoncello).
NICKL DALLAWAY (Pianoforte).
ALICE VAUGHAN (Contralto).
ALICE COUCHMAN (Solo Pianoforte).

Quintette.
Suite, "The Gressenhall"..... Woods
(a) Prelude; (b) Norfolk Folk Tune;
(c) Slow Air; (d) Big and Fiddle.
Intermezzo from "Seedtime and Harvest"
West (11)

Characteristic Waltz, No. 1
Coleridge-Taylor (11)

Songs.

"Etain's Song".....
"Tears, Idle Tears".....
"As Thro' the Land at Eve".....
"The Swallow".....
Pianoforte Solo.

Etude in A Flat, Op. 25..... Chopin
Hungarian Rhapsody, No. 13..... Liszt
Quintette.

"Valse Triste"..... Scholins
"Pleading".....

Scenades from "Wood of Youth" Suite..... Elgar (11)

Songs.

"Unmindful of the Roses" Coleridge-Taylor
"A Blood Red King" Coleridge-Taylor (11)
Pianoforte Solo.

Scherzo..... Wolf
"La plus que lente"..... Debussy
Concert Study in F..... Ravel
Quintette.

"Greeting"..... Holst (11)
"Minstrel Suite"..... Coates (1)

(a) Children's Dance; (b) Intermezzo;
(c) Scène de Bal.
Announcer: J. C. Paterson.

5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*

5.30.—Hymn, "The Church's One Foundation" (A. & M. No. 213).

The Rev. THOMAS SMITH (Wesleyan Church, Smethwick): Religious Address.
Hymn, "Our Blessed Redeemer, Ever He Breathed" (A. & M. No. 207).

9.0. THE STATION SYMPHONY ORCHESTRA.

Conductor, FRANK CANTELL.
GLADYS WHITEHILL (Soprano).
Orchestra.

Overture, "L'Impresario"..... Mascagni
Soprano.

Aria, "Hear Ye, Israel" ("Elijah")..... Mendelssohn (11)
Orchestra.

Symphony No. 41 in C ("Jupiter") Mozart
Songs.

"The Evening Prayer"..... Montemagni
"In the Dawn"..... Daskin
Orchestra.

"Scenades Lyriques"..... Elgar
"March Romance"..... Gounod

10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*

Local News.
J. Orl. Howe

10.15.—Close down.
Announcer: Percy Edgar.

BOURNEMOUTH.

BAND OF THE ROYAL TANK CORPS.
(By Permission of Col.-Commandant T. C. Medley, D.S.O.)

Conductor, W. J. GIBSON.
DORIS LEMON (Soprano).
WILLIAM MICHAEL (Baritone).

CHARLES L. LEESON (Accompanist).
Band.

3.0. Grand March, "Fame and Glory"..... Medley
Overture, "The Wreckers"..... E. Smyth
"Scenes Espagnoles"..... Elgar

3.30. Doris Lemon and William Michael.
Duet from "Rigoletto"..... Verdi

3.50. Band.
Suite No. 2, "L'Arlesienne"..... Bizet
(a) Pastorale; (b) Intermezzo; (c) Menuet;
(d) Farandole.

3.50. Doris Lemon.
Romanza and Scene ("Cavalleria Rusticana")..... Mascagni

4.0. William Michael.
"I Triumph, I Triumph"..... Corelli
"To Morrow"..... Keel
"In an Old Fashioned Town"..... Spivey

4.30. Band.
Cradle Song (Op. 94, No. 4)..... Brahms
Revolutions of Heaven..... m. Geoffrey
4.30. Doris Lemon and William Michael.
Duet—Selected.

4.40. Band.
Airs de Ballet ("Lancelotti")..... Adlon
Suite in E Flat for Military Band. Hotel (1)

(a) Chaconne; (b) Intermezzo; (c) March.
5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*

5.30.—Hymns by Choir of the Westbourne Wesleyan Church and Orchestra.

5.35.—Rev. C. H. BATEMAN, of Westbourne Wesleyan Church: Religious Address.

5.45.—Hymns by Choir and Orchestra.

Vocal and Instrumental Night.

ANN E. FARNELL-WATSON (Solo Pianoforte).

SYDNEY COLTHAM (Tenor).
Major STANLEY HOW—Reading of Southey.

THE WIRELESS ORCHESTRA.
Conducted by Capt. W. A. FEATHERSTONE.

8.30. Sydney Coltham and Orchestra.
"Comfort Ye"..... ("The Messiah")
"Every Valley"..... Handel (11)

9.0. Orchestra.
Excerpts from "The Miracle"..... Humperdick

9.10.—Ann E. Farnell-Watson and Orchestra.
Pianoforte Concerto in B Minor..... Mozart
(Allegro—Romance—Rondo)

9.35. Sydney Coltham.
"I Hear a Thrush at Eve"..... Coltham (1)
"The Lord of the Sky Blue Water"..... Coltham (1)

9.45. Orchestra.
Excerpts from "Blackmail"..... Massenet

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

Major STANLEY HOW: Readings from Poems of Robert Southey.

10.40.—Close down.
Announcer: John H. Raymond.

CARDIFF.

3.0-4.0.—PONTYPOOL AND DISTRICT SILVER BAND.
Conductor, J. B. YORKE.

ARCHIE GAY (Tenor).
I.—March, "Simplicity"..... B. J. Ord Hume (1)
Overture, "Morning, Noon and Night"..... Suggs (1)

II. Songs.
"Beyond the Night"..... Meade (1)
"Snowy Breasted Pearl"..... Irish

III.—Reverie, "Tynemouth Abbey"..... J. Ord Hume
Carnet Solo, "Enchantress"..... J. J. White
(Soloist, J. THOMAS.)

IV. Songs.
"Mary O'Neill"..... Carr Haddy
"Songs of Araby"..... Clog

V.—Fantasia, "Piper's Wedding"..... Thomas
Overture, "The Night of May"..... Rensky-Karnal

VI. Songs.
"Beneath Thy Window"..... Capas
"Sigh No More, Ladies"..... Allen (14)

Overture, "William Tell"..... Beethoven
VII.—Hymn Varie, "Eventide"..... Greenwood
Announcer: A. H. Goddard.

5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*

8.10.—THE CHOIR OF STAR STREET CONGREGATIONAL CHURCH.

Hymn, "Dear Lord and Father of Man-kind" ("Tune" "Hast")

Anthem, "Son of My Soul"..... Turner
Mr. D. G. TAYLOR, M.A., D.Sc., University College, an "Religion and Beauty—The Beauty of the Body."

Hymn, "Sole of Men, Why Will Ye Scatter?" ("Tune" "Amen Hosianna")

A number against a musical item indicates the name of its publisher. A list of publishers will be found on page 17.

WIRELESS PROGRAMME—SUNDAY (Aug. 3rd.)

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

Gems of Oratorio. THE STATION SYMPHONY ORCHESTRA.

Conductor,
WARWICK BRAITHWAITE.
DOROTHY CLARK (Contralto).
JOHN PERRY (Tenor).
SILVIO SIDELI (Bass).

- 8.40.
I. Orchestra.
Prelude and Angel's Farewell ("The Dream of Gerontius") *Edgar* (11)
II. John Perry.
"Sound an Alarm" ("Judas Maccabaeus") *Handel*
"Deeper and Deeper Still" ("Jephtha") *Handel*
III. Dorothy Clark.
"Prepare Thyself, Zion" ("The Christmas Oratorio") *Bach*
"Slumber, Be-loved"
IV. Silvio Sidel.
Songs, Selection.
Orchestra.
"Pastoral Symphony" ("The Messiah") *Handel*
10.0.—WEATHER FORECAST and NEWS.
S.B. from London. Local News.
10.15.—Close down.
Announcer: E. R. Appleton.

MANCHESTER.

- 3.0-4.0.—THE BOLTON PROFESSIONAL MILITARY BAND.
Conductor—W. S. A. JOHNSON.
GERTRUDE EDGARD (Soprano).
Band.
March, "British Cavalry" *J. Ord-Hume*
Overture, "Rosalinda E. Constantina" *Meyerbeer* (1)
Euphonium Solo, "Britannia" *J. Hartmann*
(Soloist—FRED WRIGHT.)
Gertrude Edgard.
"The Poshua Tree" *Quilter*
"Ave Maria" *Gounod* (1)
Band.
Three Light Pieces *Percy E. Fletcher*
Cornet Solo, "The Lost Diamond" *J. Whiteley*
(The words will be recited by the Composer before the performance.)
(Soloist—HARRY HILLSBY.)
Gertrude Edgard.
"Regnava nel silenzio" *Donizetti* (1)
"Elizabeth's Prayer" *Wagner* (11)
Band.
Overture, "Zampa" *Herold*
Selection, "Scottish" *J. Hartmann*
Gertrude Edgard.
"Canyons Boena" *Bisot*
"Voce di Donna" *Ponchielli*
Band.
Intermezzo, "Evening" *J. Whiteley*
"Marche des Moujoks" *Rossini*
9.0-1.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*
8.0.
FRANK RUSHTON.
"The Call" *Oliver* (8)
S. G. HONEY: Talk to Young People.
Frank Rushton.
"Nearer, My God, to Thee" *Carry* (1)
8.40. The Development of Overture.
THE "22Y" SYMPHONY ORCHESTRA.
Conducted by DAN GODFREY, Junr.
Notes by MURIEL BARITZ.
RACHEL HUNT (Contralto).
Orchestra.
Overture in D Minor *Bach*
Overture, "The Magic Flute" *Mozart*
Overture, "Nimrod" *Beethoven*
Rachel Hunt.
"Weeping Mary"
"Go Down, Moses" *H. T. Burlingame*
"Didn't it Rain?"
Orchestra.
Overture, "Jubilee" *Weber*
Overture, "The Corsair" *Berlioz*

- 9.35.—Hymn, "Glory to Thee, My God, This Night" (1009 Wes. Meth. Hymn Book).
The Rev. ROBERT ARMSTRONG, The Manor, Edgeworth, Bolton: Religious Address.
Hymn, "All People That on Earth do Dwell" (No. 2 Wes. Meth. Hymn Book).
10.0.—WEATHER FORECAST and NEWS.
S.B. from London.
Local News.
10.15. Orchestra.
Overture, "Die Feen" *Wagner*
Overture, "Prometheus" *Elgar* (11)
Rachel Hunt.
"An Old Sacred Lullaby" *Carver* (1)
"Easter Hymn" *Frank Bridge*
Orchestra.
Overture, "Carnival" *Glazounov*
10.30.—Close down.
Announcer: H. B. Brown.

NEWCASTLE

- 3.0-5.0.—Programme *S.B. from London.*
5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*
6.30-7.45. EVENING SERVICE, relayed from ST. JOHN'S CHURCH.
Preacher, The Rev. A. E. CORNIBER.
9.0-10.30.—Programme *S.B. from London.*
Announcer: E. L. Odams.

ABERDEEN.

- 3.0. THE WIRELESS ORCHESTRA.
Overture, "The Merry Wives of Windsor" *Nicolai*
3.15. CHRISTINA J. SHEPHERD (Soprano).
"O Rest in the Lord" ("Elijah") *Mendelssohn* (1)
"Calvary" *Rodney* (3)
3.25. ALLAN MORTON (Bass).
"Ye Verdant Hills" *Handel* (1)
"Within These Sacred Bowes" *Mozart* (1)
3.35. Orchestra.
Suite, "Bergamasque" *Debussy*
3.50. Christina J. Shepherd.
"Out of the Deep I Call" ("De Profundis") *Martin* (5)
"The Refuge of the Soul" *Jones*
4.0. Allan Morton.
"She Alone Charmeth My Sadness" *Gounod* (1)
"How Deep the Slumber of the Floods" *Loire*
4.10. Orchestra.
"Clanson Plaintive" *Poultis*
"The Wayside Cross"
4.25. Christina J. Shepherd.
"Nearer, my God, to Thee" *Corey* (1)
"Beyond the Dawn" *Sanderson* (1)
4.35. Allan Morton.
"Birds in the High Hall Garden" *Somervell* (1)
"The Curlew" *Gould*
4.45. Menant *Moszkowski*
Sonata, Cantabile, Op. 47 *Schumann*
5.0-5.30.—CHILDREN'S CORNER. *S.B. to all Stations.*

Chamber Music Concert.

- MARGARET R. HAY (Soprano).
THE WIRELESS QUINTETTE:
NANCY LEE (Violin).
WILLIAM BENNETT (Violin).
MINNIE MYDDLETON (Viola).
ANDREW WATSON (Violoncello).
MARIE SUTHERLAND (Pianoforte).
8.30.
Two Movements from Piano Quintette in F Minor, Op. 34 *Brahms*
8.45. Margaret R. Hay.
"Angels Guard Thee" *Godard*
"Father of Heaven" *Handel* (11)
9.0.—Hymns by Nigg Parish Church Choir.
The Rev. J. EDMUND MITCHELL, M. A., Nigg Parish Church: Religious Address.
9.15.
Two Movements from Piano Quintette in F Minor, Op. 34 *Brahms*

- 9.30. Margaret R. Hay.
"Return, O God of Hosts" ("Samson") *Handel* (11)
"O Divine Redeemer" *Gounod*
9.40. Quartette.
Two Movements from String Quartette in G Minor *Debussy*
10.0.—WEATHER FORECAST and NEWS.
S.B. from London.
Local News.
10.15. Margaret R. Hay.
"The Heart Worship" *Holt* (14)
"How Lovely are Thy Dwellings" *Liddle* (1)
"Ave Maria" *Kuhn*
10.25. Quartette.
Two Movements from String Quartette in G Minor *Debussy*
10.35.—Close down.
Announcer: W. D. Simpson.

GLASGOW.

- 3.0. THE WIRELESS QUARTETTE.
Overture, "Il Seraglio" *Mozart*
Selection, "La Traviata" *Ferd. Tann*
3.20. MARGARET MACSWAN (Soprano).
"The Jewel Song" ("Faust") *Gounod*
"I Heard a Mavis Calling" *Bonnes* (1)
3.30. Quartette.
Suite, "Children's Corner" *Debussy*
3.45. FINDLATER MACDONALD (Baritone).
"When the Swallows Homeward Fly" *M. V. White*
"Requiem" *S. Homer*
"Down Here" *M. Broke* (5)
3.55. Quartette.
Extraneous ("Le Baiser d'Elonice") *Nogues*
("Quo Vadis") *Grunfeld*
4.5. Margaret Macswan.
"Hark! The Echoing Air" *Purcell*
"The Yellowhammer" *L. Lohmann* (1)
"The Starling"
4.15. Quartette.
Ballet Music, "Salvadora" *Arends*
4.30. Findlater Macdonald.
"Linden Lea" *Vaughan Williams* (1)
"Deh Vieni" *Mozart*
"Declining Now, the Sun's Bright Wheel" *Parker* (11)
4.40. Quartette.
"Filles Napolitaines" *D'Indy*
Overture, "Joan of Arc" *Sodermann*
5.0-5.30.—CHILDREN'S CORNER. *S.B. from Aberdeen.*
8.30. THE PSALMODY QUARTETTE.
Psalm 93 (Tune: "Stroudwater" No. 128).
8.35.—The Rev. JOHN MITCHELL, Headmaster, Memorial United Free Church: Religious Address.
8.45. The Psalmody Quartette.
Psalm 61 (Tune: "Salzburg" No. 121).
9.0. JAMES NEWALL (Tenor).
"The Auld Fisher" *E. G. Mackintosh*
"An Evening Hymn" *Purcell*
9.10. ALFRED PICTON (Solo Flute).
"Arioso and Prelo" *Joachim Quants*
9.20. HELENA HARTLEY (Soprano).
"The Ships of Arctur" *Michael Head* (1)
Waltz Song from "Roméo and Juliet" *Gounod*
9.30. James Newall.
"When the Stars Were brightly Shining" *Puccini*
"Nina" *Pergolesi*
9.40. Alfred Picton.
Suite in Three Movements *Cyril B. Bootham*
9.50. Helena Hartley.
"A Pastoral" *Veracini* (1)
"Croan Island" *B. Mies*
"Lullaby" *Cyril Scott* (4)
10.0.—WEATHER FORECAST and NEWS.
S.B. from London.
Local News.
10.15.—Close down.
Announcer: Herbert A. Carruthers.

A number against a musical item indicates the name of its publisher. A key list of publishers will be found on page 137.

The Wonders of Stained Glass.

A Talk from Glasgow, by Anning Bell, R.A.

Of all the decorative crafts which have been called into being by the Christian religion, that of stained glass is the most characteristic. It arose and declined with the form of architecture most closely associated with, and dependent upon, the Christian religion—the so-called Gothic form of architecture—which, from its origin in the thirteenth century, dominated Europe for over three hundred years.

These dates are merely roughly indicated boundaries, but they cover, at any rate, the main product of this beautiful art. There was stained glass in the twelfth century—beautiful examples still exist—and there are traces of it in still earlier times. Nevertheless, it is an art essentially Gothic. Its peculiar beauties, the rich, deep and glowing colour, its qualities of mystery, of suggestion, are profoundly in sympathy with the aspiration and poetry of Gothic architecture, and it is undoubtedly seen at its finest in association with it.

Its Essential Function.

In its origin it is scarcely a painter's art at all. It is rather a glazier's art. Its essential function is to permit the passage of light, or rather to govern the passage of light, allowing more or less of it to penetrate into the interior of a building, according to the needs of the particular case. Sometimes but little is desired; it then becomes rich and sombre in colour; at another time much more light may be wanted; it then becomes silvery and clear with touches of gold and colour.

The painting upon it may be described as a decoration of the surface rather than an inherent part of the function of the window, and it came into practice from the desire of the glazier, to enrich his work, as well from the desire of the clergy to record in permanent and pictorial form the story of their religion.

Stained glass is one of those decorative handicrafts which have retained practically the same methods of workmanship from the earliest times to the present day. The few changes which have taken place are of minor importance.

A Modern Convenience.

The introduction of the stain made from a solution of silver, which gives the golden tints so characteristic of the 14th century, and still more so of the 15th century work, is by far the most important. The more modern use of the diamond instead of a hot iron to cut the pieces of glass to the shape required is another change, but is obviously a mere convenience to the glazier rather than a new and valuable aid in artistic treatment.

A few words now as to the essential nature of a stained-glass window, and as to how it is produced. To begin with, the title "stained glass" is something of a misnomer. It should properly be called "coloured glass," as it is by the juxtaposition of separate pieces of coloured glass that the effect of the window is obtained. The juxtaposition of pieces of coloured glass held together and framed off from each other, by strips of lead of varying thicknesses—anything from an eighth of an inch to three-quarters of an inch, or even more.

The Introduction of Story-Telling.

These leads form a distinct network of black lines and are a very important contributory factor to the peculiar character and beauty of the result. When in later ages the designer has endeavoured, in a mistaken wish for realistic pictorial effect, to suppress these as

much as he can, the effect is deplorable. The decline of the art from the great ages up to the Gothic revival in the last century was the result of this desire. As far as this it is clear that it is distinctly a glazier's art, a glazier artist, that is.

Much of the early work and a good deal of the later work is confined within these limits, as anyone who knows the French cathedrals must realize. But the desire for story-telling soon came in, and we get the early richly coloured windows containing small panels in a variety of geometrical frameworks, which tell stories from the Bible or the histories of the saints, as in Canterbury and the Sainte Chapelle. Large figures begin to be introduced, particularly in the clerestory windows, as in Chartres, and we soon get the figure-designer taking the principal share of the work. He works in the following manner in the present day, and in so doing follows the traditional methods.

Trimming the Glass.

A small scale colour design is first made, then a full-size cartoon, in which special attention is given to the leads, as these must be quite definitely decided at this stage. The cartoon is then traced and each separate shape is cut out. These shapes, which represent each one a definite piece of coloured glass, are handed to the glass-cutter, who lays the chosen piece of glass over them and trims it to the shape of the paper, taking care to allow for the thickness of the leaden frame which keeps the pieces of glass apart—this, I should say, is allowed for in the tracing, so that his work is made easier.

The next stage is the painting. The glass shapes are now laid over the cartoon and the outlines are traced with a brown pigment of such a nature that when placed in a moderately heated kiln or oven the pigment is fused in the glass. The pigment used is the same whatever the colour of the glass; in fact, a brownish monochrome on coloured glass is the entire method in medieval glass and in the modern

work of the same character. After this first firing the more delicate shading is applied, sometimes in fine lines, often by laying a matt, that is, a tone of the desired shade, over the whole of the piece of glass and working it away with a hard brush until the desired result is reached.

This is fired again, and the glass is handed over to the workmen, who lead it up and add a cement to fix the glass firmly to the leads. The window is now ready for its place. There are slight variations in the procedure here roughly sketched, and it is also possible to paint with enamel colour on clear glass—this was done with great skill in the 16th century and later. The windows of St. Gudule, in Brussels, are probably the best-known examples of this, and are fine things. It is, however, usually more successful on a small scale, as the enamel is likely to fly off.

A Distinguished Scottish Artist.

The window when ready for fixing is divided up into portions of a convenient weight for handling by horizontal divisions; these are eventually concealed by the iron bars fixed to the stonework which everyone will have noticed cross such a window at regular intervals. Each portion of leaded-up glass is fixed to these by copper wires, and it will be understood that this fact greatly adds to the facility with which they can be removed to mend or replace injured parts, or to avoid air-raids. It is a great misfortune that this was not more generally realized, in London and on the Western Front at the beginning of the Great War, or wrought still poorer the windows of Lincoln's Inn, and of Rheims and many other French and Belgian churches.

The art of stained glass has made a remarkable improvement in this country in recent years. Many brilliant young artists are following in the footsteps of Morris, Burne-Jones, Madox Brown, Rossetti, and others, and I feel confident that in future times the stained glass of our own period will be recognized as among the finest artistic expressions of the late eighteenth and early nineteenth centuries. I should like to say that in my opinion the leader of these is that distinguished Scottish artist, Douglas Strachan, whose work will be one of the enduring glories of Scottish art.



Boastful Enthusiast: "—and I made it entirely myself!"
Neighbour: "That explains why it's such a howling success."

WIRELESS PROGRAMME—MONDAY (Aug. 4th.)

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

LONDON.

- 6.0-6.45.—SPECIAL BANK HOLIDAY CHILDREN'S CORNER: Piano Synopses by Uncle Ragnars.
7.0.—TIME SIGNAL FROM BIG BEN.
WEATHER FORECAST and 1ST GENERAL NEWS BULLETIN. *S.B. to all Stations.*
JOHN STRACHEY (the B.B.C. Literary Critic): Fortnightly Book Talk. *S.B. to all Stations.*
Talk by the Radio Association. *S.B. to all Stations.*
Local News.
7.35-8.0.—Interval.

- 8.0. **A Summer Soufflé.**
A B.B.C. Recipe.
Suitable for a Holiday Evening's Entertainment.
(With apologies to Mrs. Beeton.)
S.B. to all Stations.
INGREDIENTS:
1 Light Soprano in Henley frock
WINIFRED FISHER
1 Soubrette ditto. GLADYS NEWTH
1 Mandy Berlioz in white Banquet
DENNIS NOBLE
Synopsed Songsters—1 Brass
LAYTON and JOHNSTONE
1 Popular Concert Party
"THE ROOSTERS"
Essence of Ivory and Outing—1 Peck
1 Small Orchestra
1 Conductor, complete with Baton
DAN GODFREY, Junr.
A Head Chef P. MERRIMAN
Sundry popular music, stories and back-chat.

Take first a thin layer of Orchestra, carefully tuned. Before completing the layer, add a flavour of Concert Party with a small dash of Soubrette. Continue with successive layers of Orchestra, securing as much variety in flavour as possible by adding one by one others of the ingredients as fancy may suggest. Shake in a soupçon of Navy or Army and add a suspicion of "Mr. Everyman." Use a moderate-sized Studio and stir the mixture as briskly as possible to a delicate froth. Garnish plentifully with comedy and serve to the minute.

This dish will be found suitable for consumption at home or out-of-doors.

- 10.0.—TIME SIGNAL FROM GREENWICH.
WEATHER FORECAST and 2ND GENERAL NEWS BULLETIN. *S.B. to all Stations.*
"From My Window," by Philémon. *S.B. to all Stations.*
Topical Talk.
Local News.
10.35.—THE SAVOY ORPHEANS AND SAVOY HAVANA BANDS, AND SELMA FOUR, relayed from the Savoy Hotel, London. *S.B. to all Stations.*
12.0.—Close down.
Announcer: J. S. Dodgson.

BIRMINGHAM.

- 5.20-5.35.—Agricultural Weather Forecast.
5.35-5.50.—CHILDREN'S CORNER.
6.30-6.45.—"Teens' Corner: Uncle Felix on "Naval History."
7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.30.—HAROLD SAMUEL (Solo Pianoforte).
Concerto Handel
Toccata Paradies
Prelude and Fugue in F Minor Bach
Prelude and Fugue in D Major Bach
Evocation Albeniz
Passquid Debussy
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*

- 10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: J. C. Paterson.

BOURNEMOUTH.

- 5.15-5.15.—CHILDREN'S CORNER.
7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35-8.0.—Interval.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: John H. Raymond.

CARDIFF.

- 7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35-8.0.—Interval.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: C. E. Parsons.

MANCHESTER.

- 3.20-3.0.—WOMEN'S HALF-HOUR: Eunice
Local Recitations.
THE FODEN'S MOTOR WORKS
3.15-4.0.—BAND, relayed from the Municipal
Gardens, Southport. Conductor, T.
HYNES.
5.45-6.0.—Children's Letters.
6.0-6.30.—CHILDREN'S CORNER.
6.30-6.55.—Clubs with the Older Children.
7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35.—Mr. W. F. BLETCHER, Examiner in Spanish to the U.L.C.E.: Spanish Talk.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.

- 10.35.—"GENTLEMEN, THE KING."
A Military Drama in One Act.
by Campbell Todd.
Cast:
Lt. Col. Charles Ainsworth, D.S.O.
H. B. BRENNAN
Capt. Arthur Lloyd R. T. FLEMING
Lt. and Quartermaster James O'Grady
MANSEL LEE
Sgt. Patrick Flynn (Mess Sergeant)
D. E. ORMEROD
2nd Lt. Harry Raymond
GASCOINE BURTON
John McGillveray (an old Soldier) (Late Sergeant in the Hon. the East India Company's Service) VICTOR SMYTHE
Scenes: Officers' Mess-room, Blankfield Barracks, Yorkshire.
Time: December, 1901.
11.5.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: H. B. Brennan.

NEWCASTLE.

- 4.45-5.15.—WOMEN'S HALF-HOUR: Weekly News Letter. Annie H. Ross on "North Country Lore."
5.15-6.0.—CHILDREN'S CORNER. Stories and Songs.
6.0-6.30.—Scholars' Half-Hour.
7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35-8.0.—Interval.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk. Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: W. M. Shewen.

ABERDEEN.

- 7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35.—Boy Scouts' News Bulletin.
7.40-8.0.—Interval.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: A. M. Shinnie.

GLASGOW.

- 5.0-5.5.—CHILDREN'S CORNER: Letter Competition Results. Dorothy Holmrich (Mezzo-Soprano).
6.0-6.5.—Weather Forecast for Farmers.
6.40-6.50.—Albert le Grip: French Talk.
7.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
JOHN STRACHEY. *S.B. from London.*
Radio Association Talk. *S.B. from London.*
Local News.
7.35-8.0.—Interval.
8.0.—"A SUMMER SOUFFLE." *S.B. from London.*
10.0.—WEATHER FORECAST and NEWS. *S.B. from London.*
"From My Window." *S.B. from London.*
Topical Talk.
Local News.
10.35.—THE SAVOY BANDS. *S.B. from London.*
12.0.—Close down.
Announcer: Margo M. Dewar.

WAVE-LENGTHS AND CALL SIGNS.

ABERDEEN (2BD)	495	Metres
BIRMINGHAM (5IT)	475	"
GLASGOW (5SC)	420	"
NEWCASTLE (5NO)	400	"
BOURNEMOUTH (6BM)	385	"
MANCHESTER (2ZY)	375	"
LONDON (2LO)	365	"
CARDIFF (5WA)	351	"
PLYMOUTH (5PY)	335	"
EDINBURGH (2EH)	325	"
LIVERPOOL (6LV)	318	"
SHEFFIELD (6FL)	303	"
LEEDS	346	"
BRADFORD (2LS)	310	"

A number against a station name indicates the name of its publisher. A key list of publishers will be issued on page 237.

WIRELESS PROGRAMME—TUESDAY (Aug. 5th.)

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

LONDON.

- 1.0-2.0.—Time Signal from Big Ben. Concert:
The "2LO" Trio and Lillian Blake
(Mezzo-Soprano).
- 4.0-5.0.—Time Signal from Greenwich. "Books
Worth Reading," by Jeremy Wren.
Organ and Orchestral Music relayed from
Shepherd's Bush Pavilion. "The Chelsea
Physick Garden," by Mrs. Hugh Spender.
- 6.0-6.45.—CHILDREN'S CORNER: Sato
Story: "The Poole," by K. W. Lewis.
"Treasure Island," Chap. 25, Part 1,
by Robert Louis Stevenson. "The
Romance of the Elements—Air," by
"Randy." Folk Songs sung by Muriel
Freeman-Smith (Soprano).
- 7.0.—TIME SIGNAL FROM BIG BEN.
WEATHER FORECAST, and 1ST
GENERAL NEWS BULLETIN. *S.B.*
in all Stations.
- Mr. L. E. WILSON, the Australian who
walked 24,200 miles, "Hints to Walkers."
S.B. to other Stations.
- Local News.
- 7.30-8.0.—Interval.

Popular Programmes.

- 8.0.
- March, "The Vanquished Army" .. Alfred
Overture, "The Merry-Makers" ..
Waltz, "Casing Tanze" ..
Pianoforte Solo.
"By the Sea" .. Schubert-Rubinstein
The Orchestra.
- Selection, "The Passing Show of 1915"
Tenor Songs.
"The Ivory Gate" .. Ivan Cargill
"With Such a Dainty Maid" .. Lullier
The Orchestra.
- Three Irish Pictures .. Ansell
Scherez .. F. Granville Ruback
Patrol, "The Wee Macgregor" .. Amere
Pianoforte Solo.
- Fantasia in D Minor
Tone Poem, "Dawn" .. F. Granville Ruback
The Orchestra.
- Andante Religioso (In Memory of the
Fallon, 1914-19) .. F. Granville Ruback
"Ballet Egyptian" .. Lullier
Suite, "La Folia" .. Lullier
- 10.0.—TIME SIGNAL FROM GREENWICH.
WEATHER FORECAST and 2ND
GENERAL NEWS BULLETIN. *S.B.*
to all Stations.
- Mr. E. KAY ROBINSON, President of the
British Empire Naturalists' Association,
on "Young Birds." *S.B.* to all Stations.
- Local News.
- 10.30. Popular Programmes (Continued).
The Orchestra.
- "Three Yorkshire Dole Dances"
Tenor Songs.
"There's a Little Maid" ("My Lady
Molly") .. Sidney Jones (31)
"Under the Lilac Bough" ..
Schubert-Clintson
Selection, "My Lady Molly"
Sidney Jones (31)
- 11.0.—Close down.
Announcer: J. G. Broadbent.

BIRMINGHAM

- 3.30-4.30.—Station Piano Quintette.
- 5.0-5.30.—WOMEN'S CORNER.
- 5.30-5.34.—Agricultural Weather Forecast.
- 5.35-5.39.—CHILDREN'S CORNER.
- 5.40-6.45.—Teenage Corner.
- 7.0.—WEATHER FORECAST and NEWS.
S.B. from London.
- Mr. L. E. WILSON. *S.B.* from London.
- Local News.
- 7.30-8.0.—Interval.

- 8.0. THE STATION ORCHESTRA.
DORIS LEMON (Soprano).
WILLIAM MICHAEL (Baritone).
Orchestra.
- Overture, "Lustspiel" .. Keler Bela
Melody in F .. Rubinstein
Fantasia on "Faust" .. Gounod, arr. Tuccan
- Baritone Solo.
"To-Morrow" .. Keel
"Onway, Awake, Beloved" .. Coues
- Soprano Solo.
"Miracle Song" ("Caravan") .. Bizet
- Orchestra.
Concert Waltz in E Major .. Alphonse
Suite, "Harvest Time" .. Wood (1)
(a) Harvester's Dance; (b) Interlude;
(c) Harvest Home.
- Baritone Solo.
"I Triumph! I Triumph!" .. Carissimi
"In An Old-Fashioned Town" .. Squire (1)
- Soprano Solo.
"Balladella" ("Pagliare") .. Leoncavallo
- Orchestra.
Ballet Music to "Hamlet" .. Thomas
- 10.0.—WEATHER FORECAST and NEWS.
S.B. from London.
- Mr. E. KAY ROBINSON. *S.B.* from
London.
- Local News.
- 10.30. Orchestra.
Selection, "Genevieve de Brabant"
Suite, "From the Countryside" .. Coues
- 11.0.—Close down.
Announcer: J. C. Paterson.

BOURNEMOUTH.

- 3.45-5.15.—The "GBM" Trio, and Talks to
Women.
- 5.15-6.15.—CHILDREN'S CORNER.
- 7.0.—WEATHER FORECAST and NEWS.
S.B. from London.
- Mr. R. J. JENKINS, Deputy Borough
Engineer, Portsmouth, on "Rambles
Around Portsmouth."
- Local News.
- 7.30-8.15.—Interval.
- Bournemouth Municipal Orchestra Night.
DESIREE MACEWAN (Solo Pianoforte).
WALTER WIDDOP (Tenor).
LONDON MALE VOICE OCTETTE.
BOURNEMOUTH MUNICIPAL
ORCHESTRA,
relayed from Winter Gardens.
Musical Director, Sir DAN GODFREY.
- 8.15. Orchestra.
March, "Land of Hope and Glory"
Overture, "Zampa" .. Elgar (1)
Waltz, "Jolly Comrades" .. Vollestedt
- 8.40. Octette.
Folk Tunes.
"The Keys of Heaven"
Cheshire, arr. Elliott Button (11)
"Blossoms and Briars"
Essex, arr. Vaughan Williams (11)
Sailor Shanties.
"Shenandoah" .. arr. H. W. Pierce (2)
"Johnny Comes Down to Hilo"
arr. Sir R. Terry (2)
- 8.50. Walter Widdop.
"For You Alone" .. Orchi
"Celeste Aida" .. Verdi
- 9.0. Duet for two Piccolos and Orchestra.
(Soloists, JEAN AND PIERRE GENIN.
- 9.10. Octette.
"Sally in Our Alley"
arr. Percy Mitches (2)
"The Old Folks at Home"
arr. Vaughan Williams (15)
- 9.20. Desiress MacEwan.
Prelude in F Sharp Minor
Nocturne in F Sharp .. Chopin
"Walderhausen" .. Liszt

- 9.30. Walter Widdop.
"I Hear a Thrush at Eye"
"At Dawning" .. Cadogan (11)
- 9.35. Orchestra.
Selection, "Morris England" .. Gurney
"Hungarian Rhapsody" .. Liszt
- 10.0.—WEATHER FORECAST and NEWS.
S.B. from London.
- Mr. E. KAY ROBINSON. *S.B.* from London.
- Local News.
- 10.30. Octette.
"I Cannot Eat but Little Meat"
arr. Martin Shaw (2)
Part Song, "Phyllis Dym Has Touched
Black" .. Frederick (11)
Lutenist Air, "Now, O Now We Needs
Must Part" .. Dordland-1890 (11)
- 10.40. Walter Widdop.
"Requiem for Armenia" .. Puccini
Desiress MacEwan.
- 10.45. Sonata No. 12 in A .. Mozart
(Tema con Variazioni—Menuetto—Alto
Torna.)
- 11.0.—Close down.
Announcer: John H. Raymond.

CARDIFF.

- 8-8.45. The Crowning of the Bard
at
THE ROYAL NATIONAL EISTEDDFOD
OF WALES
by
H.R.H. The Prince of Wales.
- 3.0.—H.R.H. will be received at the Pavilion
by the Pontypool U.D. Council, which
will present an Address of Welcome.
- 3.10.—H.R.H. will be received in the Sports
Ring by the ARCHDRUID with the
CORSEDD OF THE BARDS OF THE
ISLAND OF BRITAIN, and representatives
of the ROYAL NATIONAL EIS-
TEDDFOD ASSOCIATION and the
PONTYPOOL EISTEDDFOD COM-
MITTEE.
- 3.20.—An Inspection of Ex-service Men during
which the procession to the Pavilion will
be formed.
- 3.45.—H.R.H. will be received on the platform
of the Pavilion by the Chairman of the
day, T. GRIFITHS, Esq., M.P.,
Treasurer of H.M.'s Household. The
Choir will sing "God Bless the Prince of
Wales."
- 4.0. Ceremony of the Crowning of the Bard.
1. Adjutification.
2. Advance of the successful Bard to
the Platform.
3. Crowning of the Bard by H.R.H. THE
PRINCE OF WALES.
4. The Coronation Song, followed by the
Welsh National Hymn, "Hen Wlad fy
Nhadau."
- 4.30.—Musical Items.
- 5.0-5.45.—"JWA'S" — FIVE O'CLOCK'S —
Vocal and Instrumental Artists. Talks
to Women. Weather Forecast.
- 5.45-6.30.—CHILDREN'S CORNER.
- 6.30-6.45.—"How to Write Stories"—(XII),
by an Editor.
- 7.0.—WEATHER FORECAST and NEWS.
S.B. from London.
- Mr. RICHARD TRESEDER, F.R.H.S.,
on "Gardening."
- Local News.
- 7.30-7.45.—Interval.
- Back to the Army.
CONCERT PARTY.
Relayed from
THE TERRITORIAL (100TH SOUTH
WALES INFANTRY BRIGADE) CAMP,
Porthcawl.
In the Studio again.
LENA MASON (Solo Violin).
CHARLES WREFOED (Entertainer).
THE STATION ORCHESTRA.

A number against a musical item indicates the name
of its publisher. A key list of publishers will be found on
page 237.

WIRELESS PROGRAMME—WEDNESDAY (Aug. 6th.)

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

2.0-3.0 WOMEN'S HALF HOUR Margery
Baker (Solo)
3.0-4.0 FODENS MOTOR WORKS
4.0-5.0 HAND, relayed from the Municipal
Gardens, Southampton
5.0-6.0 CHILDREN'S CORNER
Lessons in Arithmetic
6.0-7.0 WEATHER FORECAST and NEWS
S.B. from London
Mr. J. CUMIN, WATERLOO, MA
Tutor of How a Farm was Run
Local News

7.30-8.0 Close down

8.0-9.0 Something for Everyone

THE 221 CANTON STATE
CLUBS WRETFORD (Entertain)
G. J. DUTCHURN (Base)

March Marching Out of the Guards

Overture Rhapsody

Solo A Life for the Cur

Verger Song Phenomenon of Bacon

When Do I Care?

Our Electric Light

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

Inter-aria We are all here

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Inter-aria We are all here

4.45 Recital of Russian Music by Rosing and
MAURICE COLE, S.B. from London

10.0 WEATHER FORECAST and NEWS
S.B. from London

Mr. QUENTIN WADDINGTON, S.B.
from London

11.15 THE SAVOY BANDS, S.B. from
London

11.30 Close down
Announcer O. B. March

3.45-4.30 Recital of Russian Music by Rosing and
MAURICE COLE, S.B. from London

4.30-4.45 FEMININE TOPICS
S.B. from London

5.0 CHILDREN'S CORNER
S.B. from London

7.0 WEATHER FORECAST and NEWS
S.B. from London

Mr. W. A. HUNTER, S.B. from London
Local News

30-7.45 Interval

REGINALD WHITEHEAD (Bass)
The Warwickshire Wagon

AGNES M. DYKES (Soprano)
The Temple Bell

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

Agnes M. Dykes

Why Shouldn't I?

In the Good Vale

GLASGOW.

7.30-8.0 The Wireless Quartette and Roy
Wilson (Soprano)

4.15-5.15 TOPICS FOR WOMEN Cason
and Moss

5.5-6.5 CHILDREN'S CORNER Burgess
Lessons in Arithmetic

6.0-6.5 Weather Forecast for Farmers

6.5-7.0 Weekly Morse Code Lesson by Uncle
Loche

7.0 WEATHER FORECAST and NEWS
S.B. from London

Mr. W. A. HUNTER, S.B. from London
Local News

7.30-8.0 Interval

Half an Hour's Light Music
by poetry talking

CATHIE MAWER (Soprano)
THE STATION ORCHESTRA

Orchestra

Orchestra

Orchestra

Orchestra

Orchestra

Orchestra

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EVENTS OF THE WEEK.

SUNDAY, August 3rd.

BOURNEMOUTH, 3.0 Band of Royal

Cardiff, 8.40. Gema of Oratorio.

MONDAY, August 4th.

LONDON, 8.0 "A Summer Scuffle."

S.B. to all Stations.

MANCHESTER, 11.30 Drama, "Gentle

man, the King."

TUESDAY, August 5th.

CARDIFF, 1.0. The Crowning of the

Bard at the Royal National Eisteddfod

of Wales by H.R.H. THE PRINCE OF

WALES.

GLASGOW, 8.4. Play Night

WEDNESDAY August 6th.

LONDON 3.30 Concert by the Band of

the Royal Military School of Music,

Koeller Hall

8.45. Recital of Russian Music by

ROSLING, assisted by Maurice Cole

(Solo Pianoforte). S.B. to other

Stations.

CARDIFF, 7.30 British Musical Re-

naissance II, Works of William B.

Mania.

THURSDAY, August 7th.

LONDON, 8.0 "Il Seraglio" (Mozart).

S.B. to all Stations.

FRIDAY, August 8th.

LONDON, 8.0. A Wireless Revue, "The

World in Music."

CARDIFF 8.0 "The Growth of Wales,

I Preliminary"

MANCHESTER, 9.30. Bach Recital by

Harold Samuel (Solo Pianoforte).

SATURDAY, August 9th.

CARDIFF, 7.45. Pianoforte Recital by

Harold Samuel

Continental Broadcasting.

At the suggestion of many readers we publish below a comprehensive list of Continental Broadcasting Stations with their times of transmission. Owing to frequent changes of wave-length and times of transmission, absolute accuracy cannot be guaranteed, but each time we go to press with this list it will be carefully checked with all available information.

FRANCE.

POSTE PARISIEN—Paris, 352 m.—
Experimental transmissions almost every evening at 10.30 p.m.

RADIO NIVERNAIS—Nevers, 360 m.—
11 a.m.—Concert and News. 3 p.m.—Concert and News. There is sometimes a concert at 9 p.m.

RADIO SUPERIEURE DES POSTES ET TELEGRAPHES—Paris, 450 m.—
Sundays 8.15. Lecture. English Lesson. Concert. Other days 9. Lecture, Operatic Transmission and Concert.

POSTES ET TELEGRAPHES—Lyon, 470 m.—
Daily transmissions 10.30-11.15 a.m.

RADIO PARIS CLICHY—Paris, 1780 m.—
Week-days 12.30 Stock Exchange and News Bulletin, 12.45 Concert, etc. 2.45 News Bulletin, etc. 6.30 Lecture and News Bulletin. 9 p.m. Concert. 10 o'clock p.m. Dance Music, not daily. On the second and fourth Saturdays of the month a gala evening concert is provided by Le Moulin, Paris. Sundays 12.45 p.m. Concert. 1.45 News. 4.45 Concert. 7.15 News. 8.30 Racing results, etc. 9 p.m. Concert. 10 p.m. Dance Music.

EIFFEL TOWER (ET)—Paris, 2100 m.—
Daily 7.40 a.m. Weather Forecast. 10.15 p.m. Time Signal. 6.15 Concert. 8 p.m. Weather Forecast. 11 p.m. Weather Forecast. On certain days when L'Ecole Supérieure is broadcasting this station transmits a concert or other programme.

GERMANY.

FELEFUNKEN—Berlin, 200 and 730 m.—
8 p.m. Concert, Wednesdays only. There are experimental transmissions at irregular times.

HAYEN—Hagen, 392 m.—
Sundays 10 a.m. Concert. Week-days 8 a.m. Morning Topics. 4.30 and 5.30 p.m. Concert.

BREITLAU—415 m.—
Sunday 10 a.m. Sermon. 12.15 Time Signal. Week-days 1.0 Stock Exchange News. 5-6.30 p.m. Music. 8-8.30 p.m. News followed by Concert, which commences does not close down until 10 or 10.30 p.m.

VONHAFEN—Berlin, 430 m.—
Sundays 8-11 p.m. Concert and Dance Music. Week-days 10 a.m. Market Reports, etc. 10.15 News. 12.15 Stock Exchange News. 12.55, Time Signal. 1.15 a.m. Second News Bulletin. 2.15 Stock Exchange Quotations. 5.30-7 p.m. Wireless Orchestra. 8 p.m. Lecture. 9 p.m. 11.0 Concert followed by News. From Monday and Thursday at 7.30 a.m. Fresh Talk is broadcast, and every Thursday and Saturday from 10.15-11.30 p.m. there is dance music. The week in review is broadcast on Wednesdays by Berlin II on 500 m.

STERN—Berlin, 447 m.—
4.30-6 p.m. Orchestra. 8 p.m. Weather Forecast and Time Signal. 8.30-9.30 p.m. Concert. 9.45-11.15 p.m. Dance Music.

LEIPZIG—452 m.—

Week-days 1 p.m. News Bulletin, etc. 4.30 p.m. to 6 p.m. Concert. 7.30-8 p.m. Lecture (occasionally). 8.15 Concert.

FRANKFURT A.M.—467 m.—

11.5 a.m. News. 2.30-4 p.m. Concert, only by request. 3.50 Monday and Thursday, Cattle Prices. 4.30-6 p.m. Orchestra. 7.30-8.30 Occasional Lecture. 8.30 Daily Concert and News. 9.45 Fridays only, Dance Music. (Sundays there is a Children's Hour from 4-5 p.m.)

MUNICH—480 m.—

8-8.10 a.m. Market Prices. 1.43-2 p.m. News. 2 p.m. Time Signal and Weather Forecast. 4.30-5.30 p.m. Orchestra. 8.15-9.30 Concert and News, on week-days. 9.30-9.45 News Bulletin. (On Saturdays from 9-10 there is Dance Music, and on Sundays there is a Concert. 5-6 p.m.)

KONIGSWUSTERHAUSEN—(Near Berlin) 2800 m.—

10.50-11.50 a.m. Concert. Sundays.

KONIGSWUSTERHAUSEN—(Near Berlin) 2800 m.—

From 7.30 a.m. to 10 p.m. Almost hourly News Bulletins are broadcast.

KONIGSWUSTERHAUSEN—(Near Berlin) 2800 m.—

10.40 Concert (Irregular).

KONIGSWUSTERHAUSEN—(Near Berlin) 2800 m.—

11.50 a.m.-12.30 p.m. Sunday Concert.

KONIGSWUSTERHAUSEN—(Near Berlin) 3150 m.—

Press and Stock Exchange News and Quotations, almost hourly. Sundays excepted.

BELGIUM.

RADIO ELECTRIQUE (SBR)—Brussels, 262 m.—

7 p.m. Concert. 8 p.m. Lecture or Children's Corner. 8.15 p.m. Concert. 10 p.m. News Bulletin.

HAEREN (BAV)—1100 m.—

1 p.m. and 5.50 p.m. daily Meteorological Reports.

HOLLAND.

THE HAGUE—1050 m.—
11 a.m. 1st p.m. Sundays Concert.

THE HAGUE (DCK)—1050 m.—
3-6 p.m. Sundays Concert.

THE HAGUE (PCL)—1050 m.—
10-11 p.m. Mondays Concert.

THE HAGUE—1050 m.—
9-11 p.m. Tuesdays Concert.

AMSTERDAM (PA5)—1030 m.—
8.30-10.30 p.m. Wednesdays Concert (irregular).

VAZ DIAZ AGENCY—2400 m.—
Daily Stock Exchange Quotations and News, almost hourly from 8.30 a.m.

SWITZERLAND.

GENEVA (HB1)—1500 m.—

Weekdays 1.15. Weather Forecast. News, Lecture.

LAUSANNE (HB2)—500 m.—

> 12. Concert, except on Sundays.

ITALY.

ROME—450 and 470 m.—

1.30 a.m. News. 12 noon Time Signal. 4.30-6.30 p.m. Concert. 9.15 Irregular Operatic Transmissions.

ROME—1800 m.—

8.0 p.m. Concerts (Irregular).

ROME—3200 m.—

10 a.m. Concerts and Experimental Transmissions. 11.30 a.m. Irregular Transmissions.

SPAIN.

MADRID—480 m.—

6-8 p.m. Lecture, Concert and Dance Music. almost daily.

MADRID—1800 m.—

8.30 Concert (irregular).

CZECHO-SLOVAKIA.

BRATISLAVA—1100 m.—

Sundays 11 a.m. 12 noon, Concert. Week-days 11 a.m. 12 noon, 1.30 p.m., 7.15-9 p.m. Concert, News, Weather Forecast, etc.

KOMAROV—1600 m.—

Sunday 10.11 a.m. Concert. Week-days 2.10. Stock Exchange Reports. News.

AUSTRIA.

RADIO (Vienna)—400 m.—
4.30 Daily Concert.

HUNGARY.

BUDAPEST—3000 m.—

11 a.m. to 12 noon Concert, etc.

BUDAPEST—3000 m.—

12.30 p.m.-1 p.m. News daily.

SWEDEN.

GOTHENBURG—460 m.—

7-9 p.m. Tuesdays, Fridays and Saturdays, Concert.

GOTHENBURG—600 m.—

7-8 p.m. Mondays, Wednesdays and Thursdays, Concert. (This wave length is liable to alterations.)

RADIO AKT—Stockholm—470 m.—

7-8 p.m. Sundays and holidays, Concert. 8 p.m. Tuesdays and Thursdays Concert.

TEL. GÖRAVIRKE—1000 m.—

11 a.m. Sundays religious service. 8 p.m. Monday and Wednesday Concert. 9 p.m. Friday, Saturday and Sunday Concert.

DENMARK.

COPENHAGEN—200 m.—

8.0 p.m. and 9.0 p.m. Lectures.

WIRELESS PROGRAMME—THURSDAY (Aug. 7th.)

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

LONDON.

- 3.0-5.0. Time Signal from Big Ben. The Week's Current of News Gramophone Records.
 5.0-5.30. Time Signal from Greenwich. The "10" Time. Cecil Dutt (Baritone). A Talk on "Fascism" by Mrs. Shannon. Careers for Women. The Art of the Actor by E. B. Clark.
 6.0-6.15. CHILDREN'S CORNER. Stories by Mrs. M. J. M. and Auntie Rich.
 6.15-6.30. Trip Round the World. M. of the Daily Mail.
 6.30-6.45. Scouts and Girl Guides. News.
 6.45-7.0. A Talk about Wednesday, by Eric Taylor.
 7.0-7.15. TIME SIGNAL FROM BIG BEN.
 7.15-7.30. WEATHER FORECAST and NEWS.
 7.30-7.45. CENTRAL NEWS BULLETIN. S.B. to all Stations.
 7.45-8.0. PERCY SCHOLLES (the B.B.C. Music Critic). The Fortnight's Music. S.B. to all Stations.

Talk by the Radio Society of Great Britain. S.B. to all Stations. Local News.

8.0-8.15. Mr. C. LEONARD WOOLLEY on "The Seraglio." S.B. to all Stations.

8.15-8.30. Mr. C. LEONARD WOOLLEY on "The Seraglio." S.B. to all Stations.

8.30-8.45. An Opera in Three Acts by Mozart. S.B. to all Stations.

8.45-9.0. Belmonte. S.B. to all Stations.

9.0-9.15. Belmonte. S.B. to all Stations.

9.15-9.30. Belmonte. S.B. to all Stations.

9.30-9.45. Belmonte. S.B. to all Stations.

9.45-10.0. Belmonte. S.B. to all Stations.

10.0-10.15. Belmonte. S.B. to all Stations.

10.15-10.30. Belmonte. S.B. to all Stations.

10.30-10.45. Belmonte. S.B. to all Stations.

10.45-11.0. Belmonte. S.B. to all Stations.

11.0-11.15. Belmonte. S.B. to all Stations.

11.15-11.30. Belmonte. S.B. to all Stations.

11.30-11.45. Belmonte. S.B. to all Stations.

11.45-12.0. Belmonte. S.B. to all Stations.

12.0-12.15. Belmonte. S.B. to all Stations.

12.15-12.30. Belmonte. S.B. to all Stations.

12.30-12.45. Belmonte. S.B. to all Stations.

12.45-1.0. Belmonte. S.B. to all Stations.

1.0-1.15. Belmonte. S.B. to all Stations.

1.15-1.30. Belmonte. S.B. to all Stations.

1.30-1.45. Belmonte. S.B. to all Stations.

1.45-2.0. Belmonte. S.B. to all Stations.

2.0-2.15. Belmonte. S.B. to all Stations.

2.15-2.30. Belmonte. S.B. to all Stations.

2.30-2.45. Belmonte. S.B. to all Stations.

2.45-3.0. Belmonte. S.B. to all Stations.

3.0-3.15. Talks to Women. J. S. B. to all Stations.

3.15-3.30. B. Sec. on "The Housewife's Chemical Alphabet."

3.30-3.45. CHILDREN'S CORNER.

3.45-4.0. Boy Scouts and Girl Guides. News.

4.0-4.15. WEATHER FORECAST and NEWS.

4.15-4.30. S.B. from London.

4.30-4.45. H. R. Y. S. L. S. B. from London.

4.45-5.0. Radio Society Talk. S.B. from London.

5.0-5.15. Local News.

5.15-5.30. "Il Seraglio" (continued). S.B. from London.

5.30-5.45. "Close down."

5.45-6.0. Announcer: John H. Raymond.

CARDIFF.

3.0-4.0. The Station Train. John H. Allen.

4.0-4.15. The Cardiff Orchestra, relayed from the London Reception.

4.15-4.30. "FIVE O'CLOCK."

4.30-4.45. Mr. Isaac J. Williams, Keeper of Art.

4.45-5.0. The National Museum of Wales. Miss Stevens (Mezzo-Soprano). Weather Fore.

5.0-5.15. CHILDREN'S CORNER.

5.15-5.30. "How to Speak French" (VII).

5.30-5.45. Boy Scouts and Girl Guides. News.

5.45-6.0. WEATHER FORECAST and NEWS.

6.0-6.15. S.B. from London.

6.15-6.30. PERCY SCHOLLES. S.B. from London.

6.30-6.45. Radio Society Talk. S.B. from London.

6.45-7.0. Local News.

7.0-7.15. "Les Petits Riens" (continued). S.B. from London.

7.15-7.30. "Close down."

7.30-7.45. Announcer: A. H. Goddard.

MANCHESTER.

11.30-12.30. Concert by the "ZY" Quartette.

5.0-6.10. Boy Scouts and Girl Guides' News.

5.10-5.40. WOMEN'S HALF HOUR.

5.40-6.0. CHILDREN'S CORNER.

6.0-6.15. WEATHER FORECAST and NEWS.

6.15-6.30. S.B. from London.

6.30-6.45. PERCY SCHOLLES. S.B. from London.

6.45-7.0. Radio Society Talk. S.B. from London.

7.0-7.15. Local News.

7.15-7.30. "Les Petits Riens" (continued). S.B. from London.

7.30-7.45. "Close down."

7.45-8.0. Announcer: A. H. Goddard.

8.0-8.15. Mr. C. LEONARD WOOLLEY. S.B. from London.

8.15-8.30. "IL SERAGLIO." S.B. from London.

8.30-8.45. WEATHER FORECAST and NEWS.

8.45-9.0. S.B. from London. Local News.

CHAPPELL

WEBER

BROADWOOD

pianos are in use at the various stations of the B.B.C.

8.0-8.15. "Il Seraglio" (continued). S.B. from London.

8.15-8.30. "Close down."

8.30-8.45. Announcer: H. B. Brennan.

NEWCASTLE.

3.45-4.15. An Hour's Chamber Music: Herbert M. Lloyd's Quartette, Mary Jarred.

4.15-4.30. WOMEN'S HALF HOUR.

4.30-4.45. Strongman. Percy Barrow's First N.Y.

4.45-5.0. CHILDREN'S CORNER. Anne Shaw. Stories. Songs.

5.0-5.15. Boy Scouts and Girl Guides. News.

5.15-5.30. WEATHER FORECAST and NEWS.

5.30-5.45. S.B. from London.

5.45-6.0. PERCY SCHOLLES. S.B. from London.

6.0-6.15. Radio Society Talk. S.B. from London.

6.15-6.30. Local News.

6.30-6.45. "Il Seraglio" (continued). S.B. from London.

6.45-7.0. "Close down."

7.0-7.15. Announcer: W. M. Shewen.

ABERDEEN.

3.30-4.0. Everybody's At. M. of the Daily Mail.

4.0-4.15. CHILDREN'S CORNER. Margaret.

4.15-4.30. WEATHER FORECAST and NEWS.

4.30-4.45. S.B. from London.

4.45-5.0. PERCY SCHOLLES. S.B. from London.

5.0-5.15. Radio Society Talk. S.B. from London.

5.15-5.30. Local News.

5.30-5.45. "Les Petits Riens" (continued). S.B. from London.

5.45-6.0. "Close down."

6.0-6.15. Announcer: H. J. McKee.

GLASGOW.

3.30-4.0. Pianoforte Recital by Harold Samuel.

4.0-4.15. The Wireless Quartette. Charles Welford (Entertainment). Topics for Women. Bessie Watt (Soprano).

4.15-4.30. CHILDREN'S CORNER. Weekly Chat by Uncle Phil. "BSC's" Stamp.

4.30-4.45. Weather Forecast for Farmers.

4.45-5.0. Boy Scouts' and Girl Guides' News.

5.0-5.15. Dr. J. M. CLARK of Glasgow University, on "Victorian Literature."

5.15-5.30. WEATHER FORECAST and NEWS.

5.30-5.45. S.B. from London.

5.45-6.0. PERCY SCHOLLES. S.B. from London.

6.0-6.15. Radio Society Talk. S.B. from London.

6.15-6.30. Local News.

6.30-6.45. "Les Petits Riens" (continued). S.B. from London.

6.45-7.0. Mr. C. LEONARD WOOLLEY. S.B. from London.

7.0-7.15. "IL SERAGLIO." S.B. from London.

7.15-7.30. WEATHER FORECAST and NEWS.

7.30-7.45. S.B. from London. Local News.

7.45-8.0. "Il Seraglio" (continued). S.B. from London.

8.0-8.15. "Close down."

8.15-8.30. Announcer: H. J. McKee.

8.30-8.45. Announcer: H. J. McKee.

8.45-9.0. Announcer: H. J. McKee.

9.0-9.15. Announcer: H. J. McKee.

9.15-9.30. Announcer: H. J. McKee.

9.30-9.45. Announcer: H. J. McKee.

9.45-10.0. Announcer: H. J. McKee.

10.0-10.15. Announcer: H. J. McKee.

10.15-10.30. Announcer: H. J. McKee.

10.30-10.45. Announcer: H. J. McKee.

10.45-11.0. Announcer: H. J. McKee.

11.0-11.15. Announcer: H. J. McKee.

11.15-11.30. Announcer: H. J. McKee.

11.30-11.45. Announcer: H. J. McKee.

11.45-12.0. Announcer: H. J. McKee.

12.0-12.15. Announcer: H. J. McKee.

12.15-12.30. Announcer: H. J. McKee.

12.30-12.45. Announcer: H. J. McKee.

12.45-1.0. Announcer: H. J. McKee.

1.0-1.15. Announcer: H. J. McKee.

1.15-1.30. Announcer: H. J. McKee.

1.30-1.45. Announcer: H. J. McKee.

1.45-2.0. Announcer: H. J. McKee.

2.0-2.15. Announcer: H. J. McKee.

2.15-2.30. Announcer: H. J. McKee.

2.30-2.45. Announcer: H. J. McKee.

2.45-3.0. Announcer: H. J. McKee.

3.0-3.15. Announcer: H. J. McKee.

3.15-3.30. Announcer: H. J. McKee.

3.30-3.45. Announcer: H. J. McKee.

3.45-4.0. Announcer: H. J. McKee.

4.0-4.15. Announcer: H. J. McKee.

4.15-4.30. Announcer: H. J. McKee.

4.30-4.45. Announcer: H. J. McKee.

4.45-5.0. Announcer: H. J. McKee.

5.0-5.15. Announcer: H. J. McKee.

5.15-5.30. Announcer: H. J. McKee.

5.30-5.45. Announcer: H. J. McKee.

5.45-6.0. Announcer: H. J. McKee.

6.0-6.15. Announcer: H. J. McKee.

6.15-6.30. Announcer: H. J. McKee.

6.30-6.45. Announcer: H. J. McKee.

6.45-7.0. Announcer: H. J. McKee.

7.0-7.15. Announcer: H. J. McKee.

7.15-7.30. Announcer: H. J. McKee.

7.30-7.45. Announcer: H. J. McKee.

7.45-8.0. Announcer: H. J. McKee.

8.0-8.15. Announcer: H. J. McKee.

8.15-8.30. Announcer: H. J. McKee.

8.30-8.45. Announcer: H. J. McKee.

8.45-9.0. Announcer: H. J. McKee.

9.0-9.15. Announcer: H. J. McKee.

9.15-9.30. Announcer: H. J. McKee.

9.30-9.45. Announcer: H. J. McKee.

9.45-10.0. Announcer: H. J. McKee.

10.0-10.15. Announcer: H. J. McKee.

10.15-10.30. Announcer: H. J. McKee.

10.30-10.45. Announcer: H. J. McKee.

10.45-11.0. Announcer: H. J. McKee.

11.0-11.15. Announcer: H. J. McKee.

11.15-11.30. Announcer: H. J. McKee.

11.30-11.45. Announcer: H. J. McKee.

11.45-12.0. Announcer: H. J. McKee.

12.0-12.15. Announcer: H. J. McKee.

12.15-12.30. Announcer: H. J. McKee.

12.30-12.45. Announcer: H. J. McKee.

12.45-1.0. Announcer: H. J. McKee.

1.0-1.15. Announcer: H. J. McKee.

1.15-1.30. Announcer: H. J. McKee.

1.30-1.45. Announcer: H. J. McKee.

1.45-2.0. Announcer: H. J. McKee.

2.0-2.15. Announcer: H. J. McKee.

2.15-2.30. Announcer: H. J. McKee.

2.30-2.45. Announcer: H. J. McKee.

2.45-3.0. Announcer: H. J. McKee.

3.0-3.15. Announcer: H. J. McKee.

3.15-3.30. Announcer: H. J. McKee.

3.30-3.45. Announcer: H. J. McKee.

3.45-4.0. Announcer: H. J. McKee.

4.0-4.15. Announcer: H. J. McKee.

4.15-4.30. Announcer: H. J. McKee.

4.30-4.45. Announcer: H. J. McKee.

4.45-5.0. Announcer: H. J. McKee.

5.0-5.15. Announcer: H. J. McKee.

WIRELESS PROGRAMME—FRIDAY (Aug. 8th.)

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

Orchestra
Characteristic Piece, "In a Monastery Garden" Kitching (S)
Petite Suite de Concert "Columbia Taylor
Selection, "Songs of the Hebrides"
Kennedy Fraser (1)
Canto, "The Travelling Man," by Lany Gregory

9.30
HAROLD SAMUEL
"Toccata in G Major" Bach
"In an Evening" Bach
10.0. WEATHER FORECAST and NEWS
S.B. from London.
Topical Talk
Local News.

10.30. Orchestra
Intermezzo, "Early Dreams" Wood
Symphony, "The Rose" Mylthton
11.0. Mr W F BLECHER, Lecturer in
Spanish to the U.L.C. Spanish Talk
11.5. Close down.
Announcer: H. B. Brennan.

NEWCASTLE.

3.45-4.45.—Concert: Elsie Tiley (Solo Piano-
forte) Elia Dent (Soprano), Bert Quick
(Violoncello).
4.45. 15 WOMEN'S HALF HOUR. C. M.
Eastern on "How Poetry Helps."
5.15-6.0. CHILDREN'S CORNER. Stories.

6.0-6.15. "Seaside" Half Hour
6.15-6.30. —Parade's Corner: R. W. Wheldon
on "Call Response."
7.0.—WEATHER FORECAST and NEWS.
S.B. from London.
Mr H. E. POWELL JONES. S.B. from
London.

7.30. An Hour of Musical Comedy.
MAY GRANT'S QUARTETTE PARTY
ETHEL FOWKES (Soprano)
MAY GRANT (Contralto)
ADAM NOCKLES (Tenor)
W. J. TAYLOR (Baritone).

"The Quetz Arts Ball" Ayer (6)
"Let (Soprano) and Tenor
When You are Wed to Me" Sid Jones (21)
Quartet
The Rajah of Bhing Monckton
Tenor Solo
"When a Puffin is Plump" Norton (21,
Quartet
The "Maid" San Toy Sid Jones (3)
Baritone Solo
"At My Lady's Feet" ("My Lady")
Soloist
Duet (Soprano and Contralto).

"Boat Song" Ayer (6)
Quartet
"When the Birds Begin to Sing" Monckton
Soprano, Contralto, and Baritone
"Kiss, Lad, Never Tell" Sid Jones (31,
Soprano Solo.
"Piccadilly" Cyril
Quartet
"Maiden" Norton (3).

9.0. An Hour of Light French Music.
THE STATION ORCHESTRA
Conductor, WILLIAM A. CROSBY
Selection, "Falks" Chaussegne
PHYLLIS HOWE (Soprano).
"Depuis le Jour" ("Louise") Charpentier
"My Dolly Dear" Severac
GEO. H. DITCHBURN (Bass).
Volcan Song ("Phéonon et Baucis")
Gounod (1).

"L'Amour de Moy" (French Chanson).
A. A. Century
Phyllis Howe.
"Open Thy Blue Eyes" Monckton
"I Would Believe" Chaussegne
GEO. H. DITCHBURN.
"Bour Epaie" Lally (1)
Prince Fa d's Song ("La Grande Duchesse")
Offenbach (1).

On Opera
Selection from the 1st Act of Cippola

10.0. WEATHER FORECAST and NEWS
S.B. from London.
Topical Talk.
Local News.
10.30. CHARLES WREFORD.
A humorous Musical Recital
"The Oratorio."
Some Short Stories
Jan's Cricket Match Jan Steiner
10.55.—Close down.
Announcer: W. M. Shawen

3.30-5.0.—Scottish Afternoon—The Wireless
Quartet. Feminine Topics. Isobel
Blaw (Soprano)
5.45-6.30. CHILDREN'S CORNER. Sunshine
Hour for Young and Old Kuldica. Peeps
into History—"Pyramids at Alexandria."
7.0.—WEATHER FORECAST and NEWS
S.B. from London.
Mr J. BARCLAY RENNET, Secretary,
Royal Horticultural Society of Aberdeen,
"The Centenary of the Society"
Local News.

7.30-8.0. Interval.
8.0.—Lady MARGARET SACKVILLE in a
Recital of her Poetry. S.B. from Edin-
burgh.

Operatic Night.

CATHERINE DUNCAN (Contralto).
WIDDOFF (Tenor)
THE WIRELESS ORCHESTRA.

8.30. Orchestra.
Overture, "The Huguenots" Meyerbeer
"Dance Baroque" Finch
Catherine Duncan.
"Che Faro" ("Orfeo") Villuck
"Divinites du Styx" ("Alceste") (1)
Walter Widdop.
"El trovatore le stadi" ("Tosca") Puccini
"Contra Alto" ("Aida") Verdi
9.5. Selection, "The Tales of Hoffman"
Offenbach

9.30. Catherine Duncan.
Overture, "Thy Power" ("Samson and
Delilah") Saint Sacus
"O del mio dolce ardor" ("Paride ed
Elena") Gluck
10.30. "Lend Me Your Aid" Gounod (1)
(With Orchestral Accompaniment)

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On Opera
Selection from the 1st Act of Cippola

10.0. WEATHER FORECAST and NEWS
S.B. from London.
Topical Talk
Local News.
10.30. Catherine Duncan
Softly Awakes My Heart Samson and
Delilah Saint Sacus
"When Aid Was Young" Faust (1)
Gounod
10.45. Walter Widdop.
The Prize Song ("The Mastersingers")
Wagner
(With Orchestral Accompaniment)
Orchestra.
Ballet Music from "Faust" Gounod
11.5.—Close down.
Announcer: A. M. S. Shawen

GLASGOW.

7.0-7.15. Topical Talk W. M. Shawen
Quartet Miss Robertson (Soprano)
1.45. 15 WOMEN'S HALF HOUR. Miss G. E.
Murray on Glasgow and West of Scotland
Scientific Science, on "House"

1.45. 15 WOMEN'S HALF HOUR
7.0.—WEATHER FORECAST and NEWS
S.B. from London.
Mr H. E. POWELL JONES. S.B. from
London.

7.30.—Capt. C. H. BROWN on "Proximate
Weather Change"

8.0.—Lady MARGARET SACKVILLE, in a
Recital of her Poetry. S.B. from Edin-
burgh.

Humour Dance—Song.
"All things are big with just, nothing that's
small but may be witty, if thou hast the
vein."

THE STATION ORCHESTRA.
Conducted by ISAAC LONGWICKY,
will play music by Glasgow Composers.
DORIS LEMON (Soprano)
WILLIAM MICHAEL (Baritone).
A. B. HENDERSON
(Entertainer at the Piano).

8.30. Orchestra
Overture, "Moths" Hutton
8.40. Doris Lemon.
Flea's Dream ("Lohengrin") Wagner
"O mio babbino" ("Cavaliere Rustico")
Puccini

8.50. Orchestra.
Suite, "Three Scottish Symphonic Dances"
Wagner Wright (1)

9.0. "Victorious, Victorious" Cameron
A. B. Henderson
Humorous Musical Sketch, "The Pious-
busties of a Popular Melody"
Bedbrook (22)

Humorous Song "The Music Hall Shades"
Fragson (7)
Maiden's Song "The Lesson of the
Widow" Anderson (13)

9.23. Entr'acte, "Forget Me Not" Macbeth
Doris Lemon.

9.27. Selected
9.30. Orchestra
Scottish Dances W. H. Cole

9.40. "Ye Ancient" Songs of Henry
"A Bodown Maid" (the new) (1)
10.0.—WEATHER FORECAST and NEWS.
S.B. from London.

Topical Talk.
Local News.

10.30.—Dance Music by HALL'S BAND,
relayed from Glasgow Hotel.

11.30.—Close down.
Announcer: Herbert A. Carruthers.

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

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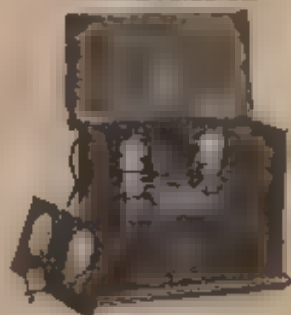
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Pieces in the Programmes.

A Weekly Feature Conducted by Percy A. Scholes.

MOZART'S COMIC OPERA "THE HAREM" II Saraglio.

(To be S.B. from London on Thursday)

ON August 1st, 1781, Mozart wrote, "yesterday young Stephanie [a librettist, gave me a libretto for an opera. It is a very good one on a Turkish subject. . . . The overture, the chorus in the first act, and the last chorus of the whole thing I shall work in Turkish music. I am so delighted at having to compose that the first songs and the terzet in the first act are already finished."

The *Harem* has had many performances in London, the very first one (1827) being, like ours to-night, in English. The British National Opera Company has often performed it.

INTRODUCTORY INFORMATION

Certain facts are to be understood before the opening of the Op.

CONSTANCE, a Spanish lady, has been carried off, with her lively young English maid BLONDA, to the palace of SELIM PACHA.

By gentle persuasion. She, however, a Spaniard, BELMONT, whose servant, PEDRILLO, has obtained a post under Selim and who is himself ostentatiously hanging about the palace, Pedrillo is in love with Blonda.

What follows below is a "Listener's Guide" and should be kept before the eye as the performance proceeds.

THE OVERTURE.

"Turkish Music" was a general name used in the time of Mozart and Beethoven for the noisier percussion instruments supposed, not altogether incorrectly to be characteristic of Turkish music. Thus the Overture is written for the usual orchestra (without Trombones), plus Piccolo, Big Drum, Cymbals and Triangle.

It is easily followed, consisting of three sections, (i) *Very quick*, (ii) *Moving slowly*, (iii) *Very quick*, of which the middle section is an anticpation of the opening Air of the Opera and the last section a curtailed repetition of the first section.

ACT I.

(The Garden of the Palace.)

The Overture leads directly to the first Air, in which BELMONT (Tenor) apostrophizes Constance.

Selim's overbear OSMIN (Bass) now appears, soliloquizing. In a duet, Belmont tries to attract his attention, at last he succeeds, but gets little out of him; Osmun doubts Pedrillo and is made additionally suspicious by the arrival of another stranger.

BELMONT leaves him, and PEDRILLO (Baritone) enters. In a brief dialogue, Osmun is more boorish than ever and breaks into a Song, *Oh, these dandies hither coming*. He next goes away, BELMONT returns, greets PEDRILLO, and inquires about Constance.

PEDRILLO proposes to introduce BELMONT to the Pacha as a skilful architect. BELMONT sings an Air, *Oh, how ardent beats my love-distracted heart*.

PEDRILLO now hides BELMONT, as SELIM PACHA (speaking part) arrives with CONSTANCE (Soprano), accompanied by the Janissaries (Turkish Guards), who provide appropriate music (see references to "Turkish Music" above).

Selim presses CONSTANCE to explain her melancholy, and she sings an exceedingly florid Air about the lover she has left, beginning, *Ah, I loved him, was so happy*.

Before Selim leaves, PEDRILLO hangs forward

BELMONT, the "architect." SELIM, pleased with him, promises to see him the next day.

The two Spaniards are, of course, overjoyed, and are entering the palace, when OSMIN bars their way, and warns them that he is as wary as the Pacha is pullible. They join in a Trio, in which OSMIN sings *March, march, march, get you gone*, while the other two sing *Ho, ho ho! We do not fear thee* (See Mozart's reference to this Terzet) about.

ACT II

(Again in the Garden of the Palace.)

This Act opens with a Song by BLONDA *Soprano* which she soliloquizes on love. She is in the Palace Garden, and Osmun now comes and claims her as his, her reply is spirited.

There can be singing a Duet, *I leave thee, but bid thee beware* (Osmun), and *Begone then, thy words I can spare* (Blonda).

Spoken dialogue now ensues for a few moments. CONSTANCE enters; BLONDA leaves her, after a few words of encouragement, and SELIM comes. His patience is well nigh exhausted, and he threatens Constance with violence.

Both of them retire, and BLONDA and PEDRILLO meet. Pedrillo tells Blonda that a rescue is planned for midnight.

CONSTANCE again appears, and sings two long Airs, bewailing her plight.

In contrast Blonda follows with *Oh, what pleasure, Oh, what joy!*

PEDRILLO next nerves himself for the rescue by singing *March to the battle!*

Presently OSMIN appears and PEDRILLO proceeds to make him drunk. Soon they are singing *Long live Bacchus*, and *Long life to the maidens, the fair ones, the dark ones*.

After this, PEDRILLO takes OSMIN off to bed, and then comes back to tell Belmont and Blonda how he has disposed of him. BELMONT sings *When the morn of joy are flowing*.

Finally CONSTANCE arrives, and the two pairs of lovers join in a long Quartet.

ACT III

(An open space before the Palace, with a view of the sea.)

SCENE I. It is midnight. BELMONT and PEDRILLO are outside the Palace. Pedrillo says he will make a tour of inspection, and leaves Belmont, who sings *On thee I place my confidence*.

After this PEDRILLO returns with the news that all is ready. He tells Belmont to go into a corner whilst he gives the signal. He sings a Rhapsody, *In Moorish lands afar from home, A maid was captive kept*.

Soon CONSTANCE appears at the window but at the moment of escape OSMIN appears, with a Negro Mute, who has warned him.

Guards arrive, the fugitives are arrested. Osmun sings a song of triumph.

SCENE II. This scene is in the Pacha's apartment, whither the prisoners are brought.

The Pacha finds that Belmont's father was his bitter enemy, and sentences him to torture.

CONSTANCE and BELMONT sing a duet, beginning *Oh, what a fate! What bitter anguish* (Belmont), and *Cease, my beloved, cease from grief and anguish* (Constance).

At the end of this duet, SELIM suddenly relents, and, saying that he despises Belmont's father too much to adopt his methods of treating an enemy, frees them all.

The Opera ends with a big Finale, in which the four principal characters sing the praise of the Pacha, Osmun grumbles at his clemency, and the Guards join in a general psalm.

Not a Moneyless Old Age for ME



I've just completed arrangements whereby I shall receive

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£3,450 at 55. Think of it, you men who imagine you cannot save! And, mind you, I haven't a large income. The margin between income and necessary expenditure is probably no greater than, if as great as yours. But, there is a margin, and it is out of it that, thanks to the Sun of Canada Investment Insurance Plan, I am making such sure financial provision for my later years and securing, also, immediate protection for my dependants. And it's all so simple!

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By Radio from the Stars.

By Joseph H. Elgie.

THE presence of Mars, the Red Planet, in the evening sky has revived the talk of "signals" being made from it. What the "signals" are, no one appears to have any idea. They are as unintelligible as the credulity of those who believe in them. They may be a sort of Martian SOS or they may simply be a reminder that the senders can do with something to relieve the dryness of their planet—and incidentally of themselves.

But on this occasion there is more than a hint among the credulous that some of the mysterious signals have their origin far beyond the Red Planet, far beyond the Solar System indeed. Where else but among the stars?

The Swiftest Messenger.

Let us, then, examine this amazing suggestion.

The stars, in the first place, are suns; each in its way as much a sun as is our own source of heat and light. Therefore, they are no more likely to be inhabited than is our sun. Indeed, we can definitely assert that the stars are not inhabited from which it follows that an SOS or any other signal cannot be transmitted from them.

Let us next, in view of the popular impression about these "signals," consider the time it would take a wireless message to reach us from the stars. While a little over a second would suffice to bring one from the moon, about three minutes from the present position of Mars, eight and a quarter minutes from the sun, and four hours from Neptune, the most distant planet yet discovered in the Solar System, it would take years for a message to come from the stars—even from those which are our nearest neighbours.

That certainly does not sound like a paying commercial proposition. The nearest star of which our astronomers have certain knowledge could not communicate with us in less than four years, even if the message were dispatched this very night. For the distance of this and other stars is not reckoned in millions of miles, but in billions and a wireless message, like other messages, takes time for its delivery. And the messenger with which we are entrusting its delivery is the swiftest in creation—light, a messenger so swift that in one second of time it can speed a distance equal to that of more than seven times round the earth.

An Immense Distance.

It is, however, when we come to consider the general body of the stars that we meet with distances which absolutely stagger one with their immensity.

There is, for example, that exquisite golden hooded orb, Arcturus, which may be seen low in the north-west towards the end of summer. It is easily found by continuing the downward curve of the Great Bear's tail.

We will suppose that our own instruments were capable of sending a message out to it and that the reply were dispatched immediately. Before that reply reached us, a period of no less than eighty-six years would have elapsed.

The Constellation of Orion.

An Arcturian News Bulletin, it is to be feared, would be just a trifle out-of-date. It would have been forty-three years or the way to us. If the Arcturian wireless operator just had time to tell us that another star was about to collide with Arcturus, we should receive his tragic message and see the flare up in the heavens, as a result of the collision, at the same moment. The light-waves which had revealed to us the awful doom of the Arcturians, would also have brought the fatal message. Until that message

was received—either visually or by wireless—we should still see Arcturus shining planet like in the serene night skies of summer.

If this is a staggering thought, how much more so is that associated with the glorious constellation of Orion, which will appear in the east-south-east when the dark nights of autumn arrive. In the upper left-hand corner of that majestic figure there is a brilliant red star named Betelgeuse. For "signals" to have been made from that star and received by us on earth they must have left Betelgeuse one hundred and fifty-five years ago. Or supposing we ourselves had signalled the star and been answered, that answer could not reach the earth in less than three hundred and ten years after we had signalled in the first place.

A Mysterious Signal.

Yet more overwhelming still is the thought of communicating with or receiving a communication from that other brilliant Orion star named Rigel, which is situated at the lower right-hand corner of the constellatory figure. We will suppose that we first communicated with it and asked for a prompt reply to be sent. We should probably have been dead nine hundred years before the reply could possibly have got here. It would be a "mysterious signal" indeed to our descendants.

Even that does not exhaust the remoteness of the stars. Another mighty leap outward into space can be taken from Rigel until a point is reached which must make even the most optimistic wireless enthusiast shrink from contemplating—and yet we can still be among the stars. It is a point occupied by clusters of stars from which if a wireless message of sufficient power had been sent two hundred thousand years ago it would only be arriving now.

So when anyone talks glitzy of "signals" coming from the stars it is evident, for the reasons (which are by no means all) I have endeavoured to set out that he does not fully realize the significance of the position. And when he is disabused as to the starry origin of those "mysterious signals" he has, I trust, gained at least some idea of the awful immensity of the universe in which he is privileged to dwell.

THE WIRELESS CHESS MATCH.

POSITION of Chessmen in the Wireless Chess Match up to and including the move on Thursday, July 31.

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Black. Mr W. Gibson (Lisgow).

An Aid to Drama.

By a Playwright.

NOT very long ago I heard a play of mine broadcast from a station of the B.B.C., and that evening I was the proudest man in London. Not, if you please, because thousands were listening to my immortal lines and silently applauding, but because, listening in the detached way permitted by wireless reception, I knew that I had written a good play. Without the glamour of the stage and the "dope" of scenery and lighting effects, my little story remained poignant and effective.

The Essential Test.

Now that, believe me, is the essential test of good drama. Try to sit through *Chu Chin Chow* with a bag over your head, and see if it is worth anything without the pretty lights and the fantastic costumes. I am prepared to bet that it is not. The effect of such a play as *Chu Chin Chow* is not truly dramatic—it is aimed, not at the intelligence, but at the senses. Whereas, since it cuts out lighting and costume and incense, broadcasting demands for its special purposes plays that have in their words alone the essential stuff of drama.

Thus, I suggest is a great benefit conferred by broadcasting on the cause of good art. For many young artists are now writing plays specially for the wireless medium, and so they are prevented at the outset of their careers from falling into the cheap stage-habits of the conventional theatre. The B.B.C. is not prepared to take out thin plots or vapid dialogue with Digby batters and wigs by Clarkson. For broadcasting purposes, the play is, first, last and always, the thing. The playwright must now stand on his own legs.

Elaborate Stage "Effects."

Which is a very good thing indeed for the drama. Every one who has written plays and every one who has to read plays knows just how easily shoddy and sloppy work can be made to look "just like real" by elaborate stage-direction and copious mechanical tricks. The adiest words ever given to a silly heroine may be made to seem convincing if the electrician is happy to flood the lady's figure in rose-pink light. But that sort of thing will not get across the ether. Essentially hollow words will ring very, very hollow at the business end of a crystal set. And nobody knows that better than the dramatist!

It is the tyro in playwriting who will benefit most of all from the discipline imposed by broadcasting conditions. The tyro's weak spot is invariably this tendency to elaborate stage-direction and device "effects" just because that sort of thing is easier to attend to than the hard graft of construction and dialogue. But the wireless audience cannot be seduced from concentration on the real play by the fact that the hero smokes Egyptian cigarettes or that the heroine has shingled hair. So the unhappy tyro, writing for wireless purposes, will require to take the trouble to write drama: for an unadvised temptation is at last out of the way.

Testing Plays by Wireless.

All of which is a good egg, a very good egg. I do not hesitate to say that the efforts of the B.B.C. in the direction of broadcasting plays will assuredly help us all to improve what the critics call "the present condition of the English Theatre."

And this will not necessarily tend to deprive the theatre-goer of his legitimate pleasure in fine scenery, pretty costumes and tricky "effects." But it will tend to make for a healthier reality in our plays. Let me suggest that every play should be tested, in the first place, over the wireless before an invisible audience. It would be a searching examination for some of our 'popular favourites.

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THE CHILDREN'S CORNER.

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A Day in the Life of an Indian Child.

Here you will 'ke our tak
the work. It is about the children who
live in far away India and are given from
100 to 1000.

It is only seven in the morning, yet every
body is up or Poonds in South India. The ob-
servation in the schoolhouse, a grey
concrete building with mud walls. The teacher
is holding a sort of inquiry. A big boy
has just brought in a small fellow, looking
very tired.

Where did you find him? asked the teacher.

It was his house. Ayva crying and
saying he was late.

The father had refused him two annas,
which is the price of the book you sold him
yesterday.

No wonder; there is no money anywhere
in the village. I suppose I can't sell my
books now. Then, turning to the captive, he
said:

When You're Late for School.

You are late and must be punished, Gopa.
What is your number in the order of arrival?
Seventeenth, Ayva.

Seventeenth "Ayva" is the master's decree.
A *ayva* is a penal exercise. You cross your arms
on your breast, hold the right ear by the left
hand and the left ear by the right hand, then,
keeping the lower parts of the legs straight, sit
down steadily until the teacher says "Up."
With them, and then stand up again. The
more or stays by to see that the child is doing
it right.

This is the time-honoured way of enforcing
punctuality. The first comer goes free. The
second has to make one *ayva*, the third two
up, and so on.

SABO STOPS A THIEF.

By E. W. LEWIS.



THE people who
lived in Prim
Court were
poor, but they used
to whisper some-
times among them-
selves and say that
Grandfather Hop-
kins had pots of
"gold." He never
seemed to spend
anything, and so
his neighbours
called him an old
"hoarder."

He keeps his money under the mattress," said one.

Or in an old bag under the floor," said another.

Now it was quite true that Grandfather
Hopkins worked very hard. He was never so
happy as when he was busy with a fret saw or
a paint-pot, and never noticed how the time
passed. He was usually late for his meals.

Laza's father, who had been killed in the
war, but who, when he was alive, had always
been clever with his fingers and fond of doing
things, had rigged up an electric bell in the
shed.

Sabo had often heard Mrs. Hopkins say,
Now, Laza, lay the cloth and ring your grand-
father up, so that he'll get his soup nice and
warm.

And Laza would press a button which was on
the side of the window-frame and the bell

in the school bells into full swing. Most of it
work is simple. The senior and junior boys
repeat the lessons together. Sometimes the
work is divided by division up to 100.
The first rule book is with 6 x 1 to 6. The
second follows with 6 x 2 to 12. The third
carries on, 6 x 3 to 18. So it goes on in a
tremendous sheet till the fellows lose heart
and their hearts become heavy.

Some fine mental arithmetic is done by the
precocious boys. Without slate or paper they
can work out the cost of
a lot of things at one anna, four pice
or head, and distribute the kind of a family
month 250 co-shares.

A Hard Taskmaster.

In his twelfth year Gopal went to school
to an English school in Tanjore. Gopal is now
a well-grown lad, and being brainy, finds it
possible to devote a great deal of his time to
play. His father, however, has become a hard
taskmaster. One morning, having to finish a
match of marbles before school, Gopal was up
early and busy at that great occupation, when his
father appeared with a tender branch of the
tamarind tree, which is the Indian equivalent
of the birch. The other fellows ran away to the
river for swimming, and Gopal took his thrashing
till very little was left of the tamarind branch.
Gopal sat awhile at his books, bemoaning his
lot, till he turned round and saw that his father
had gone away. Thereupon he threw down his
books and rejoined his play-mates, who called
him on his punishment asking how many tamarind
fruits he had consumed, and what then
the punishment was.

The river was high and not too wide. Many
people were bathing in the sheltered part of
the ford which was safely built. The boys
began to jump down into the water near them
from the parapet wall about 12 feet high. In

and run down in the shed, and Grandfather
Hopkins would toddle up the yard.

Sabo had thought what a wonderful thing that
bell was and once he had rung it just to see for
himself how it worked, much to the disgust of
Grandfather Hopkins, who came hurrying into
the house half an hour too soon for his tea.

It was also true that the old man kept his
money in the house, for he would not trust it
out of his own keeping.

One night, Mrs. Hopkins and Laza had gone
to the pictures, and the old man was working in
the shed by the light of a candle. Sabo had
been left in charge, and was sitting in his usual
place at the kitchen window.

All at once he heard footsteps on the landing
outside, and a noise as if someone were trying to
fit a key in the lock. The next moment the door
opened silently and a man glided in, with a
cap pulled down over his eyes and a scarf muffled
round his neck. He closed the door softly
behind him.

Sabo did not know who it was, but somehow
he felt that he was not a nice man. He carried
an electric torch, which he flashed round the
room, and, seeing the supper that was laid upon
the table, he helped himself, and went about the
kitchen munching and flashing his light into
every corner.

Sabo thought that he was a very rude man;
and he felt that he had no business to eat up
Laza's supper.

Then he thought of the bell. He waited
until the man's back was turned, and then,
stepping on tip-toe, he pressed the button as
hard as he could.

A few moments later there were footsteps
Continued at the foot of the next column.

India the jump is not taken like a dive, but
the body is erect, with the legs so crossed
that the feet are in front of the head, and the
cavity the displaced water rises
in a vertical column growing bigger and bigger
and then falling in a shower all round, very
pleasing to the eye, but wetting the hair of those
near. It takes some practice to jump with
safety and effect, and some clumsy fellows can
never hit it.

That day Gopal and his friends were at school
jumps, and made a great deal of noise, and
agreedable. An elderly gentleman threatened to
catch Gopal and make an example of him. Im-
mediately they dived and cleared half the
river before their heads reappeared above the
water. They had to land at a ford much lower
down. Much time was thus lost, and when
Gopal reached home to eat his breakfast before
going to school, his father was exceedingly
angry and ordered him to go away without
food.

In class Gopal was not at his best, being both
hungry and rebellious at heart. When lunch-
time came, someone told him his mother was
waiting outside for him with food, boiled rice,
dahl, mashed bananas, sweet curries, and pickles.

An Unlucky Game.

School closed at five in the evening, having
began at ten in the forenoon, with no relaxation
or games between whiles. Twilight is very brief
in South India, and as Gopal had to go to
school, he generally made haste at the end of
school. Having put away his books, he and his
friends would go to the common ground of the
village and play games till dark. The way home
was beguiled by leap-frog. Each one, as he
came to the front of the company, would bend,
not too low, and the others would clear him,
one by one, by putting a gentle palm on his back.

Gopal and two or three others, being light
and spry, would occasionally stiffen the game.
The front boy would not bend, but stand erect,
one foot well in front of the other, while his
comrades, placing their hands on his shoulders,
would rise above his head and come down on the
other side. To-day one of these mates of
Gopal suddenly sat down plump at the moment
that Gopal, having taken the rise above his
head, was about to leap forward. So the
poor fellow came down heavily, face foremost.
He had several bruises, some of which bled.

When he got home his mother saw Gopal's
tell-tale face, learned the story and gave him a
good wash, applying oil to the injured parts.
They agreed that the father should not know,
and long before he returned home Gopal had
got into bed and fallen asleep.

Continued from the previous column.

on the stairs, and Grandfather Hopkins came in.
The man pushed him roughly against the table,
and disappeared, hanging the door behind him.

When Grandfather Hopkins recovered him-
self, he lit the lamp with trembling hands; and,
seeing the kitchen all upset, he knew who the
visitor had been. "Thief, thief," he cried,
and hurried away into the bedroom, piping in
his voice: "My money! My money!"

But when he came back into the kitchen he
had a heavy little bag in one hand and a pouch
in the other; and he sat down at the table under
the light of the lamp, and counted his treasure.
As he did so, he began to chuckle, for all was
safe.

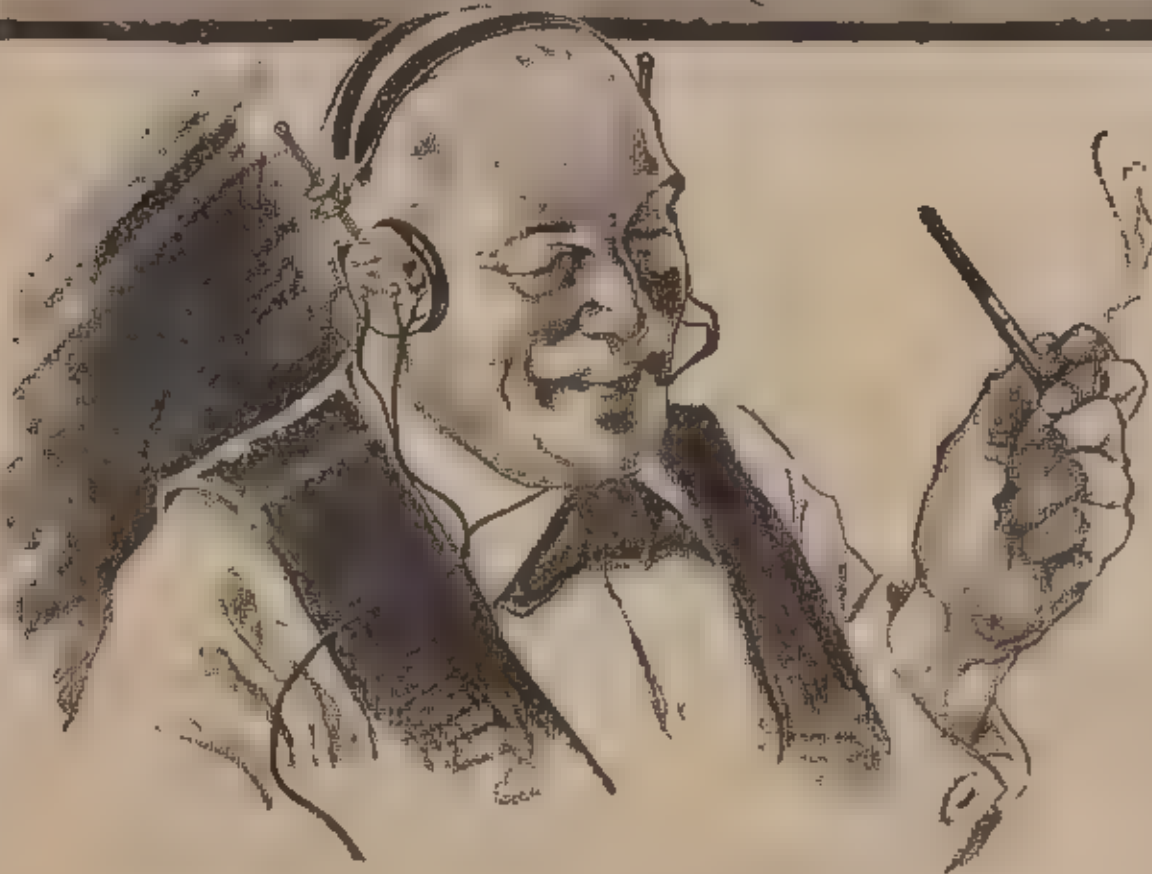
Then he looked up and saw Sabo.
'You rang that bell,' he said.

Yes, I did," Sabo replied.

Good little man," chuckled the old fellow,
and patted Sabo on the back.

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16 years'
experience

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TUNGAR RECTIFIERS

IMPORTANT NOTICE

AN INJUNCTION WITH COSTS AND DAMAGES

ON the 4th July, 1924, in the High Court of Justice,
Chancery Division, Mr. Justice Tomlin, in the action of

THE BRITISH THOMSON-HOUSTON CO., LTD.,
(Plaintiffs)

V.

THE CITY ACCUMULATOR CO.,
(Defendants)

granted an injunction against the said CITY ACCUMULATOR CO., restraining them from infringing THE BRITISH THOMSON-HOUSTON COMPANY'S registered Trade Mark "TUNGAR" and from passing off goods not of THE BRITISH THOMSON-HOUSTON COMPANY'S manufacture or merchandise as or for the goods of THE BRITISH THOMSON-HOUSTON CO., LTD., together with damages and costs.

*Legal proceedings will be brought against
Infringers whether importers, sellers, or users,
to restrain them from unlawfully using
the said Trade Mark "TUNGAR."*

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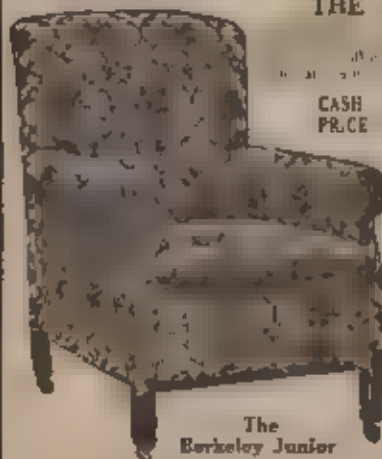
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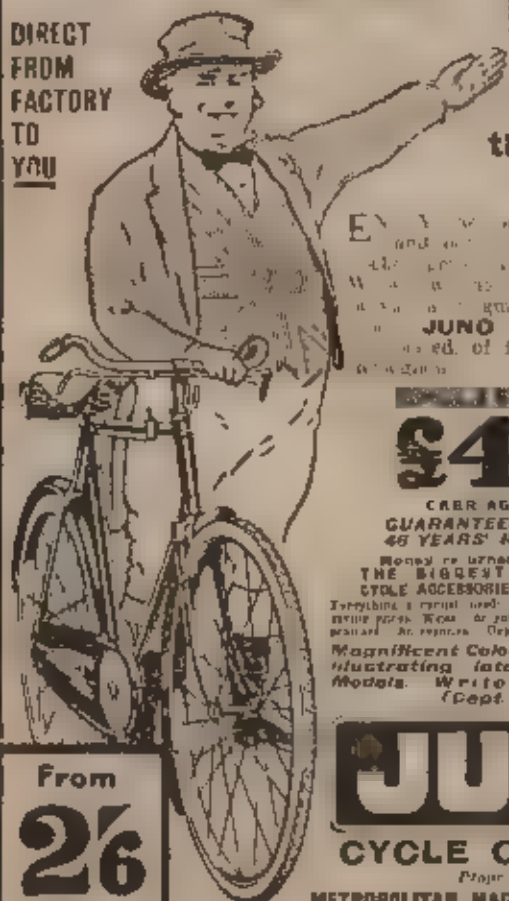
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Leeds—Bradford Programme.

Week Beginning Sunday, August 3rd.

SUNDAY, August 3rd.

8.0-8.30 } Programmed S.B. on 1st
8.30-10.30 }

MONDAY, August 4th, to THURSDAY, August 7th, and SATURDAY, August 9th.
5.0-6.0 CHILDREN'S CORNER
6.0-6.15 S.B. from London

FRIDAY, August 8th.

5.0-6.0 CHILDREN'S CORNER
6.0-6.15 S.B. from London
6.15-6.30 LIONS S.B. from London
6.30-6.45 Local News
6.45-7.00 S.B. from London

Local Programme.

THE PROTHK STRING
QUARTETTE.

ELROY PROTHK (1st Violin).
REYNALD GODLEY (2nd Violin).
J. S. MCNOL (Viola).

ARTHUR LAYNES (Violoncello).
ETTY FERGUSON (Contra).

FRANK CRAWSHAW (Recitals).

GEORGE JEFFERSON (Accompanist).

8.0. String Quartette in G, Op. 18, No. 1.

Allegro; Adagio Cantabile; Scherzo
Moderato; Allegro Molto Quasi Presto.

8.25 "Cello Song" M. Hebert

Blueprints from the Chattering
Box (1st Violin)

"Fiskay Love" Keating (1st Violin)

A Feast of Lanterns (1st Violin)

8.45 Pop Concert

Byron to the Sea

Handy Handkerchief

Savory Dance Theme in F Major

Drunk Archer

8.45. Frank Crawshaw

Recital, The Creation of Saint McGee

W. H. Stevens

9.0. String Quartette in G, Op. 18, No. 1

Allegro; Adagio Cantabile; Scherzo

9.10. Etty Ferguson

Boat Song "The Boatman's Boy" (1st Violin)

Danny Boy "The Boatman's Boy" (1st Violin)

Where Go the Boats "The Boatman's Boy" (1st Violin)

Young Night Thought "The Boatman's Boy" (1st Violin)

La Canto "The Boatman's Boy" (1st Violin)

9.25 Arthur Baynes

Recital, The Boatman's Boy

W. H. Stevens

Recital, The Boatman's Boy

W. H. Stevens

9.35 String Quartette in G, Op. 18, No. 1

Allegro; Adagio Cantabile; Scherzo

9.45. Frank Crawshaw

Recital, Wakeford Square Opera School

W. H. Stevens

10.0. WEATHER FORECAST and NEWS

S.B. from London

Topical Talk

Local News

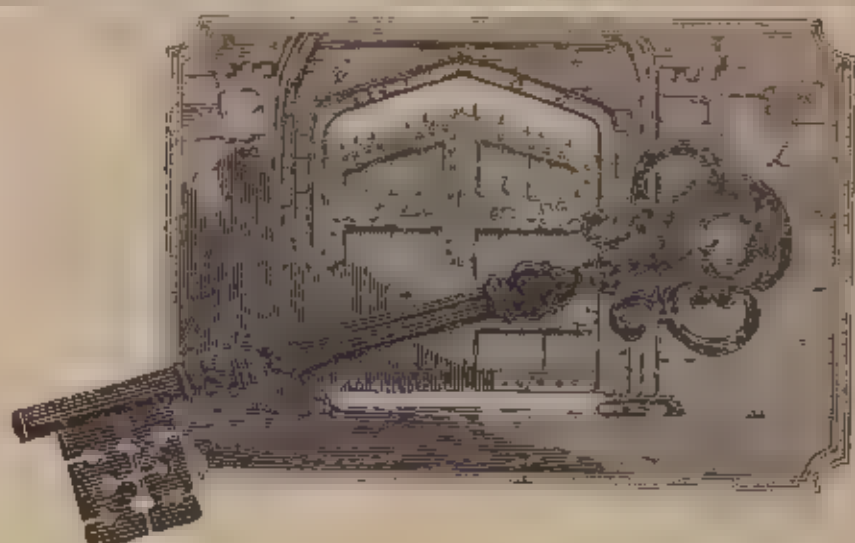
10.30. Close down

Announcer: G. P. Fox

A number against a musical name indicates the name of its publisher. A key list of publishers will be found on page 257.

ALTERATIONS TO PROGRAMMES, Etc.

AS THE RADIO TIMES goes to press many days in advance of the date of publication, it sometimes happens that the S.B.C. finds it necessary to make alterations or additions to programmes, etc., after THE RADIO TIMES has finally gone to press.



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- 3. CONDENSERS:** The Ethophone V is tuned by adjusting two condensers and reaction coil. The primary condenser is marked, whilst on its right can be seen the anode condenser.
- 4. REACTION:** The moving Coil is behind the panel, which is metal-shielded on the inner side to prevent even the slightest hand capacity effects. The movement is geared down in a ratio of 5 to 1. Reaction in the Ethophone V is employed in such a manner that the user cannot oscillate his aerial except by willful misuse. The instrument has been fully approved by the Postmaster General, and is licensed under Marconi patents.
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- 6. SWITCH:** In the centre position, all batteries are disconnected. In the upper position ("Low Power"), the radio-frequency and detector valves and one power valve (audio-frequency amplifier) are in operation. In the bottom position ("High Power"), the radio-frequency detector and both power valves function.
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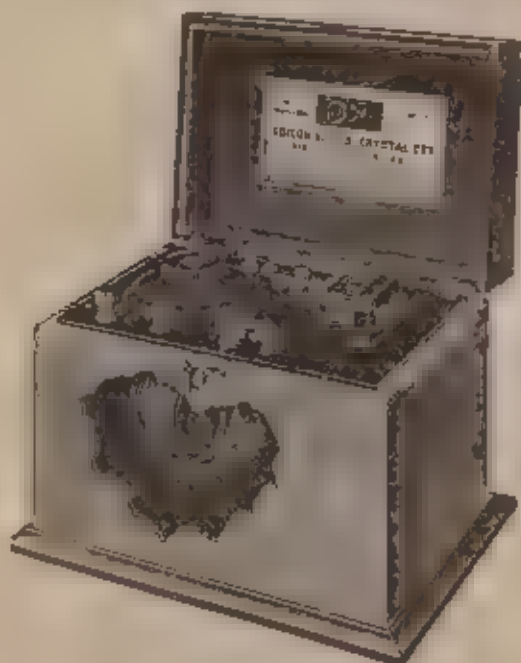
Radio Times, 1.8.29

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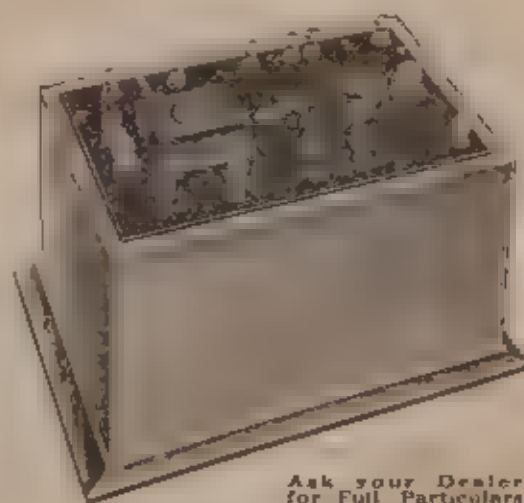
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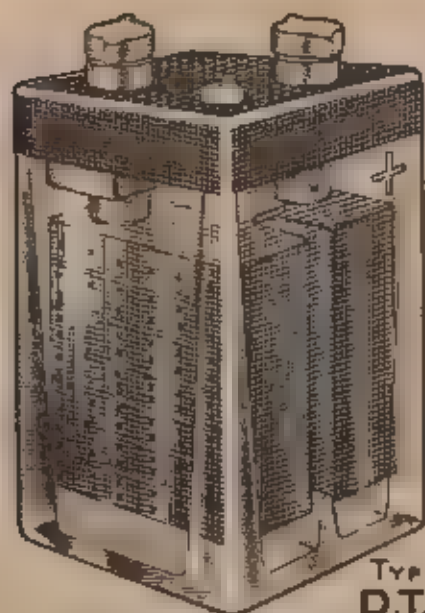
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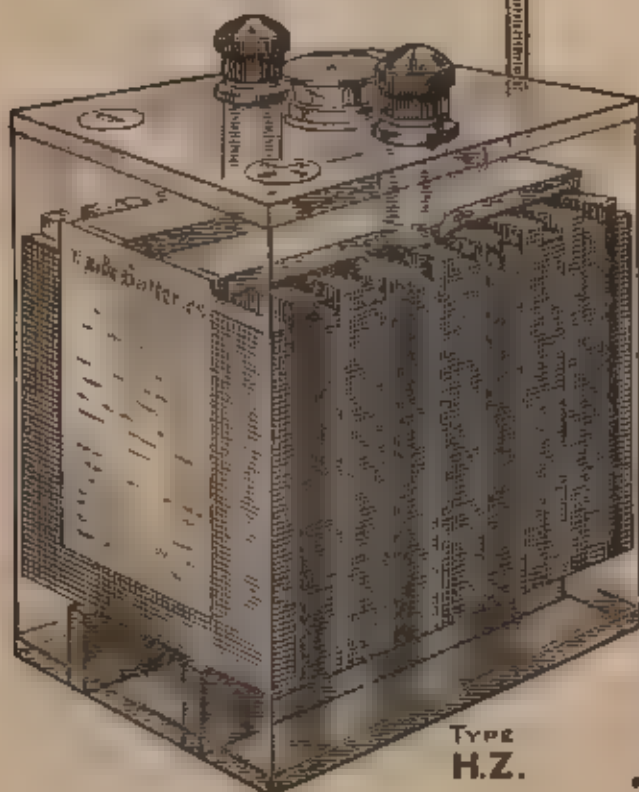
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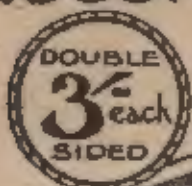


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3432	SCENTRIC, One Step	-	-	-	-	
	AM FIM LOO, Fox Trot	-	-	-	-	
3441	CARA, Five Step	-	-	-	-	
	DORA, Tango (Columbia Dance Orchestra)	-	-	-	-	
3442	BEFORE YOU GO, Fox Trot	-	-	-	-	
	GOO-GOO, Fox Trot (from "To-Night's the Night")	-	-	-	-	
3443	IT'S YOU, Fox Trot	-	-	-	-	10-inch, 3/- each.
	THE BEST OF EVERYTHING, One Step (from "Stop Flirting") (Introducing: Someone) (Savoy Havana Band)	-	-	-	-	
3450	RIVIERA ROSE, Waltz	-	-	-	-	
	YOU'RE IN KENTUCKY SURE AS YOU'RE BORN, Fox Trot	-	-	-	-	
3458	WHAT'LL I DO, Waltz	-	-	-	-	
	BURNING KISSES, Fox Trot	-	-	-	-	
3459	ROSEBUD, Fox Trot	-	-	-	-	
	SHINE, Fox Trot	-	-	-	-	

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3435	PASADENA, Fox Trot	-	-	-	-	
	I LOVE MY CHILI BOM-BOM	-	-	-	-	
3434	MARCHETA, Waltz	-	-	-	-	
	DEAR LOVE, MY LOVE, Waltz	-	-	-	-	
3455	MEMORY LANE, Waltz	-	-	-	-	
	HUGO, One Step	-	-	-	-	
3439	TAKE A STEP, Fox Trot (from "Toni") (Introducing Put a Little)	-	-	-	-	16-inch, 3/- each.
	TELL ME IN THE MOONLIGHT, Fox Trot	-	-	-	-	
3440	WHY DID I KISS THAT GIRL? Fox Trot	-	-	-	-	
	THE LITTLE WOODEN WHISTLE WOULDN'T WHISTLE, Fox Trot (Columbia Novelty Orchestra)	-	-	-	-	
3409	ARCADY, Fox Trot	-	-	-	-	
	WHEN LIGHTS ARE LOW, Waltz (Played by The Romancers)	-	-	-	-	
3394	GIGOLETTE, Fox Trot	-	-	-	-	
	WALTZ ME TO SLEEP IN YOUR ARMS	-	-	-	-	

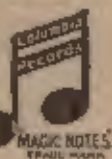
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As a wireless enthusiast you must have been intrigued by some of the mysteries of Radio transmission and reception. Why not spend a few pleasant hours on your holiday in reading the explanations so lucidly given in MODERN WIRELESS?

For instance, as a Crystal user you will eventually change over to Valves. There are several particu-

larly helpful Articles for you here. One describes how Valves may be selected for their actual job, and how their peculiarities may be actually drawn up in a diagram (called a characteristic curve) for all to see. Another article gives full instructions for building an efficient One-Valve Set at a very low cost.

To describe all the Articles would take too much space—it is sufficient to state that they have been selected with very great care specially to present a holiday appeal.

In view of the heavy demand (last month's issue was quite sold out within 10 days) it is advisable to get your copy to-day.

Read These Special Articles:

Multi-stage H.F. Amplification.

By John Scott-Tyng, F.R.S.E., A.M.I.E.E.
Scientist or hobbyist every Valve enthusiast succumbs to the desire for long distance reception. He wants to add further high frequency amplification valves. How is he to do it? This Article will show him dozens of different circuits, all of them practicable and extremely interesting, comprising more than one stage of H.F. amplification. This Article alone will cause every reader to keep his eyes peeled for the day when he decides to add a H.F. Valve to his Set.

How to Make a Single-Valve Reflex Set.

The past year has been responsible for the serious development of the "Reflex Circuit"—a means of making one valve amplify at both high and low frequencies. The first practicable solution of this problem was the famous S.T.300 Circuit first described in Modern Wireless a year ago. This Article shows how to make an excellent one-Valve Set capable of giving loud signals over a long distance if the instructions are carefully followed.

Remote Control of Wireless Sets.

By G. P. Kendall, R.S.E.
It is often more convenient to have the Loud Speaker some little distance from the Receiving Set—in the garden, perhaps, or in an adjacent room. Hence the necessity for remote controls backwards and forwards to switch on and off? No, not if remote control is fitted. It is quite a practicable matter, for instance, for the Set to be placed in the attic, the Station tuned in, and the Receiving afterwards controlled from any point in the house—any room being used for Loud Speaker or Headphones. This Article shows you clearly how this is done.

How I Design my Wireless Sets.

By Percy W. Hurdie.
As a former Editor of "Wireless World," also of "Compuet," and now Assistant Editor of Modern Wireless and Wireless Weekly, no one has had better opportunities of coming into close contact with the average Radio enthusiast than Mr. Percy W. Hurdie. His reputation for designing sound, interesting and new Sets is known from London East to John o' Groats. In this chiefly and interesting Article Mr. Hurdie lifts the veil and shows the various stages necessary in the construction of a Set, from the bare plan to the finished product. Such an Article must be of most practical value to anyone building a new Set.

A Beginner's Crystal Set.

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