



THE OFFICIAL ORGAN OF THE B.B.C.

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EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES OF THE BRITISH BROADCASTING COMPANY.

For the Week Commencing
SUNDAY, JANUARY 20th.

LONDON	CARDIFF
ABERDEEN	GLASGOW
BIRMINGHAM	MANCHESTER
BOURNEMOUTH	NEWCASTLE

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WHAT'S IN THE AIR?

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

SUCH great interest was aroused by the recent broadcast of Evensong from St. Martin-in-the-Fields, and such exceptional appreciation expressed, that we are endeavouring to make arrangements for the regular transmission of a complete service, acceptable to all denominations, probably once a month to start with. It is hoped that a suitable service can be provided to each town, rather than that one should be simultaneously broadcast.

The matter is being discussed with the Advisory Committee on which practically all the Churches are represented. It is, of course, a delicate subject, and one of no small difficulty. Our gratitude is due to the Vicar of St. Martin's for his co-operation in the initial venture. It has not passed without some unfounded criticism being directed against himself. His broad-mindedness and enthusiasm must, however, have brought their own reward in the letters and messages of appreciation with which he has been practically overwhelmed.

Many months ago, when we were anxious to broadcast a certain service of great public interest, the objection which caused the refusal was that it was unfitting that a sacred service should be received in any sort of place and under any sort of circumstances. It is difficult to follow this. The nature of the service cannot be prejudiced by any irreverence in reception, and one would have imagined that those to whose care is committed such responsibilities would welcome the opportunity of extending the influence of their beneficent activities into quarters otherwise inaccessible. Nothing but good can result.

The other objection one hears is that people will be kept from going to church if they can

hear a whole service in their own homes. Even if this be so, one can only judge on final results, and these are surely not dependent on attendance figures. Few achievements have produced so much appreciation, and it comes particularly from those who are unable to attend church at all.

This week we send selections from the operas "Tristan and Isolde," "Siegfried," and "Hänsel and Gretel." We are also going to try in London the effect of a regular short reading from famous poets. In the recent interview published in "The Radio Times," Mr. A. S. M. Hutchinson made a suggestion to this effect. We have done something in the same line already, and we should like to know if it is acceptable now. All stations will be putting in this feature on trial at an early date. Some already have it.

The new studio at 210 is in operation. It has four times the capacity of the old one, and "damping" is only carried out to about a quarter of the extent. From this room practically all the musical transmissions will take place—vocal and instrumental. Much larger orchestras can be accommodated, and, as has been proved in the experimental broadcasts from it, there is a more natural effect conveyed by the limited echo.

In a few months it may be possible to use the two studios at the same time on different wave lengths. We have at last secured permission to proceed with the erection of the new transmitting station, the site of which was approved by the Postmaster-General over six months ago. The delay was due to the difficulty of getting the plans and the site passed by the local authorities.

(Continued overleaf on col. 2.)

Readers' Own Humour.

Funny Stories Told by Listeners.

IN recent issues of *The Radio Times* readers were asked to send accounts of funny things they had seen and heard in connection with wireless. This week we print a further selection, for which payment will be made:—

A little girl was travelling in a crowded compartment of a local train the other day when her excited chattering provoked a severe reprimand from her mother.

"I won't be quiet," replied the child, decisively, "daddy isn't 'listening' now!"—**H. WHEELER, Wenvoe, near Cardiff.**

Encore!

A typical collier had been invited to listen for the first time. At the conclusion of a dance played by the Savoy Havana Band he applauded loudly and remarked: "Wind it up again, guv'nor! Let's 'ave that one again!"—**J. WOOD, Norton Canes, near Cannock, Staffs.**

While we were listening the other evening, I noticed my little boy looking very earnestly at my valve set.

As he evidently had something at the back of his mind, I said: "Studying it out, Brian?"

"I was just wondering," he answered, "if I put the aerial wire where the earth wire is, and the earth wire where the aerial is, would the words come through backwards?"—**P. BOURGETT, East Boldon, near Newcastle-on-Tyne.**

A loud-speaker in a shop window had attracted a large crowd of pedestrians. One girl pointed innocently to a sign which read "accumulators

charged," and said, rather nervously, to her friend: "Does that mean that they charge people who gather around to listen?"—**W. H. SAINES, London, S.W.**

My little girl happened to wake up the other night just as I was delightedly listening to America. Her 'phones, which always hang at her bedside, were immediately clapped to her ears and she was told that America was speaking.

After a moment, she said, with a bewildered look on her face: "Mummy, is there a war on in America?"—**Mrs. ROBERTS, London, W.**

A wireless enthusiast invited his brother, who lives in a wild part of the country, to listen. When the Savoy Orpheans were playing, the latter was handed the headphones. When the music was over, he heard a clapping noise which he thought was someone smacking the "orphans"! So, forgetting himself completely, he shouted into the 'phone: "Leave the kids alone! They were playing their best!"—**G. YOUNG, Scoton Burn.**

Walking near a hospital with a friend not long ago, I remarked on the sweet, heavy odour wafted from some of the windows.

"All hospitals smell like that," said my friend. "What's the reason?"

"Oh," I replied, "chloroform, or ether, I suppose."

"I'm sure it must be chloroform," returned my friend, seriously, "for I've never noticed the slightest smell when broadcasting is going on, and ether is what they make wireless waves out of."—**W. L. BAILLIE, London, S.E.**

What's in the Air?

(Continued from the previous page.)

By the end of January the automatic time signalling from the Royal Observatory will, we expect, be in operation. The success and the enormous interest evoked by the broadcasting of Big Ben from all our stations has set us investigating the possibility of regular transmissions of this method of time-keeping as well. So we may have the scientific and the romantic both.

I am asked to express the gratitude of the Programme Staff, the Uncles and Aunts and Announcers in particular, for the most kind and almost embarrassing manner in which gifts of all kinds were showered on them at Christmas time. The Aberdeen Station Director kept a record of these tokens of good-will, and forwarded the list to Head Office. Our Mr. Smith, Press Representative—happily restored to us after his Parliamentary ventures—seized upon this, presumably with a view to using it to advantage if ever he hears aspersions cast on the generosity of Aberdonians again—he hark from those parts. Perhaps as a guide to local acceptability of programmes this criterion may compare with the more natural one of licence issues. If other Station Directors desire to vie with Aberdeen, they had better communicate with Mr. Smith at once.

By the time these words appear in print Parliament will have been formally opened by His Majesty the King. The speech from the Throne will either have been broadcast, or it will not have been broadcast. This is of course, a platitude. But there is occasionally a great deal behind even a platitude, and we must leave it at that for the time being.

A Famous Irish Song.

The Story of "Kathleen Mavourneen." By A. B. Cooper.

"**K**ATHLEEN MAVOURNEEN" is regarded by many as the greatest of all Irish songs. Its charming words, so truly lyrical, were written by an Irish woman, and its equally charming and fitting air by an Englishman.

"Mavourneen," of course, is not the surname of the fair Kathleen, as some suppose, but simply means "Darling." Thus the title of the song, in plain English, is "Kathleen my Darling." But was there ever a real Kathleen, as there was a real Annie Laurie, and a real "Pretty Jane"? I fear no one will ever know, for our information concerning Mrs. Julia Crawford, who wrote the verses, is of the scantiest.

A Little Known Poetess.

Mrs. Crawford was born in County Cavan, but her family removed to England when she was young, and she lived the greater part of her life in Wiltshire. Nevertheless, she never seems to have lost her deep attachment to her native Erin, for she wrote many songs, and they are almost all Irish songs. In the year 1840, in fact, she published a volume of Irish songs, set to music by Frederick Nicholls Crouch, which included the famous "Kathleen Mavourneen," which had originally appeared, as had most of the others, in a magazine conducted by that famous novelist of the sea, Captain Merryat.

Like a good many other composers of good music, F. N. Crouch seems to have got more kicks than his pence from life.

One can form a mental picture of the way the great song came to him. It was on the banks of the Tamar, in Devon. That was before the railroad ran into all the nooks and corners of

the land, and, as he was a commercial traveller at the time, travelling for a Cornhill firm who were metal brokers, he was riding on horseback.

Composed on the Impulse.

He had lately seen Mrs. Crawford, and had obtained her permission to set her lovely words to music, and one can imagine the impulse seizing him as he jogged along, his slighting and sitting by the river side, and crooning to himself the famous words:—

Kathleen Mavourneen, the grey dawn is breaking.

The horn of the hunter is heard on the hill;
The lark from her bright wing the light dew is shaking.

Kathleen Mavourneen—what! slumbering still!

Oh, hast thou forgotten how soon we must sever?

Oh, hast thou forgotten this day we must part?

It may be for years, and it may be for ever.

Oh, why art thou silent, thou voice of my heart?

Kathleen Mavourneen! Awake from thy slumbers,

The blue mountains glow in the sun's golden light,

Ah, where is the spell that once hung on thy numbers?

Arise in thy beauty, thou star of my night.

Mavourneen, Mavourneen, my sad tears are falling.

To think that from Erin and then I must part.

It may be for years, and it may be for ever.

Then why art thou silent, thou voice of my heart?

We have missed a little imaginative reconstruction with the incident, but we have Crouch's own account of the composition of the song. "The words," he says, "instantly attracted my attention by their purity of style and diction. I sought out the authoress, and obtained her permission to set them to music. Leaving London as traveller for a Cornhill firm, whilst prosecuting my journey towards Saltash, I jotted down the melody on the historic banks of the Tamar.

Succumbed to Fascination.

"On arrival at Plymouth, I wrote out a fair copy of the song and sang it to Mrs. Rowe, the wife of a music publisher of that town. The melody so captivated her and others who heard it that I was earnestly solicited to give it for the first time in public at her husband's opening concert of the season. But certain reasons obliged me to decline the honour.

"I returned to rest at my hotel, and, rising early next morning and opening my window, what was my surprise to me, on a hoarding right opposite, a large placard on which was printed in the largest and boldest type: 'F. Nicholls Crouch, from London, will sing at P. E. Rowe's Concert "Kathleen Mavourneen," for one night only!'

"Amazed and confused at such an unwarrantable and unauthorized announcement, I hurriedly completed my toilet, took my breakfast, and rushed off to Mr. Rowe's warehouse. But, despite my reluctance, and overcome by the entreaties of the fascinating Mrs. Rowe, I appeared and sang the song to a crowded audience, with the most enthusiastic applause."

Perhaps, like many another man of genius, Crouch had not a good head for business, for he parted with the copyright of "Kathleen Mavourneen" for £10.

["Kathleen Mavourneen" will be sung by Miss Margery Phillips at London Station on Sunday afternoon, January 20th.]

Learning By Wireless When Asleep.

Remarkable Experiments on the Sub-conscious Mind.

DR. H. GERNSBACK, writing some years ago in *Science and Invention*, pointed out that there was every probability that the human mind could be reached while a person was asleep, and suggested that a machine might be used for educational purposes during this period.

To many people, this suggestion first appeared fantastic, but the reasoning was so good that experiments have since been made to test the possibility of teaching by wireless while the pupil is asleep.

It is now well known that what is commonly termed the sub-conscious mind never sleeps.

The sub-conscious mind, or, more accurately, the unconscious mind, is recognised to be the store-house of our memories. Without this store-house it would be impossible for us to accomplish or control anything, as it furnishes us with the information—the data based on experience, which guides our actions.

The Part of You That Never Rests.

Our memory has been described as the most wonderful filing system that is known, and enables us to perform the greatest portion of our daily acts without any conscious effort. In sleep, our memories are alive and active, whilst, apparently, the higher faculties of the mind are dormant. Dr. Gernsback, in his article, based his suggestion on the knowledge that the sub-conscious mind never sleeps. The problem, he stated, was to devise an instrument which would rouse the sub-conscious mind and make it function during the sleeping period. The article attracted the attention of Mr. J. N. Phinney, described as the chief Radio man of the United States Navy, who, as a result, began a series of experiments at the U.S.A. Naval Station of Pensacola, Florida.

Tried on a Doctor.

In a recent issue of the *Public Ledger*, of Philadelphia, Mr. Phinney is reported to have declared that he had conclusively proved from actual results obtained that many difficult subjects can be easily learned while asleep. "I have become firmly convinced," he said, "from these observations that, according to psychologists state, a part of the human brain continues to function while the body and the unconscious brain remain dormant, and that the device explained by *Science and Invention*, therefore, will do its work. This system was first tried on a doctor. About a year ago, twelve medical officers of the U.S. Navy started our flight course. They were to qualify as pilots, taking all ground school subjects, including radio. One, who was a noted specialist in psychology, expressed a willingness to try my method, after I had explained the foregoing ideas.

An All Night "Sitting."

"I equipped his bedroom with a key and the regular aviation radio telephone head set, and myself and assistants sent radio code to him all night. We started at 10.30 p.m. He had copied with pencil about 30 minutes and then retired, dropping asleep about an hour later. He had acquired a speed of fifteen cipher groups per minute in class, but had never copied plain English words or sentences.

"In the morning he was able to copy radio with much greater ease, and while no definite test was made to establish the exact amount of gain, he expressed himself as entirely convinced of the practicability of the idea, and the result of his report, naturally, gained me the coveted opportunity to conduct further experiments with official sanction.

"I was also assured that, if further experi-

ments were equally successful in demonstrating my claims, a request would be granted for the special automatic sending apparatus I had so long desired in order to incorporate my 'Learn while you sleep' method of instruction here.

Wonderful Results.

"It was now proposed to develop my system as a very material aid to the present system. Our prescribed syllabus of instruction covers a period of twenty-one weeks, and the student is required to make a predetermined rate of progress week by week in order to remain in the class. Those students whose rate of progress had been consistently unsatisfactory for some time, and who would, therefore, have been dropped from the class within the week, were told something of my successful experiences with my 'Learn While You Sleep' system. Naturally, they jumped at the chance. Seventeen students volunteered for this experiment with the following results the next day. (1) One of the seventeen copied five words faster than he had ever been able to copy previously; (2) Four copied two words faster, and one nearly two words faster; (3) Three copied one word faster and not only half a word faster.

"The instructors derive some amusement to compensate for their loss of time and sleep in watching the facial contortions, restlessness and muttering caused by the induced dreams of the students. Errors and erratic sending cause restlessness and muttered protests. Stoppage of sending when changing operators will arouse them.

"This system is now being tried out on officers of the class just started under much more favourable conditions, real beds replacing the wooden benches and tables. Students are no longer confined to last-chance tests."

How It Is Done.

The method of teaching is quite simple, and has been described by Dr. Gernsback himself.

"An ordinary phonograph would, of course, not do. There would be too many grating, jarring noises which would distract the sleeper's attention. We must have a mechanism that is soft in action, gives no extraneous noises, and will not wake up the sleeper. We have such an apparatus in existence to-day—the telegraphone.



BROADCASTING MADAME BUTTERFLY.

Voice in 'phones (interpolating opera): "Butterfly has just entered."

"Its action is based on a steel wire, which is fed across and very near to the poles of an electro magnet; the magnet is polarized by currents derived from a telephone, and the wire is polarized thereby in an almost infinite number of exactly corresponding poles. On moving same wire in front of the same or another magnet, the induced telephonic currents are made to act on a transmitter. The telephone receiver has the message repeated in it from the transmitter without any grating or jarring noise.

From History to Romance.

"By means of a loud-talking or amplifying arrangement, the voice or sound may be amplified to a loud enough degree so that it will make a lasting impression on the sleeper.

"The machine contains a number of reels, each of which has enough wire to last for about one hour of continuous service. Each reel comes into position automatically as soon as it is 'played'; thus eight reels will give the sleeper enough material for a whole night's work.

"Whether he wishes to be entertained, or whether he wishes to learn, depends upon himself. It probably would not do to learn history for eight hours at a stretch, for the mind probably would not absorb it all. So we might switch from history to romance, then we might have a concert for an hour to get accustomed to the music of the latest opera, then switch back to mathematics, if necessary, and arrange the programme as we may see fit, and so as to suit our own individual taste."

Effects on the Sleeper.

Describing the effect upon the pupil, Dr. Gernsback says:

"At the first attempt, the sleeper probably would wake up startled because he was not accustomed to it. It probably would take a week before he could accustom himself to wear a headgear attached to his head by means of a heavy rubber band and before he could submit to the annoyance of it as well.

"After he became accustomed to the headgear, as well as to the unfamiliar noises, it is very probable that his sub-conscious self would take note of what was going on while he slept. Thus, were it music, or the spoken voice, it seems almost certain that in time a lasting impression would be made upon the brain through the auditory nerves.

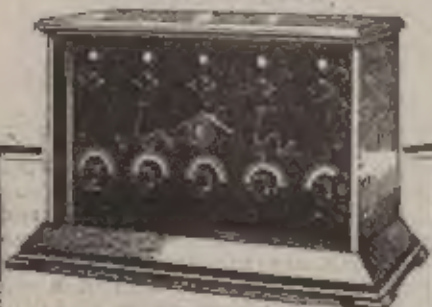
"It would be a matter of education. Probably, for the first few months not much impression would be made upon the sub-conscious self; but by and by, the hearing sense would be sharpened to such an extent that the impression would not only reach the brain centre, but would be so permanent that the hearer getting up in the morning would remember something of the nightly procedure.

Learning Automatically.

"Every time you see a typewriter, you write absolutely unconsciously, or, rather, automatically. The expert typist does not have to stop to think of each key when writing. It is done automatically, and she pays not the slightest attention to the keyboard while writing. It is a habit formed by long experience. It may be that the same thing will be true of sub-conscious learning while you sleep."

Whether this method of teaching will ever be adopted is a matter for speculation. It is certainly an ingenious suggestion, and while the ultimate use of wireless cannot yet be known, it is interesting to note the kind of experiments that are being undertaken across the Atlantic, regarding its educational value.

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Hänsel and Gretel.

Next Saturday's Covent Garden Opera, described by Percy A. Scholes.

HUMPERDINCK was the composer of *Hänsel and Gretel*. He died a couple of years ago, at the age of sixty-seven. *Hänsel and Gretel* was first performed just thirty years since, and it at once became popular all over Europe and in America. People love the simple, pleasant old fairy story, the old folk-melodies that constantly creep into the music, and the Transformation Scene in Act II.

This opera is, of course, a special favourite with children, who next Saturday will have a strong claim on the family head-phones, and as only Acts I. and II. are to be broadcast, the performance need not keep them up so very late.

The synopsis given below has been arranged in such a way that if it is kept before the eyes whilst the opera is being performed, the listener will have a fairly good idea of what is happening on the stage.

As each character enters for the first time, his or her name is given in capitals.

ACT I.

Scene 1. *At Home*.—In a poor room the boy HÄNSEL (pronounced Hänsel; Mezzo-Soprano) and the girl GRETEL (pronounced Graytel; Soprano) are seen. They complain of hunger.

O Gret, it would be such a treat
If we had something nice to eat,
Eggs and butter and sweet paste,
I've almost forgotten how they taste.

So sings Hänsel, and Gretel tries to cheer him by showing him a jug of milk, out of which their mother, when she returns, will make a blanc-mange. Hänsel cannot wait. He begins to taste it.

Gretel then tries to keep her troublesome young brother out of mischief by giving him a dancing lesson, and the children sing as they dance.

Scene 2.—The fun gets noisier, and then, when it is at its height, in comes the MOTHER (Contralto), whereupon—sudden quiet! She scolds the children for neglecting their work, and, in her anger, accidentally overturns the jug of milk which was to have provided the family supper.

Weary and distracted, she drives the children out to gather wild strawberries, and, with a prayer for help, drops asleep, exhausted.

Scene 3.—A gay song is heard, and there enters the FATHER (Baritone). The Mother awakes and expresses her discouragement; the Father goes on merrily singing, and at last shows the cause of his happiness. He has sold the brooms he had made, and bought ham and butter and flour and sausages and vegetables and tea—such provision as the cottage has not seen for many a long day.

Then the Father asks where the children are, and on learning that they have (so near night-fall) gone into the forest, he is alarmed. He talks, shuddering, of magic, and sings an eerie song of a "gobbling ogress," who lures children and bakes them in her oven.

With a cry, the Mother, wrought up by this narrative, rushes out of the door to save her children, and the Father follows.

ACT II.

Scene 1. *The Forest, Sunset*.—The children are seen, Gretel making a garland of wild roses, Hänsel looking for strawberries. Gretel sings a quiet song, "There stands a little man in the wood alone." Hänsel takes up the garland,

and crowns her as Queen of the Wood. He, courtier-like, presents her with his basket of strawberries; they both begin to eat. The Cuckoo is heard, and the children sing an old song about him.

A friendly quarrel arises. Hänsel snatches the basket and finishes off the strawberries. Gretel, horror-struck, reproaches him. It begins to grow dark.

Soon the light has quite gone. The children are frightened. They see faces grinning from every tree. Hänsel calls, and echo answers. The children crouch together.

Scene 2.—The HANDSMAN (Soprano) quietly creeps to the children, singing his song. He strews sand in their eyes. Half asleep, they sing their evening prayer:—

When at night I go to sleep
Fourteen angels watch do keep.

Then they fall into slumber, locked in one another's arms. The stage is now completely dark.

Scene 3. *A Scene without Words, but with Music*.—A light shines through the mist, which rolls together into the form of a staircase, down which are seen descending FOURTEEN ANGELS, two and two. They place themselves around the children, and move in a stately dance. The Curtain falls.

ACT III.

As this Act is not to be broadcast it need not be here described. Most people know Grimm's Fairy Tales, and will remember all about the horrible Witch with her house made of sweetmeats, her capture of the two children, the danger they ran of being made into gingerbread, their happy escape, and their joy as they used the magic signs learnt from the Witch to release the crowd of other boys and girls whom the Witch had taken prisoner.

In listening to *Hänsel and Gretel*, use one ear for the vocal parts and the other for the orchestral accompaniment. The latter is woven together out of lovely folk-tunes and other melodies, much as a Wagner orchestral score is woven out of his "Leading Motifs." The translation of the libretto used by the B.N.O.C., and quoted in the present article, is that of the late Constance Bache.

[Acts One and Two of this opera will be broadcast to all stations on Saturday, January 26th.]

Wireless Wisdom.

"CERTAIN scenes in the theatre are so extraordinary that they may even be true—truth being stranger than fiction."—ARCHIBALD HADDOX.

"CONTINUOUS novelty joined with improvement is the life-blood of a nation."—THE REVEREND SIR WILLIAM BULL, Bart. M.P.

"RESIGNATION under grave ills is only a virtue where these difficulties cannot be removed."—REV. H. ANSON.

"WE all know by experience that we are much happier when we are being kind."—E. KAY ROBINSON.

"HUMOUR is not opposed to seriousness but to dullness."—REV. G. W. KERR.

Why We Changed Wave-Lengths.

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

"YES, why did you bother?" exclaims the disgruntled listener. "Why, indeed!" says someone who has heard nothing since. Let me try to explain.

The list as it was first presented was as follows:

London	350
Bournemouth	385
Cardiff	435
Birmingham	475
Aberdeen	495
Manchester	400
Newcastle	350
Glasgow	420

Now, in general, places close together geographically were a great distance apart in wave-length. Birmingham and Cardiff close together, but forty metres apart. Glasgow and Manchester a long way apart—20 metres. The list is not perfect, because the jamming situation also came in. Birmingham is our only inland station, and therefore it was possible to put it near the jamming. Aberdeen is a coastal station, but there is not a great movement of ships in its vicinity. The shorter wave-lengths are more easily shielded by hills—hence Cardiff on 435 metres, London a short wave. Bournemouth was chosen to be least jammed, and was placed between 350 and 450. None of the scheme was perfect, but it was thought that, by a further separation of stations and by the choice as above, the service as a whole would be largely benefited.

A Word to London's Crystal Users.

London was put down at the bottom to give it freedom on one side—to prevent it, in fact, being sandwiched between other stations.

What happened?

London—a chorus of complaint from (mostly) crystal users that London was too weak to hear. Once and for all, dear crystal users, London was just as strong, and if you had used a series condenser, I think you would not have complained. I was frankly amazed that a 3½ per cent. change in wave-length should have so seriously upset so many sets. The next complaints came from London listeners at a distance, complaining that there was far more jamming on 350 metres. Now, I had some investigations made last summer in various localities, and reports showed that 385 and 350 made practically no difference. Is it that other stations have grown up, or was it that the sets were not so efficient on 350? At any rate, the complaints were so numerous as to make us realize they were serious and no idle chatter.

Cardiff's Grumble.

From Cardiff—Jamming! Jamming! Jamming! Not a letter in favour of the change.

So we tried again, and changed London back to its original, and Cardiff was swapped back to its usual. This made it imperative to change Newcastle, and Newcastle went to 435. Result—London happy, Cardiff moderately happy; but now (too late, alas!) lots of letters from Cardiff saying that 435 was their right wave, although the jamming was certainly bad, the signal in the shielded areas was very much louder.

That serious, however, and the reason that weighed with me most strongly, came the news that listeners in Wilts and Oxfordshire, accustomed to rely on Cardiff, couldn't hear anything for the harmonics of Leafeld when the wave-length was above 350.

Now Newcastle's turn came, and they yelled at me with a stentorian voice to "for goodness'

sake" (as someone wrote and split one of the longest infinitives on record), "put it back to 400 again—the jamming was awful on 435." With a deep sigh we obeyed, sandwiching Manchester in at 375.

So now they stand as follows:—

Cardiff	350
London	365
Manchester	375
Bournemouth	385
Newcastle	400
Glasgow	420
Birmingham	475
Aberdeen	495

and all the stations nearest together are nearest in wave-length, and all the short waves are used in the hilly districts; London is sandwiched, and they are too close! But obviously the ideals I set out to fulfil did not take sufficient account of the jamming situation, which is apparently the controlling factor.

Suggestions Wanted.

Sometimes I wish I had the job of a third-class boiler-washer on a power scheme for supplying one house in the smallest village in Rutland with electric light—then I bet the bally boiler wouldn't wash!

I really am very sorry to have disturbed you so. You may say I ought to have investigated further before making such drastic changes; but, truly, it is a little difficult to assess jamming in every locality—*qui s'excuse s'accuse*—but you are happy now, and I think we have, by an uncomfortable experiment, found the best compromise.

I like to feel that you and I make experiments and that, although I don't know you all personally, we still co-operate. Let us continue, then, to experiment, and when you have suggestions for improvements, grouses, and so on, let's have it out.

Be Constructive!

Talking of grouses, I wonder if some of you complainers will realize this. Criticism for criticism's sake does you no good, and does me no good—it is so easy to write: "Dear Sir,—Your show is rotten from A to Z, and you are the quintessence of rotteness," and then not sign it or give address; but it does help so little. Please don't think I get a lot of such letters, but oh! I do get some, and they make me very unhappy. I love a good argument, and my best friends are those who have hit out at me. Remember, we can never improve unless you criticize, but let it be constructive, or it is no good. "It is easy to destroy, but difficult to build." Let no one think we are afraid of criticism (or even abuse!). We can only live by your co-operation, so talk to us like a Dutch uncle when you see faults.

The Way to Advance.

Experiment—the only way to advance! Whenever someone gets an idea and asks my advice, I always advise them to "try it." Who knows but that in the trying some new, interesting fact may not be brought to light?

A road looks inviting—who knows but round the corner the dust and the heat will be forgotten in a view of mountain lake and hill undreamed of standing here?

So forgive my experiment.

It is reported that a mother, while listening in Manchester, was able to recognize the voice of her son as he sang songs in Pittsburgh, U.S.A., 3,900 miles away.

THE MAGAZINE FOR
THE WOMAN AT HOME



THE ACID TEST

by

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McKENNA

AND OTHER FICTION BY

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J. D. BERESFORD

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NUMBER OF THE

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MAGAZINE

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PEOPLE IN THE PROGRAMMES—GOSSIP ABOUT ARTISTES & OTHERS

Decided by Accident.



MISS JULIA LARKINS.

LISTENERS who have heard Miss Julia Larkins' clever child impersonations all admit that they are as nearly perfect as possible. Indeed, before she became a wireless artiste, critics said of her that one had only to close one's eyes during her performance to imagine that a little child was actually speaking. Miss Larkins, who is an Australian, began her professional career as a high soprano, and it was quite by accident that she decided to become a child impersonator.

While spending a week-end with some friends in the country, she happened to play with their large family of children and pretended that she herself was a child. Her friends were so struck with her imitations that they advised her to become a child impersonator professionally, which she did with great success.

He Had Enough at Home.

MISS LARKINS told me of an amusing experience she had while appearing for a season in Scotland. A certain man used to come regularly to the concerts, but whenever she appeared to do her turn, he used to get up and walk out and come back again when she had finished. She naturally thought that he did not like her performance, but one day she was introduced to him and asked him why he always avoided her turn.

"Don't you think that my impersonations are good?" she inquired.

"Oh, yes," he replied, "they are too good."

"Too good? Then why do you always go out?"

"Well, you see," he answered, "I have a big family of children at home, and their tiresome ways get on my nerves, and when I go to a show, I like to forget them."

Actor and Vocalist.



MR. SYDNEY RUSSELL.

THE broadcasting of plays has received a great success in the hands of Mr. Sydney Russell, whose dramatic company is well known in Birmingham. Mr. Russell is now associated in the minds of many with operatic and musical ventures, but before he took up an operatic career he had already established a position for himself as an actor. He has played

leading roles with Mr. Cyril Maude and the late Mr. Lewis Waller, and he was also for some time a member of the celebrated E. H. Sothern and Julia Marlowe organization in America.

In the British National Opera Company's productions he has made great hits with many of his character sketches.

Worth a Great Deal.

MR. RUSSELL tells a funny story about a shortsighted old woman who was fussing about in the shop of an antique dealer's.

"How much is that Japanese idol worth—the one over there by the door?" she asked the assistant.

"It's worth a very great deal, madam," was the reply. "It's the proprietor."

"German" Music.

MR. GEORGE HEWSON, who broadcasts from Glasgow Station, has been relating to me some of his experiences while he was a member of Miss Lena Ashwell's concert party in France during the war.

"After finishing a show," he says, "I was sitting with some of the boys when one of them produced a piece of music he had 'inherited' from a German, with a request that I would give him an idea of the tune. I obliged on the banjo, much to the amusement of one of his friends, who exclaimed: 'Great Scott! Fancy being able to play German music!' He thought it was written in the German language!"

Soubrette and Soprano.

BEFORE taking up singing seriously, Miss Florence Macdonald Henry, who is to appear at Manchester Station this week, was a soubrette in an amateur concert party, and thereby hangs an amusing story.

One of her admirers, who was more enthusiastic than well-informed, on hearing a girl friend boasting of the high notes which she herself could sing, remarked: "Have you heard Miss Henry sing?"

"No," was the reply. "Is she a soprano?"

"A soprano!" exclaimed Miss Henry's admirer, in disgust. "No, she's a soubrette, and that's much higher than a soprano."

A Russ That Worked Too Well.



MR. WILLIE ROUSE.

MR. WILLIE ROUSE, the entertainer and concert party producer, who is to broadcast from London on Thursday this week, tells me the following amusing story:—

A certain working man who lived on the side of the road facing east, was much troubled each morning by the sun pouring in at the window and waking him earlier than he wished. He tried many devices to stop the glare from coming in, but all in vain. At last he decided to blacken the window entirely. The first morning after he had done this, he woke up and looked at his watch and said: "Ah, another half-hour!" and went to sleep again. He woke again and looked at his watch and said: "Ah, another ten minutes!" and went to sleep once more. The third time he woke—looked at the time—dashed out of bed—dressed hurriedly—rushed out and met his foreman.

"Sorry I'm late, sir," he exclaimed.

"Late!" shouted the foreman. "Where were you on Monday and Tuesday?"

"Sacked" for Cycling.

A WIRELESS artiste with interesting family connections is Mr. Tom Copeland, who sings at London Station, for he is a son of the champion ploughman of Scotland and a cousin of the famous Piper Findlater, V.C. Mr. Copeland was the organist at a Presbyterian church, in Dufftown, when only fifteen, "but," he tells me, "I got the sack for cycling on Sunday—and deserved it. I played 'When the Weary Seeking Rest' covered with mud, having fallen off my bicycle before the morning service. Result—the order of the boot!"

In 1926, Mr. Copeland toured Africa, and he gave over a thousand concerts for the troops during the war. In the spring he is to tour Canada, Halifax, and Vancouver, and he will be much missed by listeners during his absence.

Injury to Injury.



MR. SIDNEY WALLER.

BOURNEMOUTH'S popular tenor, Mr. Sidney Waller, does not in the least mind telling a story against himself, and he relates an amusing incident that occurred when he was singing at an Army concert during the war. After he had sung *Too Young*, a voice from the back of the hall called out: "Chuck the bouncer off!" Immediately the Padre got up and demanded an apology, saying that otherwise, he would stop the concert. As no one came forward, he was just about to pronounce the concert at an end, when a Scotsman in the audience shouted at the top of his voice: "I dinna ken who called the singer a bouncer, what I would like to know is, who called the bouncer a singer?"

"Some" Golfer.

MISS RACHEL HUNT, the contralto in the Manchester Station Opera Company, is also an excellent golfer. She was golfing on one occasion with a friend who was very inexperienced at the game and who completely missed his first drive.

To hide her mirth, Miss Hunt had to turn her back, and when she looked round, she found that he was attempting the drive at his ball, which was about a foot in front of the line of the pins.

"Surely, you know," she said, "that you must not drive from in front of the pins?"

"Oh, yes, I know that," he replied, laughingly, "but I am now taking my fifth!"

Gloomy on Purpose.



MISS MARJORIE MOON.

MISS MARJORIE MOON, contralto, whose solos and duets with Mr. Edward Hill are so much liked by Bournemouth listeners, tells me the following amusing incident. "While waiting for my proofs at a photographer's," she says, "I was looking through some photos and came across a remarkably solemn-looking man. Turning to the photographer, I said:

"This man has a strong face; but how terribly gloomy he looks."

"Yes," he answered, "but that photograph is to be used as a business advertisement."

"But surely," I said, "it would be better for his business if he didn't look so glum?"

"Oh, no," was the reply. "Who'd employ a grinning undertaker?"

A Wireless Wedding.

AN event of interest to listeners in the Manchester area took place on Christmas Eve last, when Mr. E. A. Wright and Miss Jessie Cornsack were quietly married at St. Outhbert's Church, Sheffield.

Mr. Wright's work as Director of the Manchester Station in the early months of 1923 is well-known, but perhaps the children will be most interested to know that Uncle Humpty Dumpty's bride was "The Cloud Lady" who played to them so often in the Kiddies' Corner at 22Y.

Mr. Wright is now Assistant Director of the London Station.

WIRELESS PROGRAMME—SUNDAY (Jan. 20th.)

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

LONDON.

Organ Recital,

relayed from the Concert Hall of the National Institute for the Blind, Great Portland Street.
S.B. to all Stations.

At the Organ: WILLIAM WOLSTENHOLME, Mus. Bac.

5.0. Choral Song and Fugue Wesley
Offertoire in E Flat Gounod
Fugue in G (à la Gigue) Bach
MARGERY PHILLIPS (Contralto).
"Golden Light" (Agnus Dei) Bizet
"Bois Etais" Lully
CONSTANCE IZARD (Solo Violin).
"Ave Maria" Schubert
"La Priecieuse" Couperin-Arcander
WILLIAM ANDERSON (Bass).
"Bedouin Love Song" Pinaud
"The Lute Player" Albeniz
The Organ.
Béhémessque in G (ju 15/8 time)
Allegretto in F
Scherzo in F
Finale in B Flat
Margery Phillips.

"Kathleen Macnamara" Crouch
"Butterfly Wings" Mastaglio Phillips
"Easter Hymn" Frank Bridge
Constance Izard.

Romance from Concerto Wieniawski
Slavonic Dance in G Minor Dvorak-Kreutzer
Minuet in F Handel
William Anderson.

"In Cellar Cool" Old German
"The Tale of the Tohy Jug" Gibbon
"Horn the Hornblower" Ireland
The Organ.

Improvisation.
Allegro cantabile and toccata from Sym-
phony No. 2 Widor

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

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

Sunday Evening.

8.30.—Hymn: "The Church's One Founda-
tion."

DR. LAVINGTON HART, Principal of the
Anglo-Chinese College of Tientsin. Re-
ligious Address.

Hymn: "At Even ere the Sun was Set."

9.0. BRITISH COMPOSERS NIGHT.
S.B. from Cardiff.

Followed by
TIME SIGNAL AND GENERAL NEWS
BULLETIN. S.B. to Cardiff.

Announcer: C. A. Lewis.

BIRMINGHAM.

3.0-5.0.—ORGAN RECITAL. S.B. from Lon-
don.

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

8.30. STATION ORCHESTRA,
under the direction of Joseph Lewis.

Overture, "Coriolanus" Beethoven

EMILY BROUGHTON (Soprano).
Recit., "Thou Were Shepherds"

Recit., "Lo, the Angel of the Lord"

Recit., "And Suddenly" ("The Messiah") Handel

Emily Broughton and Station Repertory Chorus.
"Glory to God" ("The Messiah") Handel

THE REV. T. E. TITMUS (Baptist
Church, Spring Hill). Religious Address.

Emily Broughton and Chorus.
Aria and Chorus, "Rejoice Greatly" ("The
Messiah") Handel

8.10. Orchestra.
Symphony, "Pastorale No. 6" Beethoven

(a) "Country Dance"; (b) "The Storm";
(c) "After the Storm."

Entr'acte, "Rigodon de Dardanos" Rimsky
Suite, "Three African Dances" Debussy

(a) "Call to the Feast"; (b) "Lubet
Dance"; (c) "Warrior's Dance."

10.0.—NEWS relayed from London.
Local News and Weather Forecast.

10.15.—Close down.
Announcer: Percy Edgar.

BOURNEMOUTH.

3.0-5.0.—ORGAN RECITAL. S.B. from
London.

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

8.30. THE WILTON AINSLEY
QUARTETTE.

HITA RAMBERG Violin.
DOROTHY FAICE Viola.
DORRIS EDGE Cello.
K. WILTON AINSLEY Piano.

"Ave Maria" Gounod

8.40. RICHMOND HILL CONGREGATIONAL
CHURCH CHOIR.

Conductor: Enos Watkins, F.R.C.O., A.R.C.M.
Hymn, "Jesu, Lover of My Soul" Parry

8.45.—THE REV. JAMES O'CONNELL. Re-
ligious Address.

9.0. Choir.
"By Babylon's Walls" Gounod
"Light in Darkness" Cowen

9.10. Quartette.
"Song of Sleep" Lord Somerset
"Humoresque" Widor

9.25. Dorris Edge (Solo Cello).
"Nereuse" Godard

9.35. Rita Ramberg (Solo Violin).
"Chanson et Pavane" Couperin

9.45. Quartette.
Selection, "Lilac Time" Schubert

10.0.—NEWS, relayed from London.
Local News and Weather Forecast.

10.15.—Close down.
Announcer: W. H. Keene.

CARDIFF.

3.0-5.0.—ORGAN RECITAL. S.B. from
London.

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

8.15. ALBANY ROAD BAPTIST CHOIR.
Conductor: Mr. W. H. Brough.

Hymn, "O Lord Who Formedst Me to Wear"
Anthem, "Fierce Raged the Tempest"

THE REV. J. SANSAM ILES, Pastor of
Albany Road Baptist Church. Religious
Address.

Hymn, "Father, Who Art Alone Our Helper
and Our Stay" (Time, "Raleigh") Prout

British Composers' Night.
S.B. to London.

STATION SYMPHONY ORCHESTRA.
Conductor: OLIVER RAYMOND.

Vocalist: GILBERT BAILEY.

9.5.—Introductory Chat.
1.—"Impressum of a Windy Day"
Malcolm Sargeant

(Repeated by request.)

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ABERDEEN (2BD) - - - 495 "

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BOURNEMOUTH (6BM) 385 "

CARDIFF (5WA) - - - 350 "

GLASGOW (5SC) - - - 420 "

MANCHESTER (2ZY) - 375 "

NEWCASTLE (5NO) - 400 "

11.—(a) Miniature Fantasy for Strings

Eugene Goossens

(b) "Puck's Minuet" Herbert Howells

111.—Songs (selected).

114.—Concerto for Flute, Oboe and Strings

Gustav Holst

V.—Oriental Suite, "Beni Mora"
Gustav Holst

VI.—Songs (selected).

VII.—Symphonic Variations, "Three Blind
Mice" Josef Haydn

(Repeated by request.)

NEWS. S.B. from London.

Announcer: A. Corbett Smith.

MANCHESTER.

3.0-5.0.—ORGAN RECITAL. S.B. from
London.

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

8.0.—SIDNEY G. HONEY: Talk to Young
People.

8.35.—THE VERY REV. MONSIGNOR F.
GONNE, M.A., Principal of St. Bede's Col-
lege. Religious Address.

8.45. EMILY SEDDON (Soprano).
"Elizabeth's Prayer" ("Tannhäuser")
Wagner

"Solveig's Song" Grieg
AMY BUXTON NOWELL (Elocutionist).
Four Salt Water Ballads Massfield

HARRY HOPEWELL (Baritone).
Recitation and Air, "The Lord Worketh
Wonders" Handel

Air, "How Willing My Paternal Love"
Handel

SAMUEL SPURGEON (Solo Violin).
Hungarian Rhapsody Liszt

Londonderry Air G. O'Connor Morris
Emily Seddon.

Ombra mai fu Handel
"From Mighty Kings He Took the Spoils"
Handel

Amy Buxton Nowell.
Selected Songs.
Harry Hopewell.

"Like as the Hart" Allister
An Old Sacred Lullaby Cornet

Samuel Spurgeon.
Romance in F Beethoven

Serenata Amorese Brees
10.0.—NEWS, relayed from London.
Local News and Weather Forecast.

10.15.—Close down.
Announcer: Victor Smythe.

NEWCASTLE.

3.0-5.0.—ORGAN RECITAL. S.B. from Lon-
don.

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

8.30. WILLIAM LAWS' TRIO.
"Melodie" Schubert

9.35. R.L.C.W. MALE QUARTETTE.
"Break, Break, Break, on The Cold Grey
Stones" Rogers

Hymn, "When the Shades of Evening Fall"

9.45.—THE REV. W. A. S. KENNEDY, of All
Saints Church, Gosforth. Religious Address.

9.0. Quartette.
Hymn, "When the Weary Seeking Rest"

"Hallelujah" Handel
"A Wet Sheet and a Flowing Sea" Lloyd

9.15. Trio.
"Andante Cantabile con Variazioni"
Beethoven

9.25. Quartette.
"O Father Whose Almighty Power" Handel

"Comrades' Song of Hope" Adam

LEONIE STORM AND WILLIAM LAWS
(Violin and Piano).

"Allegretto" Mozart
Minuet Handel

9.45. Quartette.
"Maid All Power" Wabinsky

"Now Good Night" Buck

10.0.—NEWS relayed from London.
Local News and Weather Forecast.

10.15.—Close down.
Announcer: C. K. Parsons.

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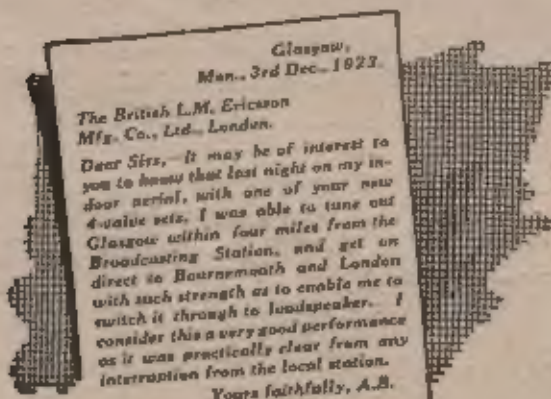
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WIRELESS PROGRAMME—MONDAY (Jan. 21st.)

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

LONDON.

- 3.30-4.30.—Concert: The Wireless Trio and Sanders Warren (Baritone).
 5.0.—WOMEN'S HOUR: Ariel's Society Gossip. Story, "A Gift of the Gods," by C. Rosamund-Jones.
 5.30.—CHILDREN'S STORIES: "Sabo at the Zoo," by E. W. Lewis. "Jack Hardy," Chap. 15, Part I, by Herbert Strang.
 6.15.—Boys' Brigade News.
 6.25-7.0.—Interval.
 7.0.—TIME SIGNAL, AND 1st GENERAL NEWS BULLETIN. *S.B. to all Stations.*
 JOHN STRACHEY (the B.B.C. Literary Critic): "Weekly Book Talk." *S.B. to all Stations.*
 Local News and Weather Forecast.
 7.30.—POPULAR CONCERT. *S.B. to all Stations except Cardiff.*
 THE AUGMENTED WIRELESS ORCHESTRA.
 Conducted by L. STANTON JEFFERIES.
 Overture, "The Scandinavians" ... Monckton
 Valse, "Sardapoli" ... Corbin
 Intermezzo ... Coleridge-Taylor
 JOHN COLLINSON (Tenor) with Orchestra.
 "Quæsto o Quella" ("Rigoletto") ... Verdi
 "Ah, Moon of My Delight" ("Persian Garden") ... Lehmann
 Orchestra.
 Selection, "The Catch of the Season" ... Boissac
 Three Dances, "Henry VIII." ... German
 A Comedian and a Baritone will Argue.
 Orchestra.
 Fantasia on Melodies from "Faust" ... Gannad
 Two Entr'actes, "Bells of St. Mado" ... Himmer
 "Serenade d'Amour" ... Blon
 Fox-trot, "Little Red School House" ... Wilson
 John Collinson.
 "Branche" ... D'Hordakst
 "Somewhere a Voice is Calling" ... Tate
 "Macushla" ... Macintosh
 9.15.—MR. E. ARNOLD WARD, B.Sc., on "What is Economics?" *S.B. to all Stations except Cardiff.*
 9.30.—TIME SIGNAL, AND 2ND GENERAL NEWS BULLETIN. *S.B. to all Stations.*
 Local News and Weather Forecast.
 9.45.—Orchestra.
 Selection, "Flowerdora" ... Stuart
 A Comedian and a Baritone will resume their Argument.
 Orchestra.
 "Mélodie Plaintive" ... Ketsfey
 Swedish Carminative March ... Scendson
 10.30.—Close down.
 Announcer: R. F. Palmer.

BIRMINGHAM.

- 3.30-4.30.—Paul Himmer's Orchestra, relayed from Lozella Picture House.
 5.0.—WOMEN'S CORNER.
 5.30.—Agricultural Weather Forecast.
 KIDDIES' CORNER.
 6.45.—Boys' Brigade News.
 7.0.—NEWS. *S.B. from London.*
 JOHN STRACHEY. *S.B. from London.*
 Local News and Weather Forecast.

- 7.30.—POPULAR CONCERT. *S.B. from London.*
 9.15.—MR. E. ARNOLD WARD. *S.B. from London.*
 9.30.—NEWS. *S.B. from London.*
 9.45.—POPULAR CONCERT (Contd.). *S.B. from London.*
 10.30.—Close down.

Announcer: H. Cecil Pearson.

BOURNEMOUTH.

- 3.45.—Concert: The "5BM" Trio.
 4.45.—WOMEN'S HOUR.
 5.15.—KIDDIES' HOUR.
 6.0.—Boys' Brigade News.
 6.15.—Scholars' Half-Hour: G. Guest, B.A., J.P., "The Red Old Times."
 7.0.—NEWS. *S.B. from London.*
 JOHN STRACHEY. *S.B. from London.*
 Local News and Weather Forecast.
 7.30.—POPULAR CONCERT. *S.B. from London.*
 9.15.—MR. E. ARNOLD WARD. *S.B. from London.*
 9.30.—NEWS. *S.B. from London.*
 9.45.—POPULAR CONCERT (Contd.). *S.B. from London.*
 10.30.—Close down.

Announcer: W. R. Keene.

CARDIFF.

- 3.30-4.30.—Palkuan and his Orchestra relayed from the Capitol Cinema.
 5.0.—"5WA'S" "FIVE O'CLOCKS": "Mr. Everyman," Talks to Women, Vocal and Instrumental Artists, and the Station Orchestra. Weather Forecast.
 5.45.—THE HOUR OF THE "KIDDIE WINKS."
 6.45.—Boys' Brigade News.

IMPORTANT TO READERS.

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The B.B.C. wishes to announce that the pianos used in the daily transmissions from all their Stations are of the following well-known makes: BROADWOOD, STEINWAY, WEBER.

- 7.0.—NEWS. *S.B. from London.*
 JOHN STRACHEY. *S.B. from London.*
 Local News.
 7.30-7.45.—Interval.
 THE KINGSWOOD EVANGEL PRIZE SILVER BAND.
 Vocalist: WILFRED MILES (Tenor).
 7.45.—March, "B.B. and C.F." ... Old Hunt
 Overture, "Ray Blue" ... Mendelssohn
 8.0.—Songs: (a) "Adeleide" (Beethoven); (b) Recit. and Aria, "Love Sounds the Alarm" ("Arts and Galates") (Handel).
 8.10.—Tone Poem, "Coriolanus" ... Jenkins
 Trombone Solo, "Jaywheel" ... Sutton
 8.25.—Songs: (a) "Pleading" (Elgar); (b) "Now Sleeps the Crimson Petal" (Quilter).
 8.35.—Selection, "La Traviata" ... Verdi
 Cornet Solo / Selected.
 8.55.—PROFESSOR GRAHAM BROWN on "The Aims of the Welsh National School of Medicine."
 9.5.—Songs: (a) "A Dream of Love" (Montagne; Phillips); (b) "The Curtains Fall" (Guy D'Hordakst).
 9.15.—Selection, "Rigoletto" ... Verdi
 9.30.—NEWS. *S.B. from London.*
 Local News and Weather Forecast.
 9.40.—"Musical Switch" ... Afford
 9.50.—Dance Music.
 10.15.—Close down.
 Announcer: L. B. Page.

MANCHESTER.

- 3.30-4.30.—Concert by the "2ZY" Orchestra.
 5.0.—MAINLY FEMININE.
 5.25.—Farmers' Weather Forecast.
 5.30.—CHILDREN'S HOUR.
 6.35.—Boys' Brigade News.
 6.40.—MR. FRANCIS J. STAFFORD, M.A., M.Ed. French Talk.
 7.0.—NEWS. *S.B. from London.*
 JOHN STRACHEY. *S.B. from London.*
 Local News and Weather Forecast.
 7.30.—POPULAR CONCERT. *S.B. from London.*
 9.15.—MR. E. ARNOLD WARD. *S.B. from London.*
 9.30.—NEWS. *S.B. from London.*
 9.45.—POPULAR CONCERT (Contd.). *S.B. from London.*
 10.30.—Close down.
 Announcer: Sidney G. Honey.

NEWCASTLE.

- 3.45.—Concert: Edythe Elton (Soprano), S. W. Barry (Solo Violin).
 4.35.—WOMEN'S HOUR.
 5.15.—CHILDREN'S HOUR.
 6.0.—Scholars' Half-Hour: Mr. A. W. Dakin, B.A. Talk on "Stories of the Nations—Spartacus the Slave."
 6.30.—Boys' Brigade News.
 6.45.—Farmers' Corner.
 7.0.—NEWS. *S.B. from London.*
 JOHN STRACHEY. *S.B. from London.*
 Local News and Weather Forecast.
 7.30.—POPULAR CONCERT. *S.B. from London.*
 9.15.—MR. E. ARNOLD WARD. *S.B. from London.*
 9.30.—NEWS. *S.B. from London.*
 9.45.—POPULAR CONCERT (Contd.). *S.B. from London.*
 10.30.—Close down.
 Announcer: E. L. Odiums.

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Women's Hour*



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WIRELESS PROGRAMME—TUESDAY (Jan. 22nd.)

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

LONDON

- 3.40-4.30.—The Wireless Trio and May Adams (Soprano).
- 5.0.—WOMEN'S HOUR "The Professional Woman's Furnishing" (No. 3), by Mrs Gordon Staples. "A Prison Wardress at Work," by Constance Coventry.
- 5.30.—CHILDREN'S STORIES Aunt Patricia on "Winter Sports," London Waikiki on "My and St James," by Violet M. Methel.
- 6.15-7.0.—Interval.
- 7.0.—TIME SIGNAL, AND 1st GENERAL NEWS BULLETIN S.B. to all Stations.
- 7.15.—Local Weather Forecast.
- 7.45.—RT HON VISCOUNT CHELMSFORD, P.C., K.C.M.G., etc., Ex-Viceroy of India. An Appeal on Behalf of the British Empire Leprosy Relief Association.
- 7.50.—THE ROOSTERS' CONCERT PARTY S.B. from Bournemouth.
1. The Roosters begin to break their shell.
 2. Concerted "I want a Girl" The Roosters.
 3. Tenor Solo, "In Love" Arthur Mackness.
 4. Humorous Song, "Tangle, Tradesmen" William Mack.
 5. Concerted "Gutter Merchants" The Roosters.
 6. Vocal Duet "Poet" Arthur Mackness and Benjamin Hunt.
 7. Character Studies from Dickens. Percy Mervin.
 8. Song at the Piano, "You Never Know" George Western.
 9. Baritone Solo, "Why Should I" Benjamin Hunt.
 10. A Private Trio. Arthur Mack and Percy Mervin.
- 8.45.—TRISTAN AND ISOLDE, Act II (Hughe), relayed from The Royal Opera House Covent Garden. S.B. to all Stations.
- 9.4.—LOCAL NEWS AND 2ND GENERAL NEWS BULLETIN S.B. to all Stations.
- 10.0.—THE SAVOY ORCHESTRA AND SAVOY HAVANA BANDS relayed from the Savoy Hotel, London. S.B. to other Stations.
- 11.0.—Close down.
- Announcer J. S. Dodge.

BIRMINGHAM

- 3.30-4.30.—Georgina Tanner (Mezzo Soprano) a Recital of French Song. Paul Rimmer's Orchestra relayed from London.
- 5.0.—WOMEN'S CORNER.
- 5.30.—Agriculture Weather Forecast.
- 6.0.—KIDNAP CORNER.
- 7.0.—NEWS S.B. from London.
- 7.15.—THE GRAYS' CONCERT PARTY. Opening Chorus, "An Introduction" Griffiths, M.S.
- LEONARD BROWN and CHRISTIE STODDARD Duet "A Night in Venice."
- EDITH JAMES. A Piano and Some Songs.
- ERNEST JONES Solo Banjo, "A Summer Idyll."
- ALBERT JONES Solo Banjo, "A Black Coquette."
- LEONARD BROWN Tenor Song, "She is Far From the Land."
- TRISTAN AND ISOLDE, Act II.
- PERCY OWENS and some Wittoisms.
- THE GRAYS. Concerted Item, "Song Salad."

Christie Stoddard. Songs. "The Last Fair Day." "All the Fun of the Fair" "The Grays." An Interlude.

Ernest Jones Solo Banjo.

The Grays. Banjo, "On Election Day."

- 8.30.—CAPT. P. P. ECKERSLEY. S.B. from London.
- 8.45.—TRISTAN AND ISOLDE, Act II S.B. from London.
- 9.45.—NEWS S.B. from London.
- 10.0.—THE SAVOY BANDS. S.B. from London.
- 11.0.—Close down.
- Announcer H. Cecil Pearson.

BOURNEMOUTH.

- 3.45.—Concert: Alan Franklin (Solo). H. J. Sherring (Solo Banjo), Ruftand Orchestra (Entertainment).
- 4.45.—WOMEN'S HOUR.
- 5.0.—KIDNAP CORNER.
- 5.30.—Local News and Weather Forecast.
- 5.45.—J. C. B. CARTER, R.A. on "Sir Arthur Conan Doyle and his Works."
- 7.30.—THE ROOSTERS' CONCERT PARTY S.B. from London.
- 8.30.—CAPT. P. P. ECKERSLEY. S.B. from London.
- 8.45.—TRISTAN AND ISOLDE, Act II S.B. from London.
- 9.45.—NEWS S.B. from London.
- 10.0.—THE SAVOY BANDS. S.B. from London.
- 11.0.—Close down.
- Announcer Ian Oliphant.

BRISTOL

- 3.30-4.30.—Falkman and his Orchestra relayed from the Cap. of Cinema.
- 7.0.—"W.A.S." "FIVE O'CLOCK." "Mr. Everman" Talks to Women, Voca. and Instrumental Artists, the Station Orchestra.
- 8.45.—THE HOUR OF THE "KIDNAP CORNER."
- 7.0.—NEWS S.B. from London.
- 7.15.—MR. RICHARD TRESELER, F.R.H.S. Chat on "Gardening."
- 7.30.—Literary Night.
- Conducted, with a critical commentary, by MR. S. P. B. MAIN.
- THE ROMANTIC REVIVAL OF ENGLISH POETRY.

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 B.B.C. finds it necessary to make alterations or additions to programmes, etc., after THE RADIO TIMES has finally gone to press.

Records in Illustration by KATE SAWIER.

1. CARIL ESTE. "RI." Songs of the Period of SWADYAS PARTHIP. "PAISTAN AND ISOLDE," Act II.

2. NEWS S.B. from London.

10.0.—LITERARY NIGHT (Contd.).

10.30.—Close down.

Announcer A. Corbett-Smith.

MANCHESTER

- 3.30-4.30.—Concert by the "221" Trio.
- 5.0.—MAINLY FEMININE, including M's. Stanley Edwards on "Home Life in Uganda."
- 5.30.—Farmers' Weather Forecast.
- 5.45.—CHILDREN'S HOUR.
- 7.0.—NEWS S.B. from London.
- 7.15.—Local News and Weather Forecast.
- 7.45.—THE "221" ORCHESTRA. March, "Floresman." Interim, "Fairy Dreams." Selection, "Kissing Time." KILTON SHEPHERD (Baritone). Bedouin Love Song. Male & Mine.
- 8.20.—I PROFESS (T. H. Pelt) on "Why We Laugh."
- 8.45.—Kilston Shepherd. The Watchman. For You Alone.
- 8.4.—TRISTAN AND ISOLDE, Act II. S.B. from London.
- 9.45.—NEWS S.B. from London.
- 10.0.—THE SAVOY BANDS. S.B. from London.
- 11.0.—Close down.
- Announcer Dan Godfrey, Jr.

NEWCASTLE.

- 3.45.—Concert. Madame Alec Thomson & Quartette.
- 4.45.—WOMEN'S HOUR.
- 5.15.—CHILDREN'S HOUR.
- 5.30.—Half Hour with F. J. Duffy.
- 6.0.—Literary Night.
- 7.0.—NEWS S.B. from London.
- 7.15.—MR. J. KENNIR on Association Football.
- 7.35.—THE WIRELESS ORCHESTRA. March. Tyneside Songs. Overture.
- 7.45.—JOHN COLQUHOUN (Baritone). "The Toreador" ("Carmen"). "Goulden Yandy."
- 7.55.—MADAME ALEX THOMPSON'S QUARTETTE. As T on the 1st. "True Love" ("The Cingales") Monckton.
- 8.5.—Orchestra. Voca. "Amorette" "Gung."
- 8.15.—VI BFAN. How Can I Comfort Thee.
- 8.25.—Now Sleep the (C. and Hardy). A Musical Jigsaw.
- 8.45.—TRISTAN AND ISOLDE, Act II. S.B. from London.
- 9.45.—NEWS S.B. from London.
- 10.0.—Orchestra. Selection, "Merrie England." V. Benn.
- 10.10.—"Rosebuds" Quartette.
- 10.20.—"On the Banks of Alan Water" "Quarrelling" "Thompson."
- 10.30.—Orchestra. Selection, "Welsh Songs."
- 10.40.—Close down.
- Announcer R. C. Pratt.

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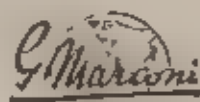
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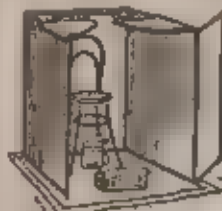
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article in

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for Amateurs &
Experimenters

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WIRELESS PROGRAMME—FRIDAY (Jan. 25th.)

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

LONDON

- 5.30-4.30. -Concert - The Wireless Ten.
 5.0. -WOMEN'S HOUR "Some Japanese Customs" by O. Pollard Croft. Improvements of the Week.
 5.30. -CHILDREN'S STORIES "The Wedding" by Uncle Pollard Croft. Songs by Uncle Rex. Uncle Jack from the Wireless Yard.
 6.15-7.0. -Interval.
 7.0. -TIME SIGNAL AND 1ST GENERAL NEWS BULLETIN. S.B. to all Stations. G. A. ATKINSON (the H.B.C. Film Critic). Seen on the Screen. S.B. to all Stations. Local News and Weather Forecast.
 7.30. -BURNS NIGHT PROGRAMME. S.B. from Glasgow.
 9.30. -TIME SIGNAL AND 2ND GENERAL NEWS BULLETIN. S.B. to all Stations. Local News and Weather Forecast.
 9.45. -BURNS' NIGHT PROGRAMME (Contd.) S.B. from Glasgow.
 10.0. -"SIEGFRIED," Act III (Wagner), played from The Royal Opera House, Covent Garden. S.B. to all Stations.
 11.20. -Close down.
 Announcer: F. Lunn.

BIRMINGHAM.

- 5.30. -WOMEN'S CORNER.
 5.40. -Agricultural Weather Forecast.
 6.0. -KIDDIES' CORNER.
 6.0. -NEWS. S.B. from London.
 6.15. -G. A. ATKINSON. S.B. from London. Local News and Weather Forecast.
 7.30. -THE STATION ORCHESTRA. Special Request Items.
 7.45. -WILLIAM MACREADY. Dramatic Recital, "The Drunken Sailor." Act II., from David Garrick.
 8.5. -Orchestra. Special Request Items.
 8.15-8.45. -Interval.
Burns Anniversary Programme
 8.45. -Orchestra. Suite "The Thistle." Myddleton.
 GLADYS WHITEHILL (Soprano).
 "Wandering Willie"
 "My Heart is True"
 "Whistle and I Come to You"
 Words by Burns
 As a Tradition
 The Thistle.
 Selection "Reminiscences of Scotland." Myddleton.
 9.30. -NEWS. S.B. from London. Local News and Weather Forecast.
 9.40. -WILLIAM MACREADY AND EDNA GODFREY TURNER. Dramatic Recital, Excerpts from "The School for Scandal."
 9.50. -Orchestra. Special Request Items.
 10.10. -"SIEGFRIED," Act III. S.B. from London.
 11.20. -Close down.
 Announcer: H. Cecil Pearson.

Bournemouth

- 3.45. -Concert. The "68M" Trio.
 4.45. -WOMEN'S HOUR.
 5.15. -KIDDIES' HOUR.
 6.15. -Society's Half Hour. Miss Grey. "The Lamp Cook's Story."
 7.0. -NEWS. S.B. from London.
 G. A. ATKINSON. S.B. from London. Local News and Weather Forecast.
 7.30. -BURNS NIGHT PROGRAMME. S.B. from Glasgow.
 9.30. -NEWS. S.B. from London.
 9.45. -BURNS' NIGHT PROGRAMME (Contd.) S.B. from Glasgow.
 10.10. -"SIEGFRIED," Act III. S.B. from London.
 11.20. -Close down.
 Announcer: W. R. Keene.

Glasgow

- 3.30-4.30. -Falconer and his Orchestra played from the Cap for Cinema.
 5.0. -"SWAN" "FIVE O'CLOCK" "M. Everyman," Talks to Women, Vocals and Instrumental Artists, the Station Orchestra. Weather Forecast.
 5.45. -THE HOUR OF THE KIDDIE WINKS.
 7.0. -NEWS. S.B. from London.
 G. A. ATKINSON. S.B. from London. Local News.

Robert Burns.

January 25th, 1759

THE BIRMINGHAM GLEE SOCIETY

Announced by MAUD STEPHENS

- 7.30. -March "Fair and Gay" from "Merrill."
 7.40. -The First of the Year. "The First of the Year" from "The First of the Year."
 7.45. -BETTY LINDSAY. Recital from the Works of Robert Burns.
 7.50. -Songs.
 "John Anderson, My Jo," arr. Michael Dyack.
 "Ye Birkies and Broom," arr. Michael Dyack.
 8.0. -MR. J. M. HOWE, M.A., M.P., proposing "The Immortal Memory of Robert Burns" at the Cardiff Caledonian Society's celebration of the 165th anniversary of the birth of Robert Burns, relayed from Lax's Cafe, Cardiff.
 8.30. -Part Songs.
 Alan Water. "The Water of Leith."
 "The Water of Leith."
 8.40. -Selection "The Thistle." Myddleton.
 8.50. -Songs.
 "My Love is Like a Red, Red Rose."
 "The Gaunt Weaver" arr. Michael Dyack.
 8.55. -A Handful of Sweetest Yarns.
 9.0. -Suite "Keltic Suite" from "Keltic Suite."
 9.10. -Part Songs.
 "Jesse, the Flower of Duane."
 "African Water."
 9.20. -Songs.
 "O Whistle and I Come to You my Lad."
 "Coming Thro' the Rye" arr. Michael Dyack.
 9.30. -NEWS. S.B. from London. Local News and Weather Forecast.

- 9.45. -Dance Music.
 10.10. -"SIEGFRIED," Act III. S.B. from London.
 11.20. -Close down.
 Announcer: A. C. C. C.

MANCHESTER.

- 3.30-4.30. -Concert. Mabel Travis (Soprano), Lily Kendra (Contralto), W. H. Watson (Baritone), James Taylor (Dialect Baritone).
 5.0. -MAINLY FEMININE.
 5.25. -Farmers' Weather Forecast.
 5.30. -CHILDREN'S HOUR.
 6.40. -MR. FRANCIS J. STAFFORD M.A., M.Ed. French Talk.
 7.0. -NEWS. S.B. from London.
 G. A. ATKINSON. S.B. from London. Local News and Weather Forecast.
 7.30-7.45. -Interval.
 7.45. -KEYBOARD KITTY will open proceed.
 8.0. -JAMES BERNARD will give you excerpts from Shakespeare.
 8.50. -BETTY WHEATLEY (Soprano).
 8.50. -"Solveig's Song" from "The Ring" by Edvard Grieg.
 9.0. -JAMES WORSLEY (Dialect Ex-aminer). How Billy Arncliffe Got a New Lady.
 9.15. -MR. W. F. BLECHER, Examiner Spanish to the Union of Lancashire and Cheshire Institute, Spanish Talk.
 9.30. -NEWS. S.B. from London. Local News and Weather Forecast.
 9.45. -Songs.
 "A Little Coon's Prayer" from "The Little Coon's Prayer" by Kennedy.
 9.55. -Songs.
 "A Little Coon's Prayer" from "The Little Coon's Prayer" by Kennedy.
 10.10. -"SIEGFRIED," Act III. S.B. from London.
 11.20. -Close down.
 Announcer: Victor Smyth.

NEWCASTLE.

- 3.45. -Concert. Ralph Elliot (Solo Pianoforte), Beppo Hindmarsh (Contralto), John J. Mott (Baritone).
 4.45. -WOMEN'S HOUR.
 5.15. -CHILDREN'S HOUR.
 6.0. -Society's Half Hour. Mr. W. C. F. Cunningham. Talk on "Water Power."
 6.35. -Society's Corner. Mr. B. W. W. Cunningham. "Variations on the Composition of M. A."
 7.0. -NEWS. S.B. from London.
 G. A. ATKINSON. S.B. from London. Local News and Weather Forecast.
 7.30. -BURNS NIGHT PROGRAMME. S.B. from Glasgow.
 8.15. -Burns' recitations relayed from the dinner given by the Newcastle Burns Club to honour the memory of the famous bard.
 SIR ROBERT BRUCE (Editor of the "Glasgow Herald") will propose the "Immortal Memory."
 9.0-9.30. -Interval.
 9.30. -NEWS. S.B. from London.
 9.45. -BURNS' NIGHT PROGRAMME (Contd.) S.B. from Glasgow.
 10.10. -"SIEGFRIED," Act III. S.B. from London.
 11.20. -Close down.
 Announcer: F. Lunn.

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IN these days of perplexity and circumstance, I would it not be folly to dwell upon what the evening may bring us? We really do know—and it mightily concerns most of us that on every evening of the week and easily within reach, lie the means of bringing wholesome pleasure and infinite contentment to family and friends. Instance the remarkable popularity of the wonderful Wireless programme and the keen enjoyment created among the charmed listeners by the introduction of a few cartons of choice Tunis Dates to the circle.

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WIRELESS PROGRAMME—SATURDAY (Jan. 26th)

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

LONDON

3.30-4.30.—Concert: The Wireless Trio and Jessie Elliott (Soprano)

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

5.30.—CHILDREN'S STORIES: Auntie Sophie at the Piano, Children's News Games and Pastimes, Richard Kearlton's "Wood Bird Adventures," read by J. Riddet Young.

6.15-7.0.—Interval

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

7.15.—MR. ALLEN BADDELEY on "The Day's Association Football"

7.30.—JOHN HENRY on "Laughing" S.B. to other Stations. Some Humorous Snapshots by FRED MILNER S.B. to other Stations. JOHN HENRY on "Grand Opera"

8.0.—"HANSEL AND GRETEL," Acts I and II (*Humperdunk*), relayed from The Royal Opera House, Covent Garden. S.B. to all Stations. (For Mr. Scholes' description of the Opera, see page 124 of this issue.)

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

9.45.—MR. E. KAY ROBINSON on "The Savoy Bands" from Nature—Footwriting to the Savoy S.B. to other Stations.

10.0.—THE SAVOY ORPHEANS AND SAVOY HALL BANDS relayed from the Savoy Hotel, London. S.B. to other Stations.

11.0.—Close down.
Announcer J. S. Dodgson

WIMBORNE

3.30-4.30.—KIDDIES' CONCERT by the Kiddies

5.0.—WOMEN'S CORNER

5.30.—Agricultural Weather Forecast. KIDDIES' CORNER. Further Adventures of Snookie

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

Old Memories Night.

7.1.—THE LEADS OF THE STATION REPERTORY COMPANY will give further renderings of "OLD TIME FAVOURITE SONGS"

8.0.—"HANSEL AND GRETEL," Acts I and II. S.B. from London.

9.0.—NEWS. S.B. from London

9.45.—ALICE COUCHMAN (Solo Pianoforte) "Prelude in A Flat" *Borabloom*
"Night on May" *Palmgren*
"Lullaby" *Palmgren*
"Appassionata No. 2" *Bridge*
"Andante" *Mudlow*

10.0.—WALTER BADHAM (Humorist), in selected items from his Repertoire.

10.15.—Close down.
Announcer H. Cecil Pearson

DOVER

3.45.—Concert: Alan Franklin (Solo Piano) Gerald Lee (Tenor), Muriel Gordon (Contra Alt)

4.45.—WOMEN'S HOUR

6.15.—KIDDIES' HOUR

6.15.—Scholars' Half Hour: J. Scattergood, H.G.S., "The Romance of Old Maps"

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

7.15.—E. HUSSELL OAKLEY on "The Passing of the Smugglers' Trade."

7.30.—JOHN HENRY and FRED MILNER. S.B. from London

8.0.—"HANSEL AND GRETEL," Acts I and II. S.B. from London.

9.30.—NEWS. S.B. from London

9.45.—MR. E. KAY ROBINSON. S.B. from London

10.0.—THE SAVOY BANDS. S.B. from London

11.0.—Close down.
Announcer W. R. Keene

CARDIFF

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

5.0.—"SWAS" "FIVE O'CLOCK" "Mr. Everyman," Talks to Women, Vocal and Instrumental Artists, the Station Orchestra. Weather Forecast.

6.0.—THE HOUR OF THE KIDDIES' WORKS

7.0.—NEWS. S.B. from London

7.15.—WILLIE O. CLISSITT Chat on Sport of the Week. Local News

7.30.—JOHN HENRY and FRED MILNER. S.B. from London

8.0.—"HANSEL AND GRETEL," Acts I and II. S.B. from London

9.30.—NEWS. S.B. from London

9.45.—MR. E. KAY ROBINSON. S.B. from London

10.0.—THE SAVOY BANDS. S.B. from London

11.0.—Close down.
Announcer L. E. Page

GLoucester

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

5.0.—MAINLY FEMININE

5.25.—Farmers' Weather Forecast

6.30.—CHILDREN'S HOUR

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

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

7.15.—THE "22Y" ORCHESTRA. March, "Folies Bergères" *Lanch*

Overture, "W. F. Te!" *Rosen*
Waltz, "Destiny" *Bugner*
"VIL, G. G. G. N. Mezzo-Soprano.

Air, "La Cid" *Musical*

7.45.—G. W. THOMPSON on "The Atmosphere."

8.0.—"HANSEL AND GRETEL," Acts I and II. S.B. from London

9.30.—NEWS. S.B. from London

9.40.—Orchestra. "Swiss Patrol" *Linke*
Selection of Irish Airs *Myddleton*

10.5.—Said Gordon. Two Songs. (Selected.)

10.20.—Orchestra. Selection, "The Arcadians" *Caryl and Monckton*

10.30.—Close down.
Announcer Sydney G. Honey

3.45.—Concert: Terehak's Dance Orchestra, John Irons (Solo Cello), Rose Chapman (Solo Violin)

4.45.—WOMEN'S HOUR

5.15.—CHILDREN'S HOUR

6.0.—Scholar's Half Hour: Mr. J. R. Williams on "Wales and its People," Part I.

6.15.—Variations Corner. Mr. H. G. Fawson on "Farming Proverbs."

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

7.15.—MR. R. J. TAIT, on "Old Parish Records."

7.35.—PALMER'S WORKS BAND. March "Commonwealth" *Palmer*
Intermezzo, "Secrets" *Palmer*

7.45.—WILLIAM TAYLOR (Baritone). "A Good Old Fashioned Chorus" *Henry*
"Rashful Tom" *Kemp*

8.0.—"HANSEL AND GRETEL," Acts I and II. S.B. from London

9.30.—NEWS. S.B. from London.

9.40.—Palmer's Works Band. "Songs of Araby" (Cornet Solo) *Moore*

9.50.—ETHEL M. STANLEY (Mezzo-Soprano)

"Parted" *Trout*
"In the Silence of the Night" *Cundick*

10.0.—Palmer's Works Band. "The Joywheel" (Trombone Solo) *Bolton*
Soloist, M. G. Snowden

10.10.—William J. Taylor. "The Widdow" *Nelson*
"Shoemaker Ned" *Nelson*

10.20.—Palmer's Works Band. Selection, "Le Pré aux Clercs" *Herold*

10.35.—Ethel M. Stanley. "Spinning" *Clarke*
"Turn Ye to Me" *Clarke*

10.45.—Palmer's Works Band. Selection, "In Sunny Lands" *Reimer*
Waltz, "Queen of Emeralds" *Green*

11.0.—Close down.
Announcer R. C. Pratt

My Secret Hut on Biggin Hill.

How I Relayed America. By A. G. D. West, Assistant Chief Engineer of the B.B.C.



CAPTAIN A. G. D. WEST,
B.A., D.S.C.

LISTENING to America has certainly had its amusements as well as its discomforts, its thrills as well as its disappointments. On the first visit to have a look round (the first time I had been there since the war) the snow was six inches thick, and it was freezing hard—a typical welcome from Biggin Hill, very much in contrast with the warm one we received from the squadron stationed there. The fun started that evening. I was waiting in a hut for a telephone call when I heard a violent crackling and dashed outside to find the Accountant's hut was blazing. Flames were leaping out of the window, but a few buckets of water soon subdued the fire, and the presence of the fire party prevented me from gathering up any of the fragments. Further, it was Friday, and the evening of pay-day, so my luck—like the cash—was out!

Listening in a Blizzard.

There was snow for a few days, and the nights of my vigils at Biggin Hill. Boxing Night was the worst with a blizzard. The hut was a stone one, but we had a good oil stove, and we soon warmed up to it; and my job often came up with us and made some boiling hot tea—very welcome at 2 a.m.

My first attempts at reception up at Biggin Hill were with a wonderful twelve-valve frequency receiver. It gave us the Yanks at full strength—but it gave us also all the Morse stations in Europe, practically every thunder storm in the world, and a frightful amount of interference from the harmonics of high power stations. And New York faded away at intervals (every three minutes or so), just as if it were engaged in a twenty-round contest with a telephone.

Disappointing Wave-Lengths.

One night the medley of Morse was deafening. It was all the result of an S.O.S. from a Dutch ship in mid-Atlantic, and by the time it had reported all O.K. America had closed down.

Listening to America on the ordinary broadcast wave-lengths was very disappointing. And who wants to wait up until 3 a.m. with a doubtful chance of getting good music from U.S.A.? Fortunately, there was more than one string to our bow. The East Pittsburgh Station of the Westinghouse Electric Company has been transmitting its programmes during the last six months on two wave-lengths simultaneously—320 metres and 100 metres. My first introduction to the latter was on a small set. It was a good night and reception was remarkable.

After that, I tried all kinds of circuits, and what turned out to be best for our purpose consisted of a seven-valve high frequency amplifier, followed by two stages of low frequency amplification. Music was then received fairly regularly at sufficient strength, but it all depended on the strength of the atmosphere as to whether it was suitable for relaying. At any rate, the Xs were less on this wave-length than on the higher wave-length, also there was practically no interference and no fading. This station was picked up directly it started at 11.15 or 11.30 each evening.

During our first attempt at relaying, on December 22nd, the atmospherics were terrific

and completely drowned the music. On Boxing Night reception was no better. On December 27th we had a busy time. At a quarter to eleven one of our 40ft. masts came down right on to the roof of our hut with a huge crash. One of the guy stakes had come out of the ground. The guy ropes were twisted round the chimney, but one of us shinned up it and released them.

At the second attempt at putting up the mast we got it up in position, and in half an hour excellent music was being received from KDKA.

Directly the Savoy Havana stopped we would relay it; but it was not to be. KDKA signed off exactly at midnight, the first time I had ever heard it do that—it usually goes on until 3 a.m.

Critical Tuning.

The difficulty throughout the experiments was that we were unable to arrange definite programmes, and we had to relay whatever we could pick up. Fortunately, on Friday and Saturday, the 28th and 29th of December, the programmes proved suitable. My apparatus was crudely arranged and the tuning was critical.

On the Friday the set appeared to have a growing tendency to oscillate, and I had to counteract this by holding my hand nearer and nearer to the tuning coil. After tuning-in and getting satisfactory signals, we phoned the station and informed 2LO, and then switched the connection to a Post Office line specially reserved for us. This brought the music to Savoy Hill where it was distributed to all stations. We also had a portable set on which we could listen to 2LO and compare the transmission with what we heard on the receiver.

On the Saturday we simply could not get through to 2LO on the 'phone, so we switched the music through, and such a good watch was being kept on our reserved line that, by the time we had changed our 'phones for those on the portable set, 2LO was already transmitting it and relaying it to all stations.

It was only an experiment, but it was great fun.

QUERIES: By G. H. Wade.

IF I tune the inductance and cut out the grid with an amplified aerial earth, And do it exactly like Eckersley did, What would crystal reaction be worth?

If I couple my anode to half watt dry cells With a potentiometer switch, And vary the valve till it fuses and smokes How could anyone tell which was which?

If I plug the resistance with rectified sparks And a queched spark transmitter reflexed, Ignoring my neighbours' indignant remarks, Do you think 2LO would be vexed?

If I tune in to Card ff and get Aberdeen By dividing my amperes by two, Then by doubling the voltage—you know what I mean, Should I get on to Glasgow, or who?

I know that I don't know as much as you know, But you think that you know such a lot, That a few simple questions like these will soon show If you're on the right wave-length or not.

** Poetic License.*

Paris Calling!

The First Franco-British Broadcast. By C. A. Lewis.

THERE is something very attractive about the French capital, and the chance to go over to see it was one I could not be jumped at, particularly as it concerned the first broadcasting between two European countries. Actually, of course, the distance between Paris and London is no greater than that between London and Manchester, and therefore no particular difficulty was encountered.

French Goodwill.

The great interest in this trip to me was the extraordinary courtesy, co-operation and goodwill which the French officials showed towards the scheme. The original arrangements to broadcast the address of M. Poincaré to me through, I had to try to put something from Paris to take its place at twenty-four hours' notice. This would never have been possible but for the help which was shown on all sides.

There were naturally two things to be done: one was to change over the direct line to London from the French Post Office to some other place where a concert could be given and, secondly, to arrange such a concert. By great good fortune, I was given a letter to M. Bréant, the technical expert to the Cie. des Radiotelegraphes, and as soon as I broached the question of making use of the Radiola for a concert to be transmitted in Great Britain he showed the greatest enthusiasm.

Trusting to Luck.

Within a few hours a programme was arranged: the Post Office and Telegraph authorities had agreed to switch over the lines to the Radiola Studio and all was complete. It remained only to test over to London to see that the lines were in full working order. This was done at 11 o'clock on Sunday morning, and the results were highly satisfactory.

The Radiola Studio started their usual programme at 8.30 and we were due to start at 9 o'clock. But something went wrong with the trunk lines and at five minutes to nine we found we were unable to speak to the London Office at all. Great excitement! It so happened that we had a French engineer on the spot who very ably established communication on one line at a few minutes after 9 o'clock. We could get nothing through on the other, and so, fearing to keep impatient listeners all over Great Britain waiting any longer, we put the microphone on to the telephone line and decided to trust to our lucky stars that everything was all right. It was fortunate that we did so, because the second line did not come into working order until after 9.30.

A Horrible Thought.

You can imagine the suspense in which the transmission took place! Particularly while General Antoine, the President of the Compagnie Française de Radiophonie, was speaking. He might be speaking to nothing! What a horrible thought! Luckily things proved to be otherwise. The General seized this opportunity of this first official broadcasting between France and England to deliver a few admirable words of friendship and goodwill towards Great Britain. After this, I had the great honour of replying on behalf of British listeners.

The Radiola Studio of Paris is underground in a cellar and about 30ft. square.

The Radiola Company is keen to take some of our transmissions, and perhaps before the New Year is out we may have established a regular series of Paris-to-London transmissions both ways.

The Savoy Dance Bands.

By the Leader of the Famous Savoy-Orpheans Band.

MANY listeners to the Savoy-Orpheans and the Savoy-Havana Dance Bands, from the artful, ballrooms of the Savoy Hotel, London, will be interested to know of the manner in which these orchestras were selected.

These orchestras are not imported en bloc from abroad, like those American dance orchestras which visited London last year. They are built up by a staff of experts, each member of the Savoy-Orpheans and Savoy-Havana Bands being a specialist in his own line. The instruments are brought to London, and, after much rehearsing, welded into the bands.

The Search for Novelties.

New instruments and new numbers are always being tried so as to add to the sparkle of the individual numbers.

The demand for dancing grows every year, and, with it, a consequent demand for finer orchestras. There are very many symphony orchestras there are, however few really perfect.

A good orchestra must be built up by a staff of experts, each member of the Savoy-Orpheans and Savoy-Havana Bands being a specialist in his own line. The instruments are brought to London, and, after much rehearsing, welded into the bands.

Better Music Wanted

There has been a change in the character of the music of the past ten years—from the poorly-constructed, poorly-orchestrated "Jazz" to the present-day syncopated music which takes advantage of every shade of orchestration and harmony. There is a constant and growing demand for better and better dance music, but it is an unsolved problem to find sufficient suitable dance tunes which are really good and original.

To-day, however, it is absolutely essential for the Savoy-Havana Bands to have a new repertoire of the work necessary for the new dance music. These new numbers

are then considered by our special staff of arrangers in London and, where selected, are recast and orchestrated with every consideration for the dance floor.

Over ten thousand dance tunes were read and tested when compiling the present repertoire of the Savoy-Orpheans Band.

Some Quasi-Instruments.

A dance orchestra for analytical purposes is divided under two heads—instruments which emphasize "rhythm" and instruments which emphasize "melody". The following are composed of the former.

Rhythm	Melody
Piano	Saxophones
Banjo	Cornets
String Quartet	Trumpets
Drums	Reeds
Harpsichord	Harp
	Xylophone
	Glockenspiel
	Tubular Bells

These instruments in almost every case are really groups of instruments. For instance, there are two banjos, the long-neck and the tenor. Saxophones range from the double bass which sounds like a double bass, to the soprano which sounds like a flute. The cornets range from the large, which sounds like a trumpet, to the small, which sounds like a flute.

The cornets sometimes use Bach trumpets, which look like coach horns, but with regular sound. The string quartet is made up of four instruments, each of which gives a different effect. The harpsichord is a small, square instrument, which gives a paper-and-wood effect.

A Man of Many Parts.

The reed instruments include clarinets and oboes, which are used almost exclusively for the "Blues" and waltzes.

The "Drummer" is the curiosity of the orchestra, however, for he manages the big drum, side-drum, timpani—or kettle-drum—in each case. The kettle-drum is a large, round drum, which is struck and are shaped almost like cow bells,

carved from wood and covered with lovely lacquer work—the xylophone, glockenspiel, and tubular bells. The glockenspiel is just like the xylophone, but the notes are higher, consisting of pieces of metal of different lengths resting on two wooden sleepers and struck with a soft hammer, giving off a soft melodious note.

Altogether, the Savoy-Orpheans and Savoy-Havana Bands each use over forty instruments in the course of an evening's broadcasting.

The World's Most Wonderful Piano.

The piano used by the Savoy-Orpheans is the most wonderful in the world. It is a grand piano, but it is not a grand piano. It is a piano of the size of the Savoy-Orpheans or the Savoy-Havana Bands, and two pianos—which have hitherto been considered as a grand piano and a corresponding lack of precision. The piano, with its two keyboards, is really a grand piano. When not coupled, each may be used as a grand piano. The Savoy-Orpheans use this piano in all the important dance bands in America.

The Atmosphere of Happiness.

The Savoy orchestras take the atmosphere of happiness into account. They are not just a group of instruments, but a group of instruments which give a feeling of happiness.

When the Savoy-Orpheans and Savoy-Havana Bands are performing, the atmosphere of happiness is everywhere. The music is so good, the instruments are so well played, and the dancers are so happy. The atmosphere of happiness is the result of the music and the instruments.

The Savoy-Orpheans and Savoy-Havana Bands are the most wonderful in the world. They are not just a group of instruments, but a group of instruments which give a feeling of happiness.



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2 volt, 100 amps., 17/-
4 volt, 60 amps., 21/-
6 volt, 40 amps., 23/-
6 volt, 80 amps., 38/-

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2/6

WORMEY HALL, A.I.E.E. Durham Rd., Low Fell, Underwood-on-Tyne.

WIRELESS PROGRAMME—ABERDEEN (Jan. 26th to Jan. 26th.)

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

SUNDAY.

- 3.0-5.0. ORGAN REHEARSAL S.B. from London
- 5.0-5.30.—CHILDREN'S CORNER S.B. from London
- 5.30.—WIRELESS QUARTETTE
"Dear Watson Words" Mendelssohn
- 5.45.—AMY MURDOCH (Soprano)
"Glory to Thee, My God, this Night"
- 6.0.—"O Divine Redeemer" London
- 6.50.—Quartette
Overture, "Cordans" Beethoven
- 7.0.—JOHN KNOX OF CHURCH CHAMBER
THE REV JOHN A. MARTIN John Knox
I.F. Church, Religious Address
John Knox I.F. Church Choir
- 8.15.—Amy Murdoch
"I Know Thou, My Redeemer Love"
- 9.0.—Come Unto Me Handel
- 9.25.—Quartette
- 9.40.—"I Shall Be Free" Amy Murdoch
- 9.50.—"O Divine Redeemer" Mendelssohn
- 10.0.—Selection, "Luppula" Debussy
- 10.0.—NEWS. Relayed from London
Local News and Weather Forecast
- 10.15.—"I Shall Be Free" Amy Murdoch
- 10.25.—Close down
To be relayed W.D. Simpson

MONDAY.

- 3.30-4.30. The Wireless Quartette, Popular Afternoon
- 5.0.—WOMEN'S HALF HOUR
- 5.30.—CHILDREN'S CORNER
- 6.0.—Weather Forecast for Farmers
- 6.30.—Boys' Brigade News
- 6.40.—Boy Scouts' Talk District Scoutmaster H.B. Forsyth "Scout Signs"
- 7.0.—NEWS S.B. from London
JOHN STRACHEY S.B. from London
Local News and Weather Forecast
- 7.30.—"La Toca" S.B. from London
- 8.15.—ARNOLD WARD S.B. from London
- 9.0.—NEWS S.B. from London
- 9.45.—POPULAR CONCERT (Lond.) S.B. from London
- 10.30.—Close down
Announcer H.J.M. Kee

TUESDAY.

- 3.30-4.30. The Wireless Quartette, Irish Afternoon
- 5.0.—WOMEN'S HALF HOUR
- 5.30.—CHILDREN'S CORNER
- 6.0.—Weather Forecast for Farmers
- 6.5.—Talk to Farmers Mr. Jas. B. Barclay, Secretary of the Aberdeen Angus Cattle Society, "The Story of the Aberdeen Angus"
- 7.0.—NEWS S.B. from London
Local News and Weather Forecast
- 7.15.—JULIAN ROSETTI'S ENSEMBLE
"La Toca" Puccini
- 7.30.—JOHN PERRY
"Pride Song" ("Mendelssohn") Wagner
"Spring Song" ("Valkyrie") Wagner
- 7.40.—Julian Rosetti's Ensemble
Ballet Music from "Rosamunde" Schubert
- 7.55.—MARY BOWMAN
"Sweet Vorrester" ("Un Balcon") Massenet
- 8.0.—"O Luce di Quasi Anni" ("Luce di Quasi Anni") Donizetti

- 8.0.—Julian Rosetti's Ensemble
Melody in F "Rubinstein"
Allegretto "Beethoven"
- 8.15.—John Perry
"Anchorage" Berthouin
"I Love You" Berthouin
- 8.30.—CAPT. P. F. RIVERSLEY S.B. from London
- 8.45.—"TRISTAN AND ISOLDE," Act II
S.B. from London
- 9.45.—NEWS S.B. from London
- 10.—Julian Rosetti's Ensemble
Overture, "William Tell" Rossini
- 10.10.—Mary Bowman
"By the Waters of Monestonka" Lohengrin
"Love is Meant to Make Us Glad" German
- 10.20.—Julian Rosetti's Ensemble
Andante Rondo Reisinger
- 10.35.—Mary Bowman
"O Flower of All the World" Woodforde Fender
- 10.45.—Julian Rosetti's Ensemble
Raymond Overture Tagino
- 10.50.—John Perry
"In Autumn" Franck
"La Donna e Mobile" Verdi
- 11.0.—Close down
Announcer R.K.J. Kee

WEDNESDAY.

- 3.30-4.30. The Aberdeen Wireless Quartet
Scotch Afternoon
- 5.0.—WOMEN'S HALF HOUR
- 5.30.—CHILDREN'S CORNER
- 6.0.—Weather Forecast for Farmers
- 6.5.—MADAME LEFEVRE Task and Instruction on the French Language, No. 4
- 7.0.—NEWS S.B. from London
ARCHIBALD HADWIN S.B. from London
Local News and Weather Forecast
- 7.30.—THE WIRELESS ORCHESTRA
Fox-trot, "Blue Danube Blues" Waltz, "The Swan Lake"
- 7.40.—DUFFON SCOTT (Grand Scots Harpist) will entertain from his own works
- 7.55.—Orchestra
Waltz, "Lava's Triumph" One-step, "Dark Town Jambores" Fox-trot, "Cat's Whiskers"
- 8.10.—PROFESSOR W. W. FAYIE D.Sc.
Aberdeen University, on "Wireless"
- 8.25.—MOLLY BIRCHARDSON (Soprano)
"The Shepherd" Durck
- 8.35.—DUFFON SCOTT will entertain from his own works
- 8.50.—Orchestra
"I Am But a Simple Maid" Swing Tune
- 9.0-9.15.—"The Shepherd" Durck
- 9.30.—NEWS S.B. from London
Local News and Weather Forecast
- 9.45.—Orchestra
Waltz, "Royale" Quadrille, "Reel Time"
- 10.0.—DUFFON SCOTT will entertain from his own works
- 10.15.—Molly Richardson
"Molly's Song" Grand Ole Opry
- 10.30.—Close down
Announcer W.D. Simpson

THURSDAY.

- 3.30-4.30. The Aberdeen Wireless Quartette
Memories of Great Composers
- 5.0.—WOMEN'S HALF HOUR
- 5.30.—CHILDREN'S CORNER
- 6.0.—Weather Forecast for Farmers
- 6.40.—Boy Scouts' and Girl Guides' News
- 7.0.—NEWS S.B. from London
- 7.15.—PERRY S. HOLMES S.B. from London
"The Swan Lake" S.B. from London
Local News and Weather Forecast

Classical Night.

- 7.30. THE WIRELESS ORCHESTRA
"Soch Symphony" Mendelssohn
- 7.50.—Greta Hodge (Soprano)
"Lament of Isis" Montyck
"Caro mio Ben" Leonard
- 8.0.—HILBERT FARQUHAR (Solo Flautist)
"Serenade" T.H.
- 8.10.—The Bartered Bride Smetana
- 8.20.—NORMAN F. SWAN (Baritone)
"Large of Factotum" ("The Barber of Seville") Rossini
- 8.30.—Orchestra
"Concerto" (Part I) Grieg
- 8.50.—Greta Hodge
"Soul of Mine" Barbra
"The Enchantress" Hurton
- 9.0-9.30. Interval
- 9.30.—NEWS S.B. from London
Local News and Weather Forecast
- 9.45.—Orchestra
"Symphony No. 3" Beethoven
- 10.0.—Norman F. Swan
"The Song of the Toreador" ("Carmen") Bizet
- 10.10.—"An Old Garden" Temple
- 10.10.—Orchestra
"Concerto" (Part II) Grieg
- 10.30.—Close down
Announcer R.E. Jones

FRIDAY.

- 3.30-4.30. Aberdeen Wireless Quartette, Dinner Afternoon
- 5.0.—WOMEN'S HALF HOUR
- 5.30.—CHILDREN'S CORNER
- 6.0.—Weather Forecast for Farmers
- 6.5.—Scholars' Half Hour: Harry Tovey, Curator, Art Gallery, Aberdeen, on "Art"
- 6.25.—Answers to Scholars' Queries
- 7.0.—NEWS S.B. from London
- 7.15.—A.A. KINSMAN S.B. from London
Local News and Weather Forecast
- 7.30-9.30 and 9.45-10.10. This Programme will take the form of the post-prandial portion of a Burns dinner. The Immortal Memory will be proposed by DR. JAMES F. TOCHER, D.Sc., F.I.C. The following Burns songs will be sung by MISS GERTRUDE SIMPSON (Soprano):
"O! the Yowes to the Knowe"
"Lamin' Thro' the Rye"
"For the Sake of Somebody"
"There was a Lad was Born in Kyle"
"Ye Banks and Braes"
MR. JAMES SHARPE (Tenor, will sing:
"Auld Lang Syne"
"I'll be awa' wi' the Exciseman"
"My Love is Like a Red, Red Rose"
"Bannie Mary of Argyle,"
and others

The following items will be recited by DONALD MURDO, O.B.E., Provost of Banchory:
"A Man's a Man for A' That"
"Address to a Haggis"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"

An after dinner talk by DR. J. F. TOCHER, D.Sc., F.I.C. Public Analyst, Aberdeen
THE PIONEERS FROM OAKBANK INSTITUTE
TRIAL SCHOOL will play organ solo selection

THE WIRELESS ORCHESTRA

- will play
"A Night We Burns"
"Heart of Midlothian"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"
"The Waulker"
- 9.30.—NEWS S.B. from London
- 10.10.—"The Waulker" Act III S.B. from London
- 11.20.—Close down
Announcer H.J.M. Kee

Continued in col. 1, page 147



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WIRELESS PROGRAMME—GLASGOW (Jan. 20th to Jan. 26th.)

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

SUNDAY

- [illegible]

MONDAY.

- 7.30-4.30 The Field of Melody.
4.45 Mr. MENN'S LITTLE HOUSE.
5.15 THE THREE PEN & CORNER.
6.0 -Weather Forecast for Farmers.
6.45--Boys' Brigade News.
7.0 NEWS S.B. from London
7.15 HEN STRAUBER S.B. from London.
Local News and Weather Forecast.
7.30--POPULAR CONCERT, S.B. from London.
8.15 MR. E. ARNOLD WARD S.B. from London.
9.0 NEWS S.B. from London
9.45--POPULAR CONCERT (Contd.). S.B. from London.
10.30 A H S P. from London

TUESDAY.

- 3.30-4.30.--An Hour of Melody,
4.45.--A TALK TO WOMEN
5.1 THE CHILDREN'S CORNER.
5.0.--Weather Forecast for Farmers,
7.0 News and Weather Forecast.
7.15 MISS H. BRENNAN on "How Gas
7.30. BAND OF B.M. 1ST BATTALION
ROYAL SCOTISH FUSILIERS
By kind permission of Brig Gen G. H.
Conductor W. C. WITHERS A.R.C.M.
Overture, "The Merry Wives of Windsor"
Serenade, "The Belfry"
Selection, "Faust"
Hawthorn

- [illegible]

WEDNESDAY.

- 7.40-8.10 A Talk to Women.
4.45.—A TALK TO WOMEN
5.16. THE CHILDREN'S CORNER.
6.40 M. E. M. S. C. L. N. S. H. ...
7.0.—NEWS. S.B. from London.
ARK HIBALD HADLON S.B. from Lon-
don
Local News and Weather Forecast,
Grand Schubert Night.
7.30. THE AUGMENTED ORCHESTRA
Conducted by
Herbert A. Carruthers.
7.40. JOHN PERRY (Tenor).
Soprano.
"Thou Bringest Peace."
Orchestra.
Symphony in C Major
8.20. John Perry.
"Hark! Hark the Lark,"
"Who is Sylvia!"
Orchestra.
Symphony in C Major
9.0-9.30. Interval.
9.30. NEWS, S.B. from London.
Local News and Weather Forecast.
9.45. Orchestra
Ballet Music, "Romeo and"
John Perry.
"The Erl King."
Omnipotency, Opus 79, No. 2.
Wagner's "Die Walküre"
10.10. Orchestra
"Ave Maria."
"Marche Militaire."
10.30.—Special Announcements. Close down.
Announcer, Mungo M. Dewar.

THURSDAY.

- 3.30-4.30. An Hour of Melody
4.45. A TALK TO WOMEN.
By THE F. DUKES. (Live)
6.0. -Weather Forecast for Farmers.
6.4. The Six and Five News.
7.0. -NEWS. S.B. from London.
7.15. Y & HOTES. S.B. from London
Radio Society Talk S.B. from London.
Local News and Weather Forecast.
7.30. WHITE RUTH. S.B. from London
8.0. -AN HOUR'S CHAMBER MUSIC. S.B.
from London.

- 9.45 Fox Trot
 10.00 Local News and Weather Forecast
 10.30 NEWS, 88
 10.45 Fox Trot
 11.00 Local News and Weather Forecast
 11.30 Fox Trot
 11.45 Local News and Weather Forecast
 12.00 Fox Trot
 12.30 Special Announcements. Close down.
 Announcer: Mungo M. Dewar

FRIDAY.

- 3.30-4.30. An Hour of Mood
6.0.—Weather Forecast for Victoria
7.0.—NEWS & B. from London
C. A. ATKINSON S.B.
Local News and Weather Forecast.

Burns' Nicht Programme.

- 7.40 "There was a Lad."
 7.50. AUGUSTUS HEDDIE Soloist
 "The Old Song"
 8.15. GLASGOW CORPORATION
 TRAMWAYS PIPE BAND
 March, "The Black Bear."
 March, "The Brown Haired Maiden."
 March, "A Man's a Man for a' that."
 Strathpey, "Ariston Castle."
 Reel, "The Grey Bob."
 8.27 "The Winton Select Choir"
 8.36. "The Winton Select Choir"
 Solo, "Ye Banks and Braes" and "A
 Man's a Man."
 Choir, "Scots Wha Hae."
 8.47 Augustus Heddie
 "The Collier's Saturday Night."
 8.0. "The Winton Select Choir"
 "An' Fond Kiss."
 "Duncan Gray."
 9.10 "The Mauchline Burns Club"
 JANE MAUCHLINE, Ayrshire
 Poetic Nancy's Inn was the scene of the John
 Haggart, and the intimate association of
 the meeting of the Mauchline Burns Club
 and of the President, Office Bearers and
 Members.)
 9.40 "The Green Hills of Tyrol"
 9.45 "The Old Rattle Bridge"
 Air, "The Old Rattle Bridge."
 Air, "They're far, far Awa."
 March, "Duke of Roxburgh's Welcome to
 Black Mount Forest."
 Strathpey "Balmoral Castle"
 Reel, "Bridge of Perth."

The "Haggis" Arrives at "ESC."

- To be taken by
 Augustus Beddoe
 "AULD LANG SYNE"
 1. 10
 London
 11 20.—I lose

(Continued in col. 2, page 147.)

YOUR VALVE TROUBLE.

You have valve trouble
So does your friend
So do thousands of others.

WHY?

In 99 cases out of 100 your valve has been overloaded, or the high tension voltage has been allowed access to the low tension circuits.

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There are two ways. One person buys a new valve; this costs him at least
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A week later the new valve fails. Bang goes another

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SEVENPENCE.

He fits this fuse to his valve before it fails, and has

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Type O. For Mullard Ora A and Ora B valves.

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Panel mounting type	-	-	"	1s. 6d. "

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WEDNESDAY'S PROGRAMME.

(Continued from page 133.)

NEWCASTLE.

- 6.30. Farmers' Corner: Prof. G. Christ Talk on "Results of Feeding Experiments."
- 6.40.—M. E. M. STEPHAN, S.B. from London.
- 7.0. NEWS, S.B. from London.
- 7.15. THE WIRELESS ORCHESTRA Selection, "Ban Toy" Jones.
- 7.45. ANITA HARRISON (Solo Pianoforte).
- 7.55. F. KEMP JORDON (Baritone). "When a Little While Has Flown" Lloyd.
- 8.5. MAY JOHNSON (Contralto). "The Cloths of Heaven" Dunkell.
- 8.25. GEORGE BUDGSON (Tenor). "Love Could I Only Tell Thee" Capel.
- 8.35. A. H. HARRISON (Pianoforte). "The Evening Post" Scott.
- 8.45. MAY JOHNSON. "Blackbird's Song" Scott.
- 8.50. "The Day" Scott.
- 9.0.9.30.—Interval.
- 9.30.—NEWS, S.B. from London.
- 9.45. "Harder Ballad" Cosen.
- 9.55. Entr'acte, "In the Shadows" Finch.
- 10.0. "Myrtle Beauty" Finch.
- 10.1. "I Love Thee" Sutherland.
- 10.15. Orchestra. Selection, "All the Girls" Williams.
- 10.30.—Close down.
- Announcer: C. K. Parsons.

ABERDEEN PROGRAMME.

(Continued from page 143.)

SATURDAY.

- 4.30.—The Aberdeen Wireless Quartette, Miscellaneous Afternoon.
- 5.0.—WOMEN'S HALF HOUR.
- 5.15.—CHILDREN'S CORNER.
- 6.0.—Weather Forecast for Farmers.
- 7.0.—NEWS, S.B. from London.
- Local News and Weather Forecast.
- Popular Old Songs and Airs.
- 7.15. THE WIRELESS ORCHESTRA "I Hear You Calling Me" Marshall.
- "Hearts and Homes" Blockley.
- "When the Heart is Young" Duck.
- 7.30. GEORGE W. L. RAE (Tenor). "Yes, I'm a Soldier Boy" Wallace.
- 7.40. RUBY CARROL (Soprano). "Love's Old Sweet Song" Moyle.
- 7.50. ROBERT E. ANDERSON (Baritone). "My Old Shako" Teatere.
- 8.0.—"HANSEL AND GRETEL," Acts I and II, S.B. from London.
- 9.30.—NEWS, S.B. from London.
- 9.40.—MR. DAVID BORIE, M.D., D.S.O., etc., of Aberdeen, "The Forgotten Scrap of Local History."

- 10.0. George W. L. RAE. "O Sole Mio" (By special request.) Adams.
- "Thorn" Raby.
- 10.10. "We Better Hido a Wee" Churchill.
- 10.20. Orchestra. "Nazareth" Gounod.
- "The Bell" R. B.
- 10.30. "The Evening Post" Scott.
- 10.40. "Sea Songs" Volts.
- 11.0.—Close down.
- Announcer: W. D. Simpson.

GLASGOW PROGRAMME.

(Continued from page 144.)

SATURDAY.

- 3.30-4.30.—An Hour of Melody.
- 4.45.—A TALK TO WOMEN.
- 5.15.—THE CHILDREN'S CORNER.
- 6.0. Weather Forecast for Farmers.
- 6.45. KILSYTH MALE VOICE CHOIR. "The Evening Post" Scott.
- 7.0. NEWS, S.B. from London.
- Local News and Weather Forecast.
- A Night of Plays.
- 7.15. "The Man in the Street" (A One Act Play) (Louis N. Parker). Produced by GEORGE ROSS.
- 7.25. Kilsyth Male Voice Choir. "O Peaceful Night" German.
- 7.37. "THE MAN IN THE STREET" (A One Act Play) (Louis N. Parker). Produced by GEORGE ROSS.
- Characters:—Philip Adara, James Gover, Missie Adara, Scene: A Studio in West Kensington.
- Time: The Present.
- 8.0. "HANSEL AND GRETEL," Acts I and II, S.B. from London.
- 9.30.—NEWS, S.B. from London.
- 9.45. Orchestra. "Desert Suite" Strauss.
- 10.0. "THE NINTH WALTZ," (A One Act Play) (E. O. Garton). Produced by GEORGE ROSS.
- Characters:—Florence and Roland.
- Scene: The Ante-room of a Ballroom in Mayfair.
- 10.25. Waltz, "Blue Danube"; Fox-trot, "Teddy Bear Blues"; March, "The Broadcaster."
- 10.45.—Special Announcements. Close down.
- Announcer: A. H. Swinburn Paterson.

THE PUBLISHER'S ANNOUNCEMENTS.

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- Eiffel Tower FL. Paris 2,500 metres.
8.40 to 7.0 a.m.; 11.0 to 11.30 a.m.; 3.40 to 4.0 p.m.; 5.30 to 7.20 p.m.; 10.0 to 10.30 p.m.
- Compagnie Française de Radiophonie Emission Radiola SFR Paris 1,780 metres.
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GERMANY.

- Koenigswusterhausen. LP. Berlin. 4,000 metres.
6.0 to 7.0 a.m.; 11.30 a.m. to 12.30 p.m.; 4.0 to 4.30 p.m.

These times of transmission are Greenwich mean time.

AMERICA.

- General Electric Co. WGY. Schenectady N.Y. 380 metres.
- Radio Corporation of America. WJZ. New York, N.Y. 455 metres.
- John Wanamaker. WOO. Philadelphia, Pa. 500 metres.
- L. Samburger and Co. WOR. Newark, N.J. 405 metres.
- Post Dispatch. KSD. St. Louis, Mo. 546 metres.
- Kunstler Poly. Inst. WHAZ. Troy, N.Y. 340 metres.

EVENTS OF THE WEEK.**SUNDAY, JANUARY 29th.**

LONDON, 3.0-6.0. Organ Recital relayed from the Concert Hall of the National Institute of the Blind. S.B. to all Stations.

CARDIFF, 8.0. British Composers' Night. S.B. to London.

MONDAY, JANUARY 30th.

LONDON, 7.30. Popular Concert. S.B. to all Stations except Cardiff.

TUESDAY, JANUARY 31st.

CARDIFF, 7.30. Literary Night.

LONDON, 8.45. "Tristan and Isolde," Act II. Wagner, relayed from The Royal Opera House, Covent Garden. S.B. to all Stations.

WEDNESDAY, JANUARY 31st.

LONDON, 1.30.—Band of H.M. Grenadier Guards.

BIRMINGHAM, 1.30.—"Singled the Waller," a Radio Piano-Ravon.

GLASGOW, 1.30.—Schubert Night.

THURSDAY, JANUARY 31st.

LONDON, 8.0.—An Hour's Chamber Music. S.B. to other Stations.

FRIDAY, JANUARY 31st.

GLASGOW 8.0. Burns Memorial Celebrations, relayed from Potts' Nairn's Inn, Mauchline, Ayrshire. S.B. to other Stations.

LONDON, 10.15.—"Siegfried," Act III. Wagner, relayed from The Royal Opera House, Covent Garden. S.B. to all Stations.

SATURDAY, JANUARY 31st.

LONDON, 8.0.—"Hansel and Gretel," Acts I and II. Hammerstein, relayed from The Royal Opera House, Covent Garden. S.B. to all Stations.

THE CHILDREN'S CORNER.

CONDUCTED BY
UNCLE CARACTACUS

Uncle Jack Frost's Wireless Story.

H. LLO. CHILDREN. This week we have got a jolly story by Uncle Jack Frost about wireless works. I hope you will read it.

Do you know, I have been thinking and thinking and thinking as to the best way in which I can make this week's talk useful to you. I am ever so afraid lest I may be making you think that Wireless is not such a very thing to understand after all. And I have just thought of it—I have not once begun one of my talks with "Once upon a time," have I? No, indeed, with "and they lived happily ever after." Sad, isn't it? At any rate, let me see if this time I cannot start and end properly.

Once upon a time in a far country there lived a little boy and a little girl in a hut in the centre of some woods. Around the hut was quite a beautiful open meadow of ever such green grass, which formed quite a clearing in the surrounding forest. The little boy and girl had a father and mother.

A Fine Game of Ball.

The little boy had been given a very nice rubber ball for a present and the little girl had received a doll. Though Jill, the little girl, was very fond of playing with her doll, she was always quite ready for a game of ball with Jack, her brother. Sometimes they played at throwing the ball high into the branches of the trees on the edge of the meadow, and sometimes they kicked it along the ground.

Though Jack was a boy, and more used to kicking the ball than Jill, yet sometimes the little girl could kick it quite as far across the smooth meadow as her brother could.

One day their father was watching them at play, and told them that he would give sixpence to the one that kicked the ball the farthest across the meadow from the front of the cottage.

First Jill kicked the ball, and then Jack. Somehow, neither of them seemed to kick as far as they tried to do when playing together, but Jack won in the end.

Then father offered another sixpence to the one who could win in a race around the meadow. Jill was the winner.

Then, hot and tired, they sat down with their father in the grass near to the cottage door. Jack, who was a very inquisitive kind of boy, began to ask lots and lots of questions.

Father, he said, "when I kicked the ball across the grass, why did it not go on rolling and rolling ever so far, instead of going slower and slower until it finally stopped?"

What "Resistance" Means.

After looking at Jill, who generally had an answer ready for Jack's many questions, expecting that she would answer. And he was not disappointed, for Jill, with quite a positive tone towards Jack, said: "Because it gets tired like I do sometimes after running a long way, and goes slower and slower until it stops."

Father smiled to himself, and explained that the ball had his weight, and as it rolled along over the grass it meets with a certain amount of resistance. "You see," father said, "if I were to rub my hand on the chair and then down, it would soon be hot and sore. Why did it not? Well, the reason of that is that

friction is set up, in other words, resistance to the passing of my hand over the wooden side of the chair. In the same way the surface of the ground offers resistance to the passage of the ball across it, and the force with which the ball was kicked by Jack in the first place is lessened by the resistance offered to it by the surface of the meadow. The force with which Jack kicked the ball is measured in pounds weight. Of course, if the ball had been kicked uphill, not only would the resistance of the ground have had effect upon the slowing down and finally stopping of the ball's rolling, but you would find that the law of gravity itself

better mediums for the passage of current than insulators.

An electric current is passed along a wire from a battery or accumulator and, provided that it has a path whereby it may return to the place that it came from (because it likes to go home like you and Jack), it will flow along the wire back to the battery or accumulator. The pressure which is used in sending the current from the accumulator along the wire is measured in what are called volts. The resistance with which it meets as it passes along the wire is measured in "ohms," and the quantity or amount of current which passes along the wire is measured in "amperes."

Neither Jack nor Jill could possibly understand exactly what this meant, so father explained to them that if he had a pipe fixed to the mouth of the pump standing outside the cottage door, close to where they were sitting, and if he were to pump on the pump handle until the water passed from the pump along the pipe, it would be something like the flow of electricity along a wire. The force with which the pump handle was moved up and down, and the force with which the water gushed out into the pipe, is something like the force which is used for the passage of the current from the accumulator on its way around an electric circuit.

The Water and the Pipe.

If the water were measured as it gushed out of the end of the pipe, and we knew it to be so many gallons, then that was just like the amount of electric current which has passed along the wire.

Again, as the water rushed along the pipe, it would be rubbing the whole way along against the sides of the pipe, and this rubbing, or friction, would tend to stop the flow of the water: but because the power used in working the pump handle is so strong, this resistance is overcome and the water gushes out from the end of the pipe. The resistance to the flow of the water along the pipe is like the resistance to the flow of the electric current along the wire. If that pipe were laid absolutely flat along the ground, neither uphill nor downhill, and were a very long one, then you would find that the water would not flow out of the pump with such a rush, but would flow out of the end of the pipe quite slowly. And now, children, I am going to wind up my story in the proper way and Jack and Jill played happily ever after.

What an "Ohm" is.

You have often heard grown-up people talk about the phones which you wear being of 2,000 or 4,000 ohms resistance, and I expect you have often wondered what an "ohm" is. It is just that tiny force which offers resistance to the flow of the electric current through an electric circuit, and the expression "2,000 ohms" only means that the resistance offered by the windings of the wire inside the headphones is 2,000 ohms.

UNCLE JACK FROST

Miss Muriel Henry, aged eight, whose picture you see on this page, has a charming soprano voice. The engineers at Glasgow Station say that every word she sings is as clear as a bell.

(CARACTACUS.)

(Continued on the facing page.)



A PRETTY LITTLE BROADCASTER.

Miss Muriel Henry, who, although only eight years old, sings at Glasgow Station.

would tend to bring the ball to a standstill in the course of time."

"How funny it would be," Jill said, "if, when you kicked the ball, it went on rolling and rolling and rolling and never stopped."

"Girls always talk like that," said Jack, "but I should not take any notice of her, father, if I were you."

Father then began to explain to them that there were other things besides india-rubber balls which, when thrown or pushed, or sent with any force along the ground or through a wire, met with resistance. "Through a wire, did you say, father?" Jill asked. "How could anything go through or along a wire?"

Her father then explained to her that electricity travels along a wire called a "conductor," not a train-conductor of course, but a conductor of electricity because it conducts electric current better than other things which are called "insulators." Even an insulator is in some degree a conductor, though what we call good conductors are, as their name implies, much

The Children's Corner. (Continued from the facing page.)

SABO AND THE BLUE-BOTTLE.

By E. W. Lewis.

ALTHOUGH Sabo was no longer used as a pen-wiper, but was now a gentleman of no occupation, he remained on the writing table in the sitting-room, and stood guard over the silver ink-pot, the glass tray for pens, and the little drawer in which the stamps were kept. He was not at all lonely, for quite a lot of interesting persons wished to make his acquaintance. The Blue-bottle for instance.

Early this morning, before anybody was downstairs, the Blue-bottle flew down on to a patch of sunlight which lay on the writing-table; and he stood there, clean up his wings with his legs.

All of a sudden, and without any introduction whatever, he said to Sabo: "You can't do that!"

"Can't do what?" said Sabo, looking down at him in surprise.

"That," said the Blue-bottle, having stroked one wing with one leg, and the other wing with another leg, and then both wings with two legs at the same time.

"What do you do that for?" Sabo asked.

"I'm coughing myself," replied the Blue-bottle.

Then the Blue-bottle flew straight up the main beam as far as the window, came skimming down it back again, and alighted on the table with the greatest ease.

"You can't do that, either," he said.

"No, and I don't want to," Sabo stilly replied.

"What can you do?" asked the impertinent fly.

"If you can't fly, can you walk?"

"Of course I can walk," said Sabo indignantly.

"But can you do this?" said the Blue-bottle.

as he flew up to the ceiling and walked across it upside down. "Do you see what I'm doing?" he called from the ceiling. "Walking upside



Sabo let go and fell head first to the floor with a terrible bump.

down, do you see?" And then he dropped with a little thud on to the table again, and walked about a bit there. "Now I'm walking right side up!" he said. "I can walk right side up, and I can walk upside down, and I can fly! . . . Let me see you walk!"

Sabo strode to and fro across the table.

"There!" he said, "you see."

"If I'd legs like yours," said the Blue-bottle,

"I'd walk over the house and over the moon." "You're a good walker, I can see that—right side up. Can you walk upside down?"

"I've never tried," said Sabo.

"But you've got feet?" "The Blue-bottle laughed. "Try. It's quite easy. You just put your feet on to the ceiling as you put them on to the table, and—walk!"

And he so teased and teased Sabo that he succeeded at last in persuading him to try.

Sabo climbed up the curtain, and when he got to the top, his tormenter was waiting for him. "That's very good," said the Blue-bottle. "Now, put your foot on to the ceiling—and the other—now, let go, and you'll see!"

Sabo let go, and fell head first to the floor with a terrible bump.

Sabo picked himself up, and went back to his place on the table, feeling very wicked. The Blue-bottle joined him there. "That wasn't a very good try," he said, "but it was the first time. You'll manage better after a bit."

Then an idea came into Sabo's aching head. "How do you manage to do it?" he asked.

"I don't manage," replied the fly, "I just do it."

"I wish you'd show me how," said Sabo.

"Well, watch," said the Blue-bottle, and flew up to the ceiling again.

"Too far away," cried Sabo.

"There's nowhere else nearer," said the Blue-bottle.

"What about this?" said Sabo, opening the top of the silver ink pot.

"That's not big enough to walk on."

"But I only want to see how you put your feet," said Sabo eagerly. "Please."

"All right," said the Blue-bottle, "Now watch closely," and he flew on to the inside of the lid.

Sabo immediately shut it down, and sat on it. (Another "Sabo" Story Next Week.)



From old Book-sellers, or 2/6 post free direct.



That's pretty smart of you, Williams!

"WELL, I must admit it's not too bad for a first attempt. I'm getting excellent results from it now."

Tell me, how did you obtain your knowledge and skill? I suppose you have had some sort of enlightening training?

"Oh no. My job is in the insurance line—I've never been in any way in my life. As a matter of fact it was James who put me up to it. He told me how this little book had built up a really good set from ready-made materials."

It is a very creditable piece of work—I must congratulate you. I suppose Oswald showed you how to make it?

"Not a bit of it. He merely advised me to get a copy of a book called *Twelve Tested Wireless S-ets*, and to follow the instructions. By the way, our boy is home from school, why not spend a couple of evenings or so with him making up a good set?"

"Oh, not a bit of it. I know he is at a bit of a loss. Let me make a note of the book and I'll call in at the bookshop on the way home for a copy."

Twelve Tested Wireless S-ets.

By PERCY W. HARRIS.

This set contains a book in which the principles of any wireless set are explained in a very clear and simple manner. The set is so arranged that it can be made at the first attempt. The following instructions are really marvellous.

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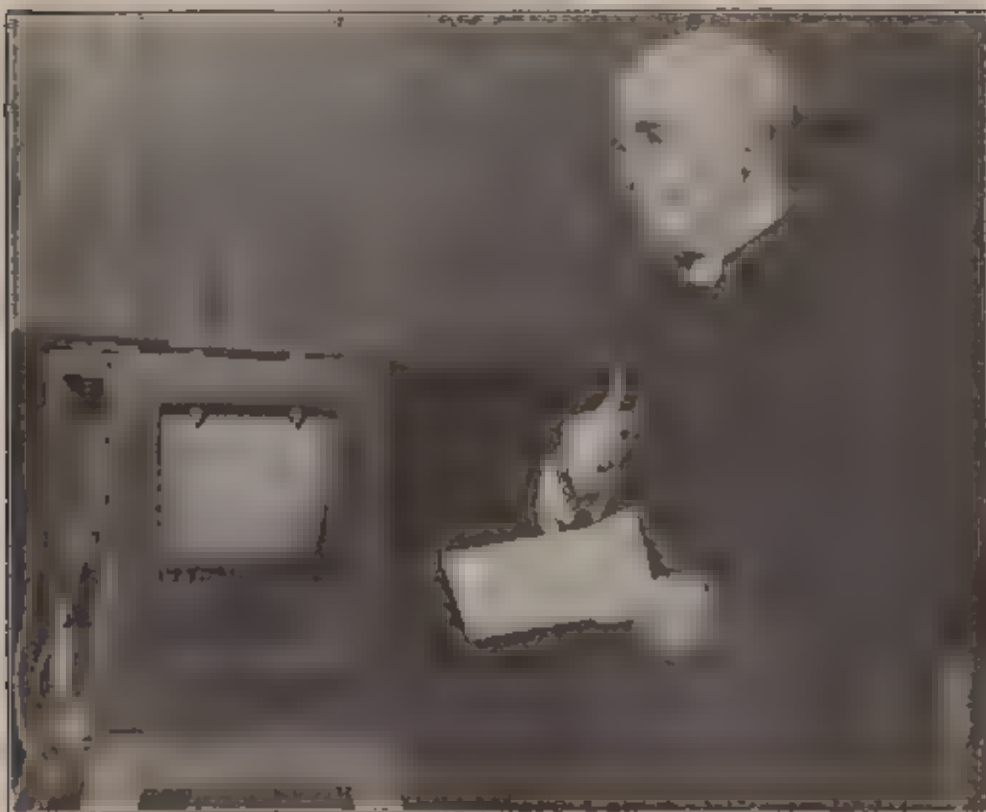
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A HISTORIC OCCASION.



THE ARCHBISHOP OF CANTERBURY BROADCASTING
One of the most important events in the history of wireless occurred on New Year's Eve, when the Archbishop of Canterbury broadcast from the London Station. Never before has such a distinguished Church dignitary addressed the world by means of wireless. His Grace is here seen before the microphones in the act of delivering his message.

Other People's Opinions.

USEFULNESS WITHOUT DREAD

TODAY the listener in America may be one with an audience assembled in some room in London; to-morrow South Africa, India, and Australia may all at the same moment be sharing in spectacles recently produced in Great Britain. The initial difficulties have been overcome, the range of time and space extends practically with every week.

The new generation will regard it as no more remarkable to converse with Sverdlov than the man of to-day does to get a trunk call from Paris or Glasgow. (Of a sudden the world seems to cramp itself into the smallest area. And of wireless telephony we may say that no great invention has ever brought so much promise of usefulness to mankind with so few possibilities that could give us cause to dread

WIRELESS AND MUSICAL
INSTRUMENTS.

AFTER a good six months' experimenting in the way of programmes, it is possible to state which instruments transmit the best. The organ, strange as this may seem, is the worst. King of instruments as it is, it fails to carry over adequately.

The voice is good if the singer maintains an even distance from the microphone, and the same may be said of the violin, but it is safe to say that the two best instruments are the piano and the violoncello. With both, of course, the quality of the player counts. The 'cello sends forth its broad resonant tones splendidly.

1. *unpleasant* 2. *unpleasant*

ANNOUNCERS AS TEACHERS

HAPPILY for us, the officials of our Broad
casting Company have been well chosen
and are all educated and refined men and
women, who use cultivated language to which
it is a pleasure to listen.

In the Americas, the very tones of our own particular voices are an indication of a background of education and culture. In America, it seems, one hears daily slips in grammar, faults in diction, and the mispronunciation of both English and foreign words.

In England such slipshod broadcasting is unknown. We look upon our announcers as teachers. And they are. WILLIAM LE GUEUR in *The Soul of a Pictorial*

ARE YOU A "MIDDLEBROW"?

ONE very amusing aspect of broadsheet is the annual squabbling as to the relative merits of highbrow and lowbrow music. The highbrows adopt a Johnsonian sarcasm with regard to "jazz" and other "popular" forms of *er-melody*, while the lowbrows are rather apt to wax vituperative on the surpassing dullness of *er—"classical"*

After all it is a matter of taste. Some prefer 'The Poet and Peasant' to a Beethoven symphony, and vice versa, but in all fairness to the B.B.C. I cannot agree with correspondents who declare that too much popular music is broadcast, nor can I agree that too much classical music is broadcast. The mixture seems fairly equal to me. Perhaps that is because I am a middlebrow—always a safe attitude.—
An Irresistible Friend

It creates the image

CAN YOU ANSWER THESE QUESTIONS?

An Article for All in Business.

1. $\mu = 1$ (the case of a single particle)
 2. $\mu = 2$ (the case of two particles)
 3. $\mu = 3$ (the case of three particles)
 4. $\mu = 4$ (the case of four particles)
 5. $\mu = 5$ (the case of five particles)
 6. $\mu = 6$ (the case of six particles)
 7. $\mu = 7$ (the case of seven particles)
 8. $\mu = 8$ (the case of eight particles)
 9. $\mu = 9$ (the case of nine particles)
 10. $\mu = 10$ (the case of ten particles)

And vet. you will agree, they are all your own business. So why not let them run their own business?

14 SPECIMEN QUESTIONS

[illegible]

HOW MANY DID YOU ANSWER?

$\frac{d}{dt} \left(\frac{\partial L}{\partial v^j} \right) = \frac{\partial L}{\partial x^j}$

HOW THIS CONCERNS YOU.

[illegible]

TWO OPINIONS.

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Please send me, free of charge, a copy of the booklet describing the M-1666 Fire Extinguisher.

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Letters From Listeners.

ALL LETTERS MUST BE SENT TO THE EDITOR, RADIO TIMES, 1, ABINGDON ROAD, LONDON, E.C. 4. AND MUST BE ACCOMPANIED BY A POSTAGE STAMP OF NOT LESS THAN 6D. (NOT RECORDED.)

The Authorship of "Some Day"

DEAR SIR.—I have just read the short article by A. H. Cooper on "Some Day," and hasten to correct a great mistake. The words of this popular song were written by my old friend Mr. Fergus Hugh Conway, the gifted author of "Tallied Back." He and I, and my brother, E. E. Weatherly, were boys together and we kept up our friendship till his sad death from typhoid at Nice.

F. E. W. was then writing many songs for M. J. Wellings and other known composers and was one of the first to congratulate Fred Fergus on the great success of "Some Day."

Yours faithfully,

LOVELL A. WEATHERLY, M.D.

Our contributor states that Milton Wellings stated to be the author of the words of "Some Day," in an advertisement published on 17th Dec. 1933.

Parrot's Cage As Aerial.

DEAR SIR.—Has a brass parrot cage ever been used by others as an indoor aerial?

I was astonished at the excellent results obtained in this way with my three valve set. The London Station concert was heard perfectly clearly with three pairs of phones.

Perhaps this may interest readers of *The Radio Times*.

Yours faithfully,

Brentford.

J. C.

Long-Distance Results.

DEAR SIR.—I have been reading, with interest, readers' results on crystal sets, and thought you would like to hear of mine.

On December 23rd (Sunday) I was able to receive the concert sent out at 6.15 p.m. from FL (Paris). I could hear speech, songs, an instrument which was probably a violin, and the piano, which latter came through very well indeed.

I have received the weather forecast transmitted by FL at 6.40 a.m. almost every time I have listened for it. Much of the speech is jammed out by the Marconi Station at Ongar (GLA) transmitting on 2,000 metres wavelength.

Yours faithfully,

Stoke Newington, N.

E. C.

Drawing the Nations Together.

DEAR SIR.—I feel compelled to send my congratulations on the excellent programme broadcast every day.

One grudges the time one has to spend away from the wireless receiver. Being in the Bourne mouth area, we do not commence until 3.45 and the following hour is a real treat.

Having no young children in the house, we tear ourselves away for tea somewhere about 5.30, but even then keep picking up receivers, to be amused by the brilliant Unions Chat to the kiddies.

Then the Schmoers' Half Hour. What an advantage! But I take the liberty of making the suggestion that we may soon have the privilege of receiving something in the nature

of a French lesson on certain evenings. I am certain this would prove a very attractive feature, considering the numbers of children who are learning a kind of French which, in the majority of cases, they will only be able to read (owing to lack of efficient French teachers) and not to pronounce properly.

I think that wireless has a great mission to fulfil in drawing the nations together. Surely, the commencement was made the other day when your wonderful engineers were so successful, after their long and arduous trials, in transmitting the American programme so distinctly even on a crystal set, such as mine is.

Yours faithfully,

Thomas Hants.

G. C.

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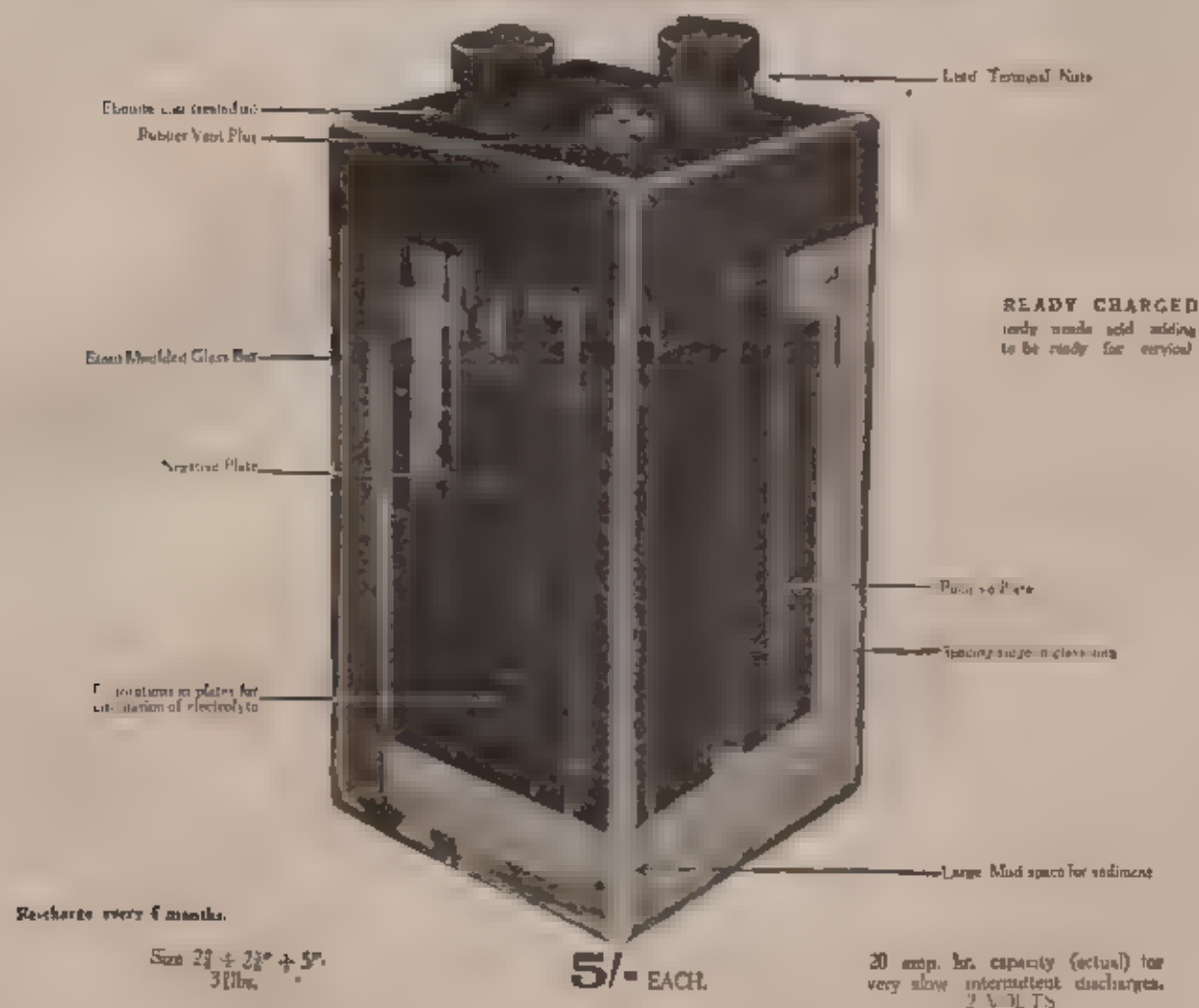
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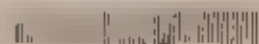
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It will work one or more Loud Speakers by reason of the power valves incorporated in the instrument. Attached to a reasonable aerial it will receive all British Broadcast Stations—Paris, Brussels, and Berlin. Can be used with the new Dull Emitter Valves.

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THESE instruments are of fine appearance, entirely free from resonance and "buzzy" sound.

Used with Burndeft and Ethophone Speech and Power Amplifiers, the Ethovox will render speech and music into true and perfectly natural sound.

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No. 214.—Junior Model 2,000 ohms	£2 15 0

Each instrument securely packed in special cases.

Distortionless Speech and Power Amplifiers.

MANY people have crystal sets, or 1 and 2 valve sets, who will wish to purchase apparatus to attach to their existing sets in order that they and their friends may hear the Opera transmissions on a Loud Speaker. Burndeft and Ethophone Speech and Power Amplifiers have been designed to fill this want. They have been designed specially to amplify Speech and Music without distortion.

Ethophone Speech Amplifier (illustrated above) is a companion to the Popular Model Ethophone, and may be used in conjunction with any Crystal Receiver Set.

No. 125.—Complete with 2 Valves and self-contained 120-volt Battery	£20 0 0
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No. 1159.—In sloping Cabinet (without Valves)	£15 15 0
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No. 520.—With Two self-contained Power Valves and 150-600 high tension	£25 10 0
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No. 1185.—2-valve Power Amplifier (without Valves), in sloping cabinet	£20 0 0
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No. 1193.—1-valve Power Amplifier (without Valves), in sloping cabinet	£15 0 0
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GECOPHONE Single Circuit Crystal Receiving Set, complete with one set double headphones. Approximate range (with Standard P.O. Aerial) 25 miles.

Price £4 : 10 : 0. Plus B.B.C. Tariff 1/-

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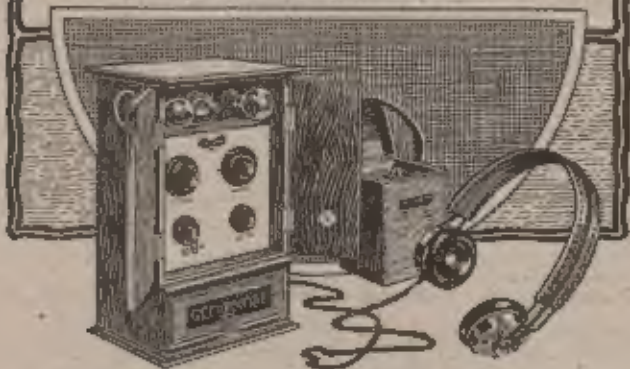
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