



THE OFFICIAL ORGAN OF THE B.B.C.

Vol. 2. No. 16.

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

EVERY FRIDAY.

Two Pence.

OFFICIAL PROGRAMMES OF THE BRITISH BROADCASTING COMPANY.

For the Week Commencing
SUNDAY, JANUARY 13th.

LONDON	CARDIFF
ABERDEEN	GLASGOW
BIRMINGHAM	MANCHESTER
BOURNEMOUTH	NEWCASTLE

SPECIAL CONTENTS

ENCOURAGE BRITISH INVENTORS.
By Sir William Bull, Bart., M.P.

THE FARMER AND RADIO.

THE ENGINEER ROMANTIC.
P. P. Eckersley on Fairies and Flowers.

WIRELESS AND HEALTH.

THE STORY OF "THE OLD FOLKS AT HOME."

THE CHILDREN'S CORNER.

LETTERS FROM LISTENERS.

WHAT'S IN THE AIR?

From America by Crystal.

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

NOW that the Christmas holidays are a pleasant memory and the year's work beckons, it seems a fitting time to consider the possible developments which lie ahead. Technically, there is much achievement promised. The re-radiation of American concerts to English listeners is a development which will bring an interesting novelty into the range of the most modest crystal set.

Our sceptical neighbours who don't believe in wireless, and view our jumpat-and-wire contrivances with disdain, have surely been converted now. America! a word to conjure with in wireless circles.

Another technical development will be the portable transmission stations which are under consideration as a means of solving the difficulty of collecting outside material for our programmes. Hitherto we have relied upon special installations for "outside broadcasts," but with these little sub-stations the wireless link which proved so satisfactory in the "Old Vic" transmissions can be used.

Again, attention is being given to the idea of two programmes on different wave-lengths from the same station. With this plan those with a taste for serious talks could listen to them undisturbed by the lighter fare provided for their neighbours.

This week we are again to enjoy the British National Opera Company's performance from Covent Garden. To-night we shall hear Mr. Rutland Boughton's new Opera, "Alkestis," and to-morrow "Aida" is to be given. Full particulars will be found in the detailed programmes for the week.

I have a picture in my mind as I write. It stands out clear and distinct as though Time had but served to brighten the colours instead of dull their vigour. Covent Garden Theatre, packed from orchestra stalls to gallery steps, the curtain up, and a great singer accepting wild applause from an adoring audience, bouquets and gifts of every description, and among them a strange-looking object—how the audience comes forward to see—a miniature house made of beautiful white flowers, with queer-looking apparatus at each end.

What is it? Half that great audience are at a loss, the other half whispers excitedly, "Wireless." Then the singer—it is Dame Nellie Melba herself—thanks the audience for their appreciative reception, and begs their indulgence while she speaks for a moment to that greater unseen audience for whom, she understands, she has been singing, and from whom this beautiful wireless tribute has come.

It marked an epoch, I think, that microphone speech from the stage by Dame Melba. That was a year ago. What will another year bring forth?

We are making efforts to prove that wireless can be a sympathetic medium for dramatic representation, and I am hoping that our listeners will give us the necessary assistance. In a theatre, for instance, the lights are turned down and all alien sounds are shut out in order to eliminate as far as possible the consciousness of outside existence.

When a play is to be broadcast, therefore, remember that, however we may try to reproduce the right atmosphere by suggestion, description, or music, our efforts will prove

(Continued overleaf in column 3.)

Wireless and Health.

How Listening Affects Your Well-Being.

AMONGST those unexpected things which we often happen, one of the most remarkable is that feeling of increased well-being now experienced by large numbers of listeners (writes a medical correspondent). That this is a fact there can be no reasonable doubt in the minds of those who have listened to or read the enthusiastic testimonies of those thousands of what we may well call "human aeriols" who are living witnesses to the truth of it.

Life-giving Wave-lengths.

We have long been familiar with the effects of those vibrations in the ether which have a short wave-length—the ultra-violet rays, the soft and hard X-rays, and the gamma rays of radium—all of which exercise profound effects of their own on the various tissues of our bodies. The only difference between these rays and the radio or Hertzian rays—which are our own familiar wireless under another name—is one of wave-length. All alike are vibrations of the ether—the wireless having the longest and the gamma rays of radium the shortest. It is, therefore, only reasonable to assume that long wave-lengths must exert some physical influence similar in kind, however vastly different in degree, to those of shorter length.

Be that as it may, when we consider what happens in those countless individuals who tap the wireless waves by means of aeriols and transmit their magic direct to their central nervous system through their head-phones, we conclude that certain very definite effects ensue. When experienced listeners avow that their health has improved, that they take their food better, have gained in weight, obviously look better, have a

healthier colour, feel better and in higher spirits, and enjoy a more hopeful outlook on life and what the future holds for them, we are clearly justified in assuming that all-conquering wireless is at least an important factor in this physical and mental betterment.

And there are many reasons why this should be so. The reaction of the mind to the various stimuli reaching it through the medium of radio vibrations is mirrored in the various subtle changes that occur in the glands of internal secretion, and, consequently, in the blood and other tissues. Its contact with the outside world is, by means of broadcasting, immensely facilitated, so that the necessary mental pabulum—without which no mind can for long remain quite healthy and balanced—is fed to it, so to speak, whenever the want of it is experienced. By this simple means, melancholy, anxiety, and loneliness can be banished for all time.

Colds and Coughs Avoided.

The listener benefits in health more than he knows. His restfulness as compared with the excitement of other amusements is very greatly in its favour. He avoids those climatic risks he would have to run in seeking entertainment at theatres, concert-halls, dances, etc., in all weathers, as well as the fatigue and physical disturbance of tedious journeys by train, tram, or bus, and the return, often in the small hours, cold, hungry, and depressed. Again, he who depends largely on broadcasting for his recreation at this time of year avoids contact with those victims of infective colds, coughs, and catarrhs who congregate in places of public entertainment.

What's in the Air?

(Continued from the previous page.)

abortive if you don't co-operate. Make yourself thoroughly comfortable and turn down the light, so that no outside distraction may seek to interpose itself between you and the studio.

At the theatre we say "Hush!" angrily if our neighbours seem restless. At home we must be more tactful, but it should not be difficult to get real quiet for a quarter of an hour. The great thing is to get an atmosphere conducive to mental concentration and the exercise of the imaginative faculties.

Next Tuesday evening there will be an opportunity to put these suggestions to the test, as Mr. Nigel Playfair is then going to produce a series of concise dramatic representations.

The first is a poem, set to music by the composer who gave us those favourites, *The Beggar's Opera* and *Polly*. For this I suggest that the lights be turned off and the head-phones put on. But for the next item, the proposal scene from *Pride and Prejudice*, turn up the lights so that you can watch the delight in each other's eyes. The more there are in the secret, the greater the fun will be.

Elsewhere in this issue you will find a description of the third item, so I will say little here than that it has been specially written for wireless purposes, and needs no special "props" at your end but darkness and quiet, for which a special request will be broadcast.

I make these suggestions tentatively, and expect that each of you has his own ideas about wireless plays, anyhow!

A Famous Negro Melody.

The Story of "The Old Folks at Home." By A. B. Cooper.

IT is surprising how seldom genius and business acumen appear to run in harness. In some cases, of course, such a happy combination has been found, but such have been the exceptions which only serve to prove that the reverse is the rule.

As we have seen, in talking about other songs, the ballad writer is probably, considering the good work he—or she—does, the worst paid artistic worker in the world, and quite often the composer of the music has been at least a good second in the poverty stakes. Frequently these two poverty-stricken individuals, the librettist and the musician, have been combined in the same unfortunate person, without any improvement in the financial results, although, as a rule, the monetary reward is in inverse ratio to the value of the words—as poetry.

The Negro Lull.

Stephen Collins Foster, for instance, died in a public ward at the Bellevue Hospital, New York, and is entered on the records as a "labourer." Yet, probably no single man before or since has given to the world so many "folk-songs," mostly of the "plantation" order—not the rag-time stuff which the jazz-bands play to-day, but the original and authentic lull of the Negro chant in the moonlight, on the edge of the sugar and cotton-fields, in the old slave days, a type of song which brings to the older folk visions of "Uncle Tom's Cabin" and "The Jubilee Singers." In all, Foster wrote some hundred and seventy songs, and among the number were such widely-known ditties as "Old Kentucky Home," "Old Black Joe," "Old Uncle Ned," "Come Where My Love Lies Dreaming," and

best of all, rising like a snow-capped peak in a range of lower hills, "The Old Folks at Home."

Can it be believed that that beautifully flowing and mellifluous line: "Way down upon the Swanne River," read in the original draft of the song, "Way down upon the Pedee River"? It seems incredible, but it is true.

It Might Have Been "Yazoo."

It goes without saying that the song-writer was far from satisfied with the sound of the river-name he had chosen, for, although it was a real river, and was, therefore, geographically correct, it had not that poetic sound which attaches to such names as Avon or Doon or Wavoney, so he said to his brother, Morrison Foster, who relates the story: "What Southern stream do you suggest instead of Pedee?"

Morrison suggested "Yazoo" as a more mellifluous name, but Stephen did not care for that either.

"Well, the best thing we can do is to consult an atlas," said the practical brother, and it was on a large map of Florida that they discovered a tiny river, right down at the tip of the peninsula, unmarked on all but large maps, called "Swanee."

"That's it! That's it! The very thing!" cried Stephen, and it was thus that the original Pedee River became the Swanee River known to all the world.

The song was an immediate success, and is said to be the song which has been translated into more languages than any other, although one could imagine its original language being difficult to convey in its sweet simplicity into any other.

Stephen Collins Foster was born in Pittsburg on July 24th, 1826, and although most of his songs are of the Southland, he knew it mainly by making pleasure-trips down there.

It was during the latter phase of his chequered life that the author and composer of "The Old Folks at Home" strayed into a shop on Broadway—for he had been long in New York—and, sitting down at the piano in his worn and midsplashed clothes, won from the keys, in his own inimitable way, a strain so wistful and pleasing that a man who stood by offered him, then and there, the sum of five dollars (No! Not five thousand dollars!) for the sole rights in the song, an offer which Foster gratefully accepted, for he was nigh to starvation.

The Original Poem.

How much the purchaser made on his bargain has never transpired, but it certainly must have run into thousands—not dollars, but pounds—for the song thus introduced to the world was "Come Where My Love Lies Dreaming," a song which, in its day, had a world-wide popularity, and, although not now nearly so well known as "Swanee River," still lingers in the affectionate remembrance of millions. The words of "Swanee" were originally written, true to Negro "lingo," as follows—

Way down upon de Swanee Radder,
Far, far away,
Dere's whar ma heart is turning ebbin,
Dere's whar de ole folks stay.
All de world am sad an' dreary,
Eberywhere I roam;
Oh, Darlies, how ma heart grows weary,
Far from de ole folks at home.

All up an' down de whole creation
Sadly I roam,
Still longing for de ole plantation,
And for de ole folks at home,
All de world, etc.

Fashions Set by Wireless.

Innovations for Women Listeners.

GOLD and silver net caps, designed specially to prevent the hair being disarranged when listening with ear-pieces, are being sold in large numbers to women wireless enthusiasts.

"These nets were originally intended for evening wear on the way to dances and other functions," a saleswoman told a representative of *The Radio Times*. "Now they are being bought almost exclusively for use at wireless listening parties. After using the ear-pieces, the hair is liable to be slightly pulled out of place, and these nets prove just the thing to prevent this."

Thus, there has come into being the first of what may well be a long series of fashions set by wireless. What will be the next innovation of this kind?

Doom of the Bandeau.

Fashion, being notoriously fickle, is always difficult to forecast, but experts say that the first item of feminine apparel to suffer eclipse by wireless will be the bandeau, which has had such a great vogue since Miss Lenglen introduced it, or rather popularized its use, three or four years ago. Women listeners prefer the net cap, and as the ear-pieces themselves partly surround the head, the bandeau will have to be consigned to the limbo of fashions that have had their day.

Wireless, in fact, will tend to simplify rather than to complicate women's dress of the future. The woman enthusiast, who will soon be numbered in her hundreds of thousands, will not want to be hampered by superfluities of dress when busying herself about the task of tuning-in. Tassels and ribbons and lace are liable to become entangled with the leads, as she bends over her set, and for this reason they will be discarded. Probably women will adapt for use on these occasions the simplest of simple blouses, while the overall may be given a new lease of life—at least, so some authorities predict.

Pockets for Receiving Sets.

When we get to the stage of miniature wireless sets, that is to say, sets that can be carried with us wherever we go—and we may certainly have them in a year or two—the changes of fashion may be more drastic. Special pockets to contain one's set will be necessary, while fur and muffs will, no doubt, be adapted to this purpose.

Meanwhile, wireless has already made a definite mark on fancy-dress fashions. At every big fancy-dress party and ball at Christmas, as well as at many smaller ones, there were guests garbed as wireless "fans," or representing some particular phase of the great wireless industry.

One of the most original of these fancy dresses was that of a well-known actress who appeared as a two-valve set, a large cardboard cabinet being "built" round her waist, complete with celluloid valves, indicators, and ear-phones.

Another ingenious reveller, a man, got himself up like an accumulator and won the second prize at a dance at a well-known South Coast resort!

THE RADIO 'BUS.

AN interesting prophecy was made by Sir Frederick Sykes the other day. During a speech at the staff dinner of the London General Omnibus Company, he said that the time is possibly coming when wireless apparatus will be installed on motor 'buses.

Considering that last year 923,000,000 passengers were carried by the L.G.O. Co.'s services, it is easy to see that the radio 'bus would prove a tremendous fillip to listening.

The Philosopher's Stone.

A Talk from Newcastle, by E. J. Williams, B.Sc.

THE science of chemistry dates back only to the seventeenth century, but as an art it was practised thousands of years before the Christian era. It is no part of my purpose to trace the growth of the art into the science, but merely to take a brief glimpse at one phase in its development—the phase of experimental alchemy.

Roger Bacon, one of the greatest of the alchemists, defines alchemy as follows: "Alchemy is a science teaching how to transform any kind of metal into another: and that by a proper medicine, as it appeareth by many Philosophers' Bookes. Alchemy, therefore, is a science teaching how to make and compound a certaine medicine, which is called Elixir, the which when it is cast upon mettals or imperfect bodies, doth fully perfect them in the verie projection."

Turning Lead into Gold.

The possibility of the transformation, or transmutation, of the metals into one another had its germ in the oldest systems of philosophy. Cupidity and love of wealth have ever been present in the human breast, so that it was but natural that the transmutation whose accomplishment was most sought after was that of the base metals, such as lead, into the noble silver and gold. The Philosopher's Stone was the agency by means of which the transformation was to be effected. It was supposed of old that metals were generated within the earth, as animals and plants were generated on its surface, and that something akin to a seed was needed to initiate their formation. The great problem of alchemy was to discover this fecundating substance.

Varied descriptions of the Philosopher's Stone are found in the literature of alchemy. Since the substance was as mythical as the sea-serpent, we might expect the same divergence of description as we get in the case of the latter. The Stone was most commonly described as a red powder, but occasionally two varieties were distinguished—a white one for transmuting imperfect metals into silver, and a red one for gold.



"LISTENERS NEVER HEAR . . ."

Male Voice (finishing Children's Bedtime Stories):
"And now, my little dears, off you go to bed!"

Sometimes, gold was used in the preparation of the Stone and after the process was complete, this was recovered in the metallic form, the alchemist imagining that he had effected a transformation. A few recipes given are intelligible, and if the instructions are carried out, a yellow metallic alloy, superficially resembling gold, is obtained.

Whereas, a large number of alchemists were undoubtedly genuine and earnest seekers after truth, the idea of the Philosopher's Stone naturally lent itself to imposture. The Philosopher's Stone was the "gold brick" or "salted mine" of the Middle Ages. Small wonder that monarchs with depleted treasuries were accustomed to keep tame alchemists, just as they kept court jesters.

"Delivering the Goods."

"Hope deferred maketh the heart sick," and ultimately the alchemists were called upon to deliver the goods. One such alchemist actually made mercury from lead and then gold from mercury. To avoid deception, his doubting patrons provided him with the lead and with the furnace in which it was to be melted, but they afterwards found their doubts were not unwarranted, discovering that the mercury had been concealed in a pocket and the gold in his sleeve.

Some who were favoured with demonstrations would appear to have had more satisfactory experiences. A meanly-dressed stranger is said once to have called upon Robert Boyle, the scientist, and after conversing with him on chemical processes, to have requested Boyle to furnish him with some antimony and other common metallic substances. This Boyle did, and the substances were put in a crucible and melted in a furnace. When the metals had melted, the stranger threw a powder into the crucible and instantly departed, directing the servants to leave the crucible in the furnace until the fire died out and promising to return in a short while.

As he did not reappear, Boyle ordered the crucible to be uncovered and found therein a yellow metal, having all the properties of pure gold, and only a little lighter than the weight of the original materials. Unfortunately, this incident is narrated not by Boyle himself, but by a third party.

Burnt at the Stake.

Princes eventually learned that alchemists were not a profitable investment, and alchemists, to an even greater degree, became distrustful of princes. A woman alchemist, who failed to furnish her patron with a promised recipe for the making of gold, was burnt at the stake by Duke John of Brunswick in 1573. Another alchemist was hanged by the Margrave of Bayreuth, who caused this inscription to be attached to his gallows: "I once knew how to fix mercury, and now I am myself fixed." Many others suffered a like fate.

Although the history of alchemy is, to a great extent, a chapter in the history of human credulity, and contains many a page of self-deception, imposture and fraud, it was not barren of valuable results, though not as regards its professed objects. Many new substances and new methods of preparing previously known substances were discovered by the alchemists in the course of their work.

FIDLER'S SEEDS GROW!

BROADCASTING OUR NEW SEASON'S CATALOGUE.

HULLO, EVERYBODY!
FIDLER'S CALLING!

"Our new season's catalogue, full of remarkable bargains in seeds of all kinds, beautiful flowers and profitable vegetables, is ready for you. In this Garden Guide will be found all varieties suitable for garden lovers, amateur and professional."

SEND A POSTCARD FOR YOUR COPY.

"To support these seeds in 'earth' is to be sure of 'good results.' They make gardening more interesting and productive."

FIDLER & SONS,
Established 1856,
READING.



— "ABBIPHONE" — for better reception.

"Abbiphones" are the wireless products that are "usually different but always better" advanced in design, subtly distinctive and out of the rut they combine the certainty of satisfaction with moderate prices. Altogether a certain means of obtaining better reception at less cost. We are always pleased for you to visit our Depots and inspect the "Abbiphone" products for yourself.

The "Abbiphone" Crystal Receiving Set, Type C.R.III.

Mounted in a compact polished mahogany box, this is a portable, sturdy, useful set, having a reception range of approximately 10 miles. Simple to tune by means of an electric handle controlling our well known Variometer. Comes with our patented Crystal Detector and Tuning Indicator enabling the crystal to be adjusted prior to broadcasting.

Price (D.E.C. Tax 1/- extra) £3. 10. 0.



Receiving Sets from 10/6 to 25 guineas. Catalogues on application. Also a complete range of accessories.

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

Telephone:
Woodford 578.

Telegrams:
"Abbiphones, London."

City Depot:
80, Mark Lane, E.C.3.
West End Depot:
50A, Strand, W.C.2.

WIRELESS PRODUCTS

"ABBIPHONE"
Regd. Trade Mark

Monday's Symphony Concert.

A Description of the Music, by Percy A. Scholes.

BORODIN—OVERTURE TO "PRINCE IGOR."

THIS is the prelude to Borodin's brilliantly coloured Opera of love and war, the plot drawn from Russian history. Borodin, Doctor of Medicine and Professor of Chemistry, was born at Petrograd in 1834 and died there in 1887.

HOLST—COUNTRY SONG.

This is just a pleasant "Song Without Words" for small orchestra. Holst was born in Cheltenham in 1874. The "Country Song" is one of his earlier works, written in 1903.

DEBUSSY—"AIR DE LIA."

This is a song from Debussy's early Cantata, "The Prodigal Son," by which, as a young man of twenty-two, he won the "Prix de Rome." It has been made familiar in this country by both Beecham and the B.N.O.C., who have performed it as an Opera.

In the song, Lia (mother of the Prodigal, Azazel) passionately laments her son's absence.

Recitative "The years roll by, no comfort bringing."

Air "Azazel! Ah! wherefore didst thou leave me?"

FRANCK—SYMPHONIC VARIATIONS.

Here is a very beautiful and imposing work for Piano-forte and Orchestra. The Tune which forms the basis of the whole long piece falls into several sections, expressing feelings of tenderness, mysticism, and exaltation. The Variations, in which the Piano and Orchestra carry on a wonderful dialogue of comment upon this tune, are not of the clear-cut, older variation style, but (as the word "Symphonies" implies) are complex, dignified, and of considerable depth of emotional expression.

César Franck was born in Belgium, but lived his whole artistic life in Paris, where he gathered around him a band of ardent disciples, who strove to develop the more serious side of French musical thought, as distinct from the more frivolous or grandiose sides. He was of a very lovable, simple-minded nature, and much directed by sincere religious conviction.

The present work should be listened to sympathetically, as typical of his spirit and his style. It may be convenient to set forth the plan of the work.

The Tune—falling into four short sections.

Variation I.—Quick.

"II.—At a moderate, "Singing" speed.

"III.—A good deal slower.

"IV.—Pretty quick.

"V.—This begins with a new Tune, in the Piano, and then passes to a development of various sections of the original Tune. It includes some brilliant passages.

TCHAIKOVSKY—PATHETIC SYMPHONY.

Tchaikovsky's Sixth Symphony, called by him "The Pathetic," has become the most popular of his larger orchestral works. It was his composer's favourite, but he hardly anticipated for it the general approval it has received. Whilst still engaged in its composition (1893) he wrote to his nephew:—

"To me it will seem quite natural, and not in the least astonishing, if this Symphony meets with abuse, or scant appreciation at first. I certainly regard it as quite the best—

and especially the "most sincere"—of all my works. I love it as I have never loved one of my musical offspring before."

The separate sections (or "movements") of the Symphony are as follows:—

I.—Slow Introduction. Pretty Quick—Rather Slow—Quick and Lively—Rather Slow. That is to say, this is a movement with many changes of speed.

With the "Pretty quick" section above shown, the movement proper opens. It is made out of two chief tunes, one agitated and broken in character, and the other gracious and flowing and of a beauty that at once impresses itself on the memory.

II.—Quickly but gravely. This is the favourite movement with five beats to the bar, instead of the two, three, four, or six usual at the time this work was written. (Considered in another way, it consists of alternate bars of two beats and three beats.) The movement falls into three sections—1st Section (note how the first main tune is given to the Cellos and then a second tune to the Violins, afterwards taken up by the Wood Wind whilst the Violins decorate the scene with scales); 2nd Section—softer and more sedate; 3rd Section—like the first.

III.—Rapid and lively. This has a good deal of the Military March style about it.

IV.—Slow and Lamenting—then Somewhat Quicker. The moods here pass through pathos and pity to final despair—as though the composer saw approaching the death which overtook him within three months of the completion of the work.

MUSSORGSKY—A NIGHT ON THE LONELY MOUNTAIN.

This is a "descriptive" piece, representing the supernatural—voices of spirits of evil, a "Black Mass," revels of witches, and, at last, the sound of the village church bell, scattering all the forces of darkness.

Mussorgsky (1839-81) strongly represents the realistic tendency in Russian music.

GRIEG—"SIGURD THE CRUSADER" SUITE.

This suite was compiled by Grieg from the incidental music he had written (in eight days!) to a Norwegian national play, "Sigurd Jorsalfar," by Bjørnson. The music of the play was badly performed, and when one of the actors began his song, Grieg covered in misery in his seat, until Bjørnson poked him in the ribs and commanded, "Sit up properly!" However, the audience applauded heartily and author and composer went home happily and "hunched on some delicious old cheese."

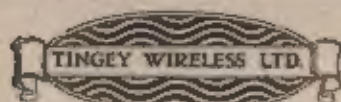
(a) Overture ("In the King's Hall"). An effective and original march-like piece.

(b) Intermezzo ("Borghild's Dream").

(c) Triumphal March. A long, elaborate and stirring piece, made out of two fine tunes.

GRAINGER—MOLLY ON THE SHORE.

This is a lively Irish Reel, by the Australian-born composer (now become an American) who has used British folk-tunes (or themes in folk-tune style) as the basis of so many of his works. This piece has been very popular in America, and in a String Quartet version has been played there to a hundred audiences by the famous Flonzaley Quartet.

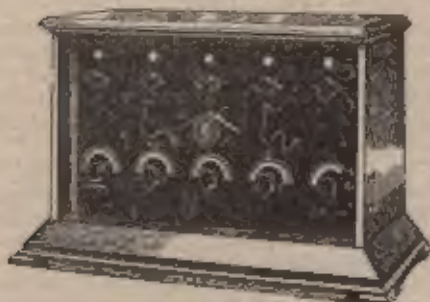


SUPERFIVE

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

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

Send for Superfive Booklet.



The 1924 MODEL.

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

Other sets of Coils at extra charge.

OFFICES and SHOWROOMS:

22, QUEEN STREET, HAMMERSMITH, LONDON, W.6.
Phone: Ham 1916. Telegrams: Tingoider, London.

DUBILIER CONDENSERS

Capacity plays such an important part in a wireless receiver that you dare not leave your condenser equipment to chance.

Always specify Dubilier Condensers for your set—it ensures your getting the best.

Type 600. 0.0001 to 0.0009, mfd. with or without grid leak clips as desired, 2/6.

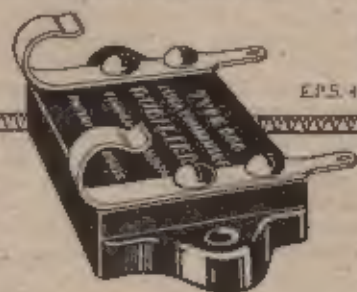
0.001 to 0.006, mfd. 3/-.

The Dubilier Condenser Co.

(1921) Ltd., Dept. 1.

Goldhawk Road, London, W.12

Telephone: Hammersmith 1034.



E.P.S. 41

The Engineer Romantic.

P. P. Eckersley on Flowers and Fairies.

I AM going to advertise Mother London and her gardens.

I may even become lyrical about Temple Gardens, and not an aerial shaft throw its shadow across the page, not a sound of broadcast will disturb the twittering of the birds, not the faintest reference to the technical aspect of broadcast will mar my flights of fancy.

Why should I write about Temple Gardens at all in an official organ? Only because I think the place holds for all of us in the B.B.C. something precious and special, because the gardens and the B.B.C. have much in common. Like many others who work at 2, Savoy Hill, I am spewed out of the bowels of the earth, trying to look as if I was only for ten o'clock and not late for half-past nine, as usual, and my way lies due East straight through the gardens.

Green Grass and Growing Things.

To those of us who find our noses more than usually close to the grindstone and whose week-ends, as well as our weeks, are frequently spent in London, the Temple Gardens are our only sight of green grass and growing things.

We cannot take our lives as he took his who wrote—

And since to look at things in bloom
Fifty springs are little room,
About the woodlands I will go
To see the cherry hung with snow.

And the sight of shaven lawns in June, gay bulbs in spring, and in the heat of July, that little corner where the fountain is an oasis of spangled shade comes as an inspiration.

Even in winter when the fountain is dead, and dark against the dirty sky one sees: "those bare ruined choirs where late the sweet birds sang," dear London adds a splash of colour to the drabs and greens of Temple Gardens, for are there not the flower carriers?

Every day, wet or fine, frost spangled and keen, or murky and dark, come seemingly jiggly men with vast strokes of vivid blooms—chrysanthemums, and dahlias in the autumn, russet brown and yellow—lighting up the cheerless day's beginning.

The Morning Inspiration.

I like to think of each of us, even prosaic engineers, with our pipes reversed against the downpour, absorbing something of the morning inspiration that all this must give.

I like to think that perhaps one day an "uncle," hurrying Savoywards, saw a Temple fairy lost on the hard asphalt and saved her from the crushing foot of a "Captain of Industry" (one of those limousine ones with a condenser scale inside his waistcoat and an anchor chain in pure gold stretched across his redundancy).

Perhaps the fairy knew him for an "uncle" and at a midnight meeting in June the fairies voted to look after the B.B.C., and perhaps that is why to so many of us the Temple Gardens are an inspiration and a thing of beauty.

An Oasis of Peace.

It is, of course, absurd for engineers to talk of fairies. We all know they don't exist. No one who knows the difference between a grid leak and a leaky grid could possibly have any illusions on the subject.

Fairies? Nonsense!

But, of course, it is contrast; anyone walking through Temple Gardens, if these were transplanted to the heart of the New Forest, or were even labelled Pleasance in the Botanical Gardens of a seaside resort, would hurry away

to fresh woods and pastures new. With sluggish Thames, muddy and foul and gurgling to herself her horrid secrets, on the one side, the roaring Strand, alive with traffic and pushing, hurrying people, on the other, what an oasis of peace these few trees, these formal gardens present!

Peter Pan lives in Kensington Gardens, Hyde Park has its Row, its Church Parade, its orators, and its sheep—scarcely distinguishable, for they both bleat and follow one another.

The Green Park is just a park surrounded by bureaucracy: on the one side active, on the other, retired, feeding their goat in their clubs, and it merits no mention beside that little strip where the B.B.C.'s patron fairies live.

I say, thank Heaven for that little strip, dewy in summer mornings, crying shame to the closed eyes of the great rich hotels that tower above it, that lies in my way, winter and summer, autumn and spring, to buffer me from the letters, the complaints, the telephones of the day's work.

But if only they'd put some loud speakers in the band-stand!

(Shame?)

Lovers and Music.

Late on summer evenings, my head reeling and my inside very empty, the cool and the peace of the gardens soothe amazingly. There is a sight of many come out of the heat of the streets to whisper all the dear nothings to one another; there is a stir of the evening wind in the trees, and the band, softened by distance, breathes the beneficent peace, lighted by early sky-signs across the river. Who could deny that the rounding of one's days by a breath of even formal nature could do aught but help and influence?

As a last effort, while the dance band's playing:—

STYLE.

Fairly New—

Temple Gardens on a boisterous day.
Temple Gardens with the daffies all a'way,
In a spring wind from the river
With the dancing lights a'quiver—
Temple Gardens on a boisterous day.

Modern—

A hot day dying in a languid swoon,
Temple Gardens emptying
To the bells' imperious ring,
And above the river, the moon.

Very Modern—

Temple Gardens in a fog.
The wind meaning:
Cold, cheerless—an old man like a log
Lies, groaning—
Temple Gardens in a fog.

(With grid current)

(Entirely futurist)—

The gardens called The Temple.
Spring and summer
I love them

No.

But, you know,
They would be more entertaining,
Truly,

If they had some loud speakers,
Or possibly squeakers,
On the Band-
Stand

No ad.

* * * * *

verifying

PEOPLE IN THE PROGRAMMES--GOSSIP ABOUT ARTISTES & OTHERS

Very Embarrassing.



MISS GWEN GODFREY

MISS GWEN GODFREY, who has been singing at London Station, once had an embarrassing experience when appearing at a concert in Australia. "I was a nervous young amateur," she says, "and the song I was to sing was called 'You are My Darling'—accompanied by the local soloist. Nervousness made me forget most of the words, which were very sentimental, and I kept turning my head towards the piano in the hope that my accompanist would give me a fresh start. But he, poor man, being nearly as nervous as I, failed me utterly, and in one dreadful pause, a voice from the audience called out: 'They will surely bring it off before Christmas!'"

"We could not help seeing the funny side of the situation and joined the audience in shrieks of laughter, but I did not attempt to sing any more that night!"

"Never Say Die."

A WIRELESS humorist who is also an author-composer is Mr. Frank Wood, who broadcasts from London.

One of his funniest anecdotes is the following. A shabby man was sitting in the park, when a richly dressed woman passed by. Thinking that he must be very hard up, she took two shillings from her purse and, writing on a piece of paper the words, "Never say die," she pressed the coins and the paper into his hand, and departed.

The next day, being again in the park, she came across the shabby man once more, and, to her astonishment, he gave her a pound note and her two shillings back.

"Why," she exclaimed, "what is this for?"

To which the sordid individual replied: "It's all right, mum. Your horse won at ten to one! Who's yer tipster?"

A Singer Through the War.



MR. JOHN COLLINSON

THERE are not many vocalists who owe their profession to the war, but such is the case with Mr. John Collinson, the tenor. "My first attempt at singing," he tells me, "was on Lemnos Island, after the evacuation of Gallipoli. A competition was being held for the 'championship' of the forces in the East. It was rumoured that the prize was to be a bottle of whisky. The battalion to which I belonged insisted that I should compete. I entered and won, with a friend, the duet competition, and also the solo."

The prize turned out to be a box of lollipops and a pipe—much to the annoyance of the battalion, which had turned up in full strength, hoping to get a share of the whisky!

When I was wounded and in hospital in England, I began singing 'Ave Maria,' and one of the Sisters suggested that I should take up singing as a career. I laughingly refused, but she taught me a song that I sang at one of the hospital concerts. Someone took me to Sir Henry Wood, who gave me lessons and later sent me to the Royal Academy of Music."

Stoning a Conjuror.

A FAVOURITE at London Station is Mr. Louis Hertel. "I am first a conjuror," he says, "and began entertaining at an early age, but am now old enough to know better!" Once in Egypt, he was stoned out of a village on the Nile, where his extemporaneous attempts to mystify the natives proved too realistic.

A Big "Hit."

BUT my biggest hit," says Mr. Hertel, "was undoubtedly while playing my farewell performance at the Alhambra, in Alexandria. I was taking the part of 'Mrs. May' in 'A Sister to Assist 'Er,' when, in attempting gracefully to slide to the floor, I unfortunately tore away about six feet of the scenery and disclosed through the rent in the 'attic wall' the two soldier stage-hands, who were busily sharing the bottle which I had carefully put on one side to revive me on my exit!"

Another Kind of Mug.



MR. ALEC KELVIN

AN entertainer who is popular at Glasgow is Mr. Alec Kelvin. As a variety artiste he has travelled far and wide, and he tells an amusing story about a party he once attended while travelling through the States and Canada. "I stopped at Niagara," he says, "for a few days to see the Falls. There, I received an invitation to a social gathering, and it so happened that there were no cups and saucers to be had for love or money. The keeper of the little hall where the party was held said that he had a number of mugs he could lend, but no saucers. His offer was accepted with alacrity. After tea had been served, the chairman, who had done a lot of rather boring talking, said: 'Well, gentlemen, I think we'll now have a song from Mr. Alec Kelvin while the mugs are being removed.'"

"The words were hardly out of his mouth when a member of the audience jumped up and cried, 'But if you remove the mugs, how shall we manage without a chairman?'"

A Valuable "Present."

VERY much appreciated are the Spanish talks which are given by Mr. W. F. Blotcher at Manchester Station.

"Many years ago," he says, "when we were relatively inexperienced in Continental railway travelling, I was journeying with my wife and youngest child from Barcelona to Paris en route for London. Half-way between Toulouse and Paris our compartment was invaded by two Cockney jockeys loaded with 'horsey' appurtenances. On leaving the car at an intermediate station, one of them, turning to my wife, said: 'Here, lady, I'll make you a present of this; it'll come in useful for the baby,' handing her a splendid blanket."

"At last we reached Paris, and, leaving my wife on the platform for a few moments, I was staggered on my return to find her surrounded by railway officials all violently gesticulating and pointing to our bag, to which the jockey's blanket was strapped along with other wraps. 'It is the property of the company!' yelled one of them, seizing the end of the blanket. Our air of astonishment and the delivery of the rug, together with a substantial 'tip,' probably saved us from being arrested as station thieves."

A Night in the Cells.



MR. JACK HASTINGS

MR. JACK HASTINGS, whose funny stories from the Bournemouth Station have been delighting listeners, tells me a funny experience he once had. "Accompany with which I was touring," he relates, "arrived in the town very late on Sunday night. There were three other companies who got there first and they snapped up most of the 'digs.'"

"I, with several others, searched in vain for rooms until about three in the morning. At last, we found a policeman and told him of our plight. He played the part of the good Samaritan and took us to the police station, where we were made comfortable and were given beds in the cells."

"When we got back to London, I went to my club in the evening and was hauled in front of the officials, who were looking as black as tarred niggers. They demanded my immediate resignation, because they could not have a member who had been in prison! They had heard that I had spent some time in the cells! For doubting me, I called upon them to give me a supper—a real good one!"

Why the Audience Laughed.

A VOCALIST who is always popular at Glasgow is Mr. R. E. Cunningham, who is the possessor of a rich baritone voice. Mr. Cunningham was singing at a concert on one occasion when one of his numbers was that favourite song, "Sing Me to Sleep." To his astonishment, he found the audience convulsed with laughter. He, naturally, could not understand the reason of this until he learnt later on that the chairman had announced that "Mr. Cunningham would now sing them to sleep."

The "Soul" of a Song.



MME. DE KOUSHEN

A SINGER who may truly be described as "getting to the soul" of the music she sings is Mme. Sophie de Koushen, who is a great favourite at Manchester Station. Mme. de Koushen comes of a well-known Russian family and she received her musical education at the Royal Conservatoire in Moscow, and later with the Italian Professor Mazetti and with Mme. Felia Litvin, in Paris.

At this time, under the influence of the great Russian singer Chaliapin and the Moscow Arts Theatre, there was started a movement in Russian musical circles known as "Liederabend" singing. Instead of learning a song in the usual way, the individual peculiarities of the composer, his style of writing and character were studied. The words of the songs which hitherto were regarded merely as an accidental combination for expressing the melody were explained and united with the music, and as a result, the "soul" of the music was expressed by the voice.

Under the influence of this movement, Mme. de Koushen took up the "Liederabend" singing with the best musicians of Russia.

WIRELESS PROGRAMME—SUNDAY (Jan. 13th.)

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

LONDON.

- 3.0. ORGAN RECITAL, relayed from the Kingsway Hall. S.B. to all Stations.
At the Organ: GATTY SELLARS.
Postlude in D Smart
Festival Toccata Percy Fletcher
Theme with Variations in A Minor Foulkes
Overture to "Oberon" Weber
DOROTHY ROBINSON (Soprano).
"Songs That Are Brightest" ("Maritana") Wallace
"Blue Butterflies" Stanley Dixon
"The Room of Wandering" Hamilton Harty
RITA SHARPE (Solo Cello).
"Lullaby" Cyril Scott
"Ave Maria" Hannah Melba
"The Broken Melody" Vic Biren
DAVID JENKINS (Bass).
"Beloved, it is Morn" Ayckard
"Gray Days" Johnson
"Devotional Cream and Cider" Sanderson
Organ.
Tone Picture, "An Ocean Tempest" Gatty Sellars
"Lagoon Lullaby" Gatty Sellars
"The Russian Patrol" Rubinstein
Dorothy Robinson.
"The Herding Song" Lancelotti
"The Skye Boat Song" Lancelotti
"Covent Garden" Armstrong Goble
RITA SHARPE.
"Nina" Pergolesi
"Oriental Dance" Squire
David Jenkins.
"Beauty's Eyes" Tosti
"The Cobbler's Song" ("Chi Chi Chou") Norton
Organ.
Toccata in C Minor Halsey
Tone Picture, "The Mighty Andes" Gatty Sellars
March, "Militaire" Gounod
5.0.—Close down.
Announcer: R. F. Palmer.

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

SUNDAY EVENING.

- 8.30.—Hymn, "As With Gladness Men of Old" (A. and M. 74).
THE REV. C. E. RAVEN, M.A., Rector of Bletchingley, Surrey. Religious Address.
Hymn, "Oswald, Christian Soldier" (A. and M. 391).
ANDREW SHANKS (Bass) of the B.N.O.C. "Rolling in Foaming Billows" ("Creation") Haydn
9.0. "2LO" LIGHT ORCHESTRA.
Overture, "Raymond" Thomas
Jules from "Mars et Vénus" Gounod
DOROTHY GEORGE (Contralto).
"Absence" Ruthless Martin
"A Song of Thanksgiving" Addison
Andrew Shanks.
"The Two Grenadiers" Schumann
"Droop Not, Young Lover" Handel
"King Charles" White
Orchestra.
Incidental Music, "Merchant of Venice" Rasse
Dorothy George.
"The Enchantress" Hatten
"Sincerity" Clarke
10.0.—TIME SIGNAL AND GENERAL NEWS BULLETIN. S.B. to all Stations.
Local News and Weather Forecast.
10.15. Orchestra.
Selection, "To-Night's the Night" Rubens
"Serenade des Mandolines" Desvignes
"Marche Militaire" Schubert
10.30.—Close down.
Announcer: J. S. Dodgson.

BIRMINGHAM.

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

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

8.30. ORCHESTRA.
Conductor: Joseph Lewis.

Overture, "Mignon" Thomas
8.40.—THE RIGHT REV. BISHOP HAMILTON BAYNES, of Birmingham Cathedral. Religious Address.

REPERTORY CHOIR.
Hymn, "Glorious Things of Thee are Spoken" (A. and M. 545).

9.0. Orchestra.
Symphony, "Surprise" Haydn
(a) Adagio Cantabile and Vivace Assai;
(b) Adagio; (c) Menuetto; (d) Allegro di Molto.

9.20. THE ELIZABETHAN TRIO.
MAISIE SOUTHWALL, GWEN WASHBOURNE
RUBY TAYLOR.

Trios: "See, Mine Own Sweet Jewel" (Morley—1593)

"Upon a Hill" (Wagles—1608)

Song: "Phyllis was a Faire Maid" (Wilbye—1589)

Trios: "Weep, O Mine Eyes" (Wilbye—1589)

"Cruel, You Pull Away" (Morley—1593)

Orchestra.
Serenade, "Lyrique" Elgar

9.40. The Elizabethan Trio.

Trios: "Sweet Nymph, Come to Thy Lover" (Morley—1593)

"Lo, Here Another Love" (Morley—1593)

Song: "Dido's Lament" Purcell

Duet: "Why Sigh at the Shepherd?" (Jenkins)

9.50. Orchestra.
"Marche Militaire" Schubert

10.0.—NEWS. S.B. from London.

Local News and Weather Forecast.

10.15.—Close down.
Announcer: Percy Edgar.

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

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

Including a Short Story, and Songs by LULU BRADSHAW.

Also: if the Children wish very hard, the Fairy may come with the Piano.

8.15.—THE REV. J. STEPHENS ROOST, of St. Andrew's Presbyterian Church. Religious Address.

8.30. "Elijah," Part II (Mendelssohn).

KATHLEEN DANCE (Contralto), "The Angel"

HAROLD STROUD (Tenor), "Obadiah,"

ARTHUR J. ENGLAND (Baritone), "Elijah,"

THE WIRELESS ORCHESTRA.

THE "GIM" TRIO.

Under the Direction of Capt. W. A. Featherstone.

Chorus: "Be not Afraid,"

Elijah—Recit: "The Lord Hath Exalted Thee."

WAVELENGTHS AND CALL SIGNS.

LONDON (2LO)	-	365 Metres
ABERDEEN (2BD)	-	495 "
BIRMINGHAM (5IT)	-	475 "
BOURNEMOUTH (6BM)	-	385 "
CARDIFF (5WA)	-	359 "
GLASGOW (5SC)	-	420 "
MANCHESTER (2ZY)	-	375 "
NEWCASTLE (5NO)	-	400 "

Obadiah—Recit: "Man of God,"
Obadiah—Air: "It is Enough,"
Angels—Trio: "Lift Thine Eyes,"
Chorus: "He is Watching Over Israel,"
The Angel—Recit: "Arise, Elijah,"
The Angel—Air: "O Rest in The Lord,"
Chorus: "He That Shall Endure to the End,"
Recit. and Chorus: "Holy, Holy, Holy,"
Elijah—Recit: "For the Mountains Shall Depart,"
Obadiah—Air: "Then Shall the Righteous Shine Forth,"
Quartet: "O Come, Everyone that Thirsteth,"
Chorus: "And Then Shall Your Light,"

10.0.—NEWS. S.B. from London.

Local News and Weather Forecast.

10.15.—Close down.
Announcer: Jan Oliphant.

CARDIFF.

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

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

8.10.—THE ST. PAUL'S CHURCH CHOIR.

Antiphons, "Holy Spirit Come, O Come" (G. G. Martin)

"The Lord is My Strength" Coleridge-Taylor

THE REV. J. H. LEWIS, B.D., St. Paul's Church. Religious Address.

Hymn, "When All Thy Mercies, O My God" (A. and M. 517).

Overak Night.

Vocalist: GLANVILLE DAVIES (Baritone).

J. C. HAYWARD'S STRING QUARTETTE.

Pianoforte Duets:

VERA McCOMB THOMAS and THOMAS RILEY.

8.30.—Introductory Chat, followed by a Suite of Pianoforte Duets from "The Bohemian Forest," String Quartette in F, Op. 90, and three groups of Songs.

The National Anthem.

NEWS BULLETIN.

Announcer: A. Corbett Smith.

MANCHESTER.

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

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

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

8.25.—THE VERY REV. B. BUTLER, S.J., Church of the Holy Name. Religious Address.

EDWARD ISAACS (Solo Pianoforte).

Chromatic Fantasia and Fugue Bach

AGNES CLARKE (Soprano).

"Hear Ye, Israel" ("Elijah") Mendelssohn

HAROLD DERRYSHERE (Baritone).

"It is Enough" ("Elijah") Mendelssohn

Edward Isaacs.

"Canzonetta di Salvatore Rosa" Liszt

"Au Bord d'une Source" Liszt

Polonaise No. 1 in C Minor Liszt

Agnes Clarke and Harold Derryshere.

Duet, "What Have I To Do With Thee?" ("Elijah") Mendelssohn

Harold Derryshere.

"Eleanore" Coleridge-Taylor

"The Old Shepherds Song" Howard Fisher

Agnes Clarke.

"How Lovely are Thy Dwellings" Liddle

10.0.—NEWS. S.B. from London.

Local News and Weather Forecast.

10.15.—Close down.
Announcer: Victor Smythe.

NEWCASTLE.

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

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

8.30. HERMANN McLEOD'S STRING QUARTETTE.

Adagio (Piano and Strings) Rheinberger

(Continued in vol. 1, page 197.)

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

MARCONI VALVES

MADE AT THE OSRAM LAMP WORKS

FOR BROADCASTING

Important Announcement



REDUCED PRICE

ON AND AFTER JAN. 1st, 1924, THE PRICE OF

MARCONI VALVES

MADE AT THE OSRAM LAMP WORKS

"R"

TYPE

WILL BE REDUCED
FROM 15/- TO

12/6

*Sold by leading Electrical Contractors,
Wireless Dealers and Stores.*

Manufacturers and Wholesale only:
THE GENERAL ELECTRIC CO., LTD.
MAGNET HOUSE, KINGSWAY, LONDON, W.C.2

WIRELESS PROGRAMME—MONDAY (Jan. 14th.)

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 Irene Morris (Soprano).

5.0.—WOMEN'S HOUR: Ariel's Society Gossip. "Fantasies on Fashion," by F. M. Kelly, Ex-Lecturer to the Wallace Collection.

5.30.—CHILDREN'S STORIES: Children's Songs by Uncle Rex. "The Sundown Dance," by Dawn Mounsey (aged 18½). "Jack Hardy," Chap. 17, 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.

Symphony Programme.

S.B. to other Stations.

7.30.—AUGMENTED ORCHESTRA, conducted by

L. STANTON JEFFERIES.

Overture, "Prince Igor" Borodine

"Country Song" Gustav Holst

DOUGLAS VANE (Soprano)

Aria, "Air de Liu" Debussy

Orchestra.

Symphonic Variations for Piano and Orchestra

Cesar Franck

(Solo Pianoforte: MAURICE COLE.)

Time Piece, "A Night on the Lonely Mountain" Mussorgsky

Symphony No. 6, "Pathétique" Tchaikovsky

8.15.—LORD BURNHAM, S.B. from London.

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

Local News and Weather Forecast.

9.55.—Doris Vane.

"The Cloths of Heaven" Dunhill

"The Willow" Goring Thomas

"Come Out, My Dearest" Deschner

Orchestra.

Suite, "Sigurd Jorsalfar" Grieg

MAURICE COLE (Solo Pianoforte).

Nocturne in G Major (By request) Chopin

As de Ballet from "Chamber Music Pieces."

Opus 36 Moszkowski

Merry Andrew John Ireland

Orchestra.

"Molly on the Shore" Percy Grainger

10.30.—Close down.

Announcer: R. F. Palmer.

BIRMINGHAM.

3.30-4.30.—Frank Edwards (Solo Pianoforte).

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.—SYMPHONY PROGRAMME.

S.B. from London.

9.15.—LORD BURNHAM. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SYMPHONY PROGRAMME (Contd.).

S.B. from London.

10.59.—Close down.

Announcer: H. Cecil Pearson.

BOURNEMOUTH.

3.45.—Concert: The "BBM" Trio, Reginald S. Mount (Solo Violin), Arthur Marston (Solo Piano), Thomas E. Hingworth (Solo Cello).

4.45.—WOMEN'S HOUR.

6.15.—KIDDIES' HOUR.

6.30.—Boys' Brigade News.

6.15.—Scholars' Half-Hour: Miss E. M. Rodda on "Cecil Rhodes."

7.0.—NEWS. S.B. from London.

JOHN STRACHEY. S.B. from London.

Local News and Weather Forecast.

7.30.—SYMPHONY PROGRAMME.

S.B. from London.

9.15.—LORD BURNHAM. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SYMPHONY PROGRAMME (Contd.).

S.B. from London.

10.59.—Close down.

Announcer: Ian Oliphant.

CARDIFF.

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

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

Weather Forecast.

5.45.—THE HOUR OF THE "KIDNIE WINKS."

6.45.—Boys' Brigade News.

7.0.—NEWS. S.B. from London.

JOHN STRACHEY. S.B. from London.

Local News.

7.30.—THE BAND OF H.M. ROYAL AIR FORCE.

(By kind permission of the Air Council.)

Conductor: FLIGHT LIEUT. J. AMERS.

Vocalist: OLIVE FRANKS.

Overture, "Ray Blas" Mendelssohn

Negro Spirituals: "No One Knows de Trouble I've Seen" arr. White

"Many Thousand Gone" arr. White

Air de Ballet, "Pas Des Mariannettes" Paganini

Songs: Hindu Song (from the Opera "Sadko")

Rimsky-Korsakov

"Black Roses" Jean Sibelius

"Song of the Volga Boatmen" Traditional

Suite: "Atlantis" (The Lost Continent)

(a) Nocturne and Morning Hymn of Praise;

(b) A Court Function; (c) I Love Thee

(The Prince and Anna); (d) The Destruction of Atlantis (Saffron).

Serenade Pierné

Songs: "Hark! My Triangle" Anton Dvorak

"Songs My Mother Taught Me" Anton Dvorak

Band: "The Boy and the Birds" Hager

"Tangled Tunes" Kietelbey

Descriptive Piece, "In a Clock Store" Orth

"Two Old French Dances" Humble

Songs: "Hindu Children's Rain-song" Albert Mallinson

"Sing! Break into Song" Albert Mallinson

10.30.—Close down.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Announcer: H. Cecil Pearson.

Suite in F for Military Band Holst

Selections "The Lillie Domino" Courdillier

"The Nightingale and the Frog" Eidenberg

French Military March: "Algeriennes" Saint-Saens

9.30.—NEWS. S.B. from London.

Local News and Weather Forecast.

9.45.—The R.A.F. Band in Waltzes and other

Dance Music of former days.

10.15.—Close down.

Announcer: L. B. Page.

MANCHESTER.

3.30-4.30.—Concert by the "2ZY" Trio, Edith

Crick (Soprano), Ethel Wynne Jones (Con-

tralto), David Miller (Tenor), James Farn-

worth (Baritone).

5.0.—MAINLY FEMINE.

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.—SYMPHONY PROGRAMME.

S.B. from London.

9.15.—LORD BURNHAM. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SYMPHONY PROGRAMME (Contd.).

S.B. from London.

10.30.—Close down.

Announcer: S. G. Henry.

NEWCASTLE.

2.45.—Concert: James E. Rowell (Tenor),

Michael Kelly (Solo Saxophone).

4.45.—WOMEN'S HOUR.

5.15.—CHILDREN'S HOUR.

6.0.—Scholars' Half-Hour: Mr. A. Rae, M.A.,

Talk on "Wave Motion."

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.—SYMPHONY PROGRAMME.

S.B. from London.

9.15.—LORD BURNHAM. S.B. from London.

9.30.—NEWS. S.B. from London.

9.45.—SYMPHONY PROGRAMME (Contd.).

S.B. from London.

10.30.—Close down.

Announcer: R. C. Pratt.

Plays by Wireless.

Important New Productions.

LISTENERS will have noticed some developments in wireless drama during the last few weeks, and the programme provided on the 15th inst. is of interest as showing a further step in this direction.

In conjunction with Mr. Nigel Playfair, we have arranged four short plays. None of these plays will last more than twenty minutes and each is of quite a different character. The assumption we have made is that, since all visible aids to imagination are missing, the interest cannot be maintained for such a long period and whatever is given must be of a tabloid nature.

The first play is adapted from a poem by Mr. Vachel Lindsay, the well-known American poet. Music has been specially written for this by Mr. Frederick Austin, who is so well

known in connection with *The Beggar's Opera* and *Polly*. This will be followed by the famous classic—the Proposal Scene from *Pride and Prejudice*, by Jane Austen.

By way of a contrast, the third play may almost be termed "Wireless Melodrama." It has been specially written by Mr. Richard Hughes, who wrote *The Sinders Tragedy*, one of the Grand Guignol plays which aroused widespread interest a year or two ago. The scene of this play is laid in a mining quarry, and to help the atmosphere, it is suggested that listeners might well sit in darkness to correspond with the play's setting, which will also be in the darkness of a mine.

The last of the series is entitled *The Annual Dinner*, by A. P. Herbert. Many will have appreciated Mr. Herbert's writings in *Punch* under the initials A. P. H., and this play which he has written for us abounds in subtle humour.

Wireless drama is still in an experimental stage, but we shall be glad to know whether you think these efforts are successful.

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

The Story of Wireless is the Story of Marconi

IV

Early in March, 1914, Senatore Marconi communicated successfully by Wireless Telephony between Italian war-ships. On the high seas consistently good reception was obtained at a range of 44 miles, with the use of only limited energy and ordinary receivers.

These experiments, in which radiotelephonic communication was kept up for 12 hours on end, conclusively established the practicability of Wireless Telephony.

In the latest development of Wireless—Broadcasting—the name “Marconi” fully maintains its unchallenged lead. The Marconiphone is the Receiver on which you can always rely implicitly, because it embodies everything for which the name “Marconi” stands in Wireless.

The Marconiphone

The Triumph of the Master Mind



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

MARCONI'S WIRELESS TELEGRAPH CO. LTD
MARCONIPHONE DEPT., MARCONI HOUSE, STRAND, W.C.2

Principality Buildings, Queen Street, CARDIFF: 101, St. Vincent Street, GLASGOW: 10, Cumberland Street, Deansgate, MANCHESTER: 38, Northumberland Street, NEWCASTLE - ON - TYNE

WIRELESS PROGRAMME—TUESDAY (Jan. 15th.)

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

LONDON.

- 9.30-4.30.—Concert: The Wireless Trio and Chorus.
 5.—WOMEN'S CORNER. The Programme.
 6.—DANCE MUSIC. By Mr. [Name] and his Orchestra.
 7.—CHILDREN'S STORIES. "Sally and David Once More," by E. W. Lewis. "London Wishes Christmas to its Children."
 8.—LOCAL NEWS AND WEATHER FORECAST.
 9.—TIME SIGNAL AND 2ND CENTRAL NEWS BULLETIN. S.B. to all Stations.
 10.—LADY (IAN) MALCOLME. An Appeal on Behalf of the West End Hospital for Nervous Diseases.

An Evening of Plays.

MR. NIGEL PLAYFAIR
S.B. to Glasgow.

THE BLACKSMITH'S SERENADE
 (Yvonne Lindsay).
 Music by Frederick Austin.

PRIDE AND PREJUDICE
 (Jane Austen).

A COMEDY OF DANGER
 (Richard Hughes).

THE ANNUAL DINNER
 (A. P. Herbert).

- 10.15.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 11.0.—DANCE MUSIC. S.B. to other Stations.
 11.10.—Close down.
 Announcer: J. S. Dodgson.

BIRMINGHAM.

- 3.30-4.30.—Station String Quartette.
 5.0.—WOMEN'S CORNER.
 6.30.—Agricultural Weather Forecast.
 7.0.—NEWS. S.B. from London.
 7.15.—LOCAL NEWS AND WEATHER FORECAST.
 7.25.—ERNEST JONES (Solo Singer).
 7.30.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 7.45.—DANCE MUSIC. S.B. to other Stations.
 8.0.—Close down.
 Announcer: J. S. Dodgson.

WIMBLEDON.

- 3.30-4.30.—Station String Quartette.
 5.0.—WOMEN'S CORNER.
 6.30.—Agricultural Weather Forecast.
 7.0.—NEWS. S.B. from London.
 7.15.—LOCAL NEWS AND WEATHER FORECAST.
 7.25.—ERNEST JONES (Solo Singer).
 7.30.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 7.45.—DANCE MUSIC. S.B. to other Stations.
 8.0.—Close down.
 Announcer: J. S. Dodgson.

- 8.0.—NOTES. LESLIE PIGGOTT.
 8.15.—AN EVENING OF PLAYS produced by MR. NIGEL PLAYFAIR. S.B. from London.
 9.1.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 9.30.—NEWS. S.B. from London.
 9.45.—LOCAL NEWS AND WEATHER FORECAST.
 10.0.—DANCE MUSIC. S.B. from London.
 11.0.—Close down.
 Announcer: H. Cecil Pearson.

BOURNEMOUTH.

- 4.45.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 4.45.—WOMEN'S HOUR.
 5.15.—KIDDIES' HOUR.
 6.15.—Scholars' Half Hour: Eustace Nash, B.W.S., "Appreciation of Pictures."
 7.0.—NEWS. S.B. from London.
 7.15.—J. C. B. CARTER, B.A., Talk, "Joseph Conrad and his Works."
 7.30.—Local News and Weather Forecast.
 7.45.—Irish Night.
 7.50.—THE WIRELESS ORCHESTRA. Conductor: Capt. W. A. Featherstone. All Songs accompanied by Orchestra.
 8.0.—Overture, "An Irish Comedy" by Arnold.
 8.10.—Song Cycle, "A Bunch of Shamrock."
 8.15.—"Reminiscences of Ireland" by Fred Gifford.
 8.15.—GERALD KAYE (Tenor).
 8.20.—"The Maypole" by Benedict.
 8.25.—"Snowy Breasted Pearl" by Robinson.
 8.30.—Orchestra.
 8.35.—"Three Irish Pictures" by Arnold.
 8.40.—MARY JEFFERIES (Soprano).
 8.45.—"Danny Boy" by Old Irish.
 8.50.—"Mother Machree" by O'Neill.
 8.55.—Orchestra.
 9.0.—Irish Jig from "The Lily of Kilmerney" by Benedict.
 9.05.—Song Cycle, "A Bunch of Shamrock" Part II. by Arnold.
 9.10.—Orchestra.
 9.15.—Selection, "The Shamrock" by Myddleton.
 9.15.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 9.30.—NEWS. S.B. from London.
 9.45.—Local News and Weather Forecast.
 9.55.—Dance Music. S.B. from London.
 10.0.—Close down.
 Announcer: W. R. Keene.

CARDIFF.

- 3.30-4.30.—Falkman and his Orchestra relayed from the Capitol Cinema.
 5.0.—"SILAS" "FIVE O'CLOCK" "Mr. Everyman." Talks to Women. Vocal and Instrumental.
 5.15.—THE HOUR OF THE MIDDIE WINKS.
 7.0.—NEWS. S.B. from London.
 7.15.—LOCAL NEWS AND WEATHER FORECAST.
 7.25.—Close down.
 Announcer: W. R. Keene.

Shakespeare Night IX.

- 8.0.—THE RT. HON. STANLEY M. BRUCE, M.C. Prime Minister of the Commonwealth of Australia, speaking at the Dinner given in his honor by the Australian Natives Association, relayed from the Hotel Cecil. S.B. to all Stations.
 8.15.—LOCAL NEWS AND WEATHER FORECAST.
 8.30.—DANCE MUSIC. S.B. from London.
 8.45.—Close down.
 Announcer: W. R. Keene.

MANCHESTER.

- 3.30-4.30.—Concert: May Winstanley (Soprano), Agnes York (Contralto), Wilfred Newham (Tenor), and the Piano.
 4.45.—WOMEN'S HOUR.
 5.0.—MAINLY FEMININE. Miss Gertrude.
 5.15.—DANCE MUSIC. S.B. from London.
 5.30.—LOCAL NEWS AND WEATHER FORECAST.
 5.45.—Close down.
 Announcer: H. Cecil Pearson.

NEWCASTLE.

- 3.30-4.30.—Concert: Gladys Wallis (Solo Flute), Northrop (Contralto).
 4.45.—WOMEN'S HOUR.
 5.0.—CHILDREN'S HOUR.
 6.0.—Scholars' Half Hour: Chas. Wain on Natural History.
 6.15.—DANCE MUSIC. S.B. from London.
 6.30.—LOCAL NEWS AND WEATHER FORECAST.
 6.45.—Close down.
 Announcer: W. R. Keene.

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

A price reduction

**JANUARY 1st.
1924**

B.T.H.
R Type
**RADIO
VALVES**

There is no better "general purpose" valve than the amber-tinted B.T.H. "R" type valve. It is unsurpassed for stability, freedom from distortion and mechanical strength. At the new reduced price of 12/6, made possible by increased demand and consequent economies in manufacture, the B.T.H. "R" type valve undoubtedly represents the finest valve value in the world.

When next you buy "R" type valves, see that they are marked B.T.H., the sign and symbol of good reception

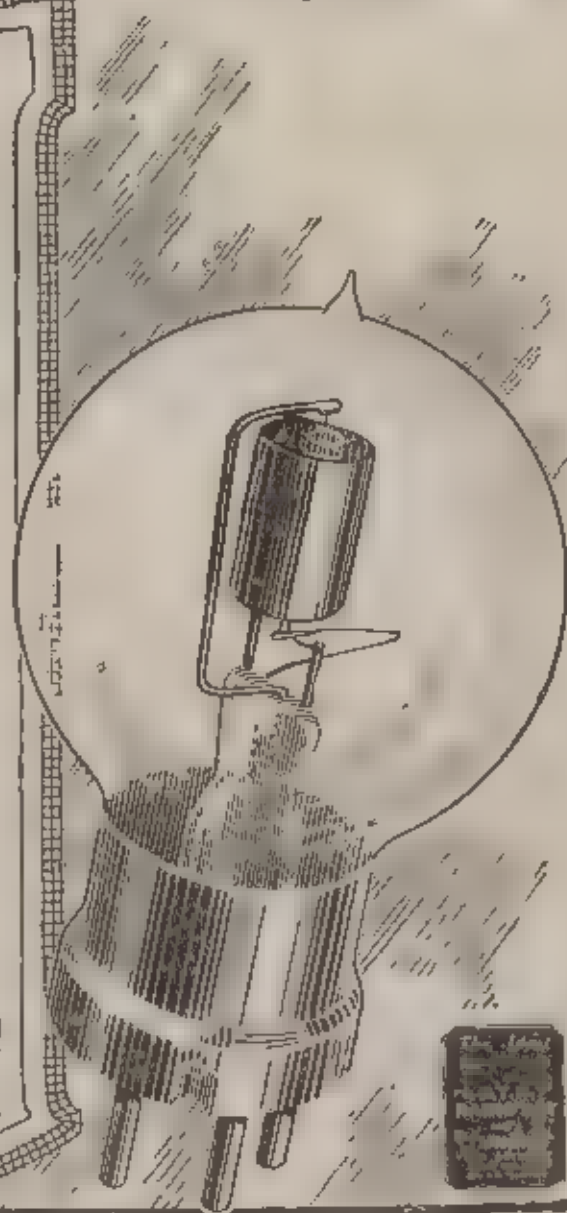
Reduced Price 12/6 each.

The British Thomson-Houston

CO. LTD.

(WHOLESALE ONLY)

Works RUGBY London Office: CROWN HOUSE, ALDWYCH.



WIRELESS PROGRAMME—THURSDAY (Jan. 17th.)

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

LONDON

- 3.30-4.30.—*Secrets: The Wireless Trio and Adam Gill (Bass).*
- 5.0.—WOMEN'S HOUR. Fashion Talk by Nora Shannon. A Travel Talk on Borneo by Charles Brown.
- 5.30.—CHILDREN'S STORIES "A Quarter Party," by Eucynith Crumpton (Aged 15). "Jack Hardy," Chap. 17, Part II, by Herbert Strang. L.C.M. of the Daily Mail. I wish to See the Zoo.
- 6.1.—Boy Scouts' and Girl Guides' News.
- 7.0.—THE SIGNAL AND 1ST GENERAL PERCY SCHOLLES S.B. to all Stations. PERCY SCHOLLES (the B.B.C. Music Critic). "The Week's Music." S.B. to all Stations. Talk by the Radio Society of Great Britain. S.B. to all Stations.
- Local News and Weather Forecast.
- 7.35.—Programme S.B. to Glasgow until 8.3.—THE WIRELESS ORCHESTRA. Conducted by L. Stanton Jeffries.
- March, "The King's Herald" Fulton.
- Valse, "Voices of Spring" Strauss.
- Humoresque, "Harold and Mildred" Finch.
- WEN GODFREY (Soprano).
- "Love's Lament" Robert Batten.
- "The Spring is at the Door" Quilter.
- JOSEPH FARRINGTON (Bass) of the B.N.O.C.
- "The Fortune Hunter" Witteby.
- "The Old Vindictive" Easthope Martin.
- "All the Fun of the Fair" Easthope Martin.
- Orchestra.
- Fantasia, "Tales of Hoffmann" Offenbach.
- JACK MILLARD will Entertain.
- Gwen Godfrey.
- "An Autumn Love Song" Soderstrom.
- "The Sweetest Song" M. G. Jones.
- Orchestra.
- Prologue in C Sharp Minor Bachmanoff.
- Secrets, "Theodore and Co." Vocello & Kern.
- Joseph Farrington.
- A Selection of the Line Squier.
- 9.1.—WALKER on 3rd.
- 10.0.—Quiet and Temple.
- 10.3.—THE SIGNAL AND 2ND GENERAL PERCY SCHOLLES S.B. to all Stations.
- Local News and Weather Forecast.
- Programme S.B. to other Stations.
- 9.45.—Orchestra.
- Petite Suite de Concert Coley Taylor.
1. "La Caprice de Nanette," 2. "Demande et Réponse," 3. "Sondage," 4. "Faisant la Mute."
- Jack Millard will Entertain.
- Orchestra.
- Tone Poem, "Fata Morgana" Sibelius.
- 10.30.—Close down.
- Announcer: J. S. Dodgson.

BIRMINGHAM.

- 2.30-4.30.—The Station String Quartette.
- 5.0.—WOMEN'S CORNER.
- 5.30.—Agricultural Weather Forecast.
- KIDDIES' CORNER.
- 6.45.—Boy Scouts' and Girl Guides' News.
- 7.0.—NEWS S.B. from London.
- PERCY SCHOLLES S.B. from London.
- Radio Society Talk. S.B. from London.
- Local News and Weather Forecast.
- 7.35.—THE STATION ORCHESTRA.
- Conductor: Joseph Lewis.
- Overture, "Zurich" Herold.
- 7.45.—DAVID HAMILTON Dramatic Recital, Characters from the Works of Dickens.
- 8.0.—Orchestra.
- Suite, "Wand of Youth—No. 1" Elgar.
- (a) Overture, (b) Serenade, (c) Minuet—Old Style, (d) Sun Dance, (e) Fairy Procession, (f) Slumber Scene, (g) Fairies and Giants.

- 8.15-9.45.—Interval.
- 9.4.—Orchestra.
- Ballet Music, "The Swan Lake" Tchaikovsky.
- 9.9.—MAX HAY, NON BROOK M.A., B. Weekly Talk, "Engineering Review."
- 9.15.—Orchestra.
- Tone Poem, "Fata Morgana" Sibelius.
- 9.30.—NEWS S.B. from London.
- Local News and Weather Forecast.
- 9.45.—Programme S.B. from London.
- 10.30.—Close down.
- Announcer: H. Cecil Pearson.

DOVERMOUTH

- 7.4.—Concert: Arthur S. Tellow, L.B.A.M. (Soprano). Alfred Ascott (Soprano). Jones (Contralto).
- 8.1.—WOMEN'S HOUR.
- 8.15.—KIDDIES' HOUR.
- 8.3.—Boy Scouts' and Girl Guides' News.
- 8.15.—Scholars' Half hour: Miss A. G. Spry.
- 7.0.—NEWS S.B. from London.
- PERCY SCHOLLES S.B. from London.
- Radio Society Talk. S.B. from London.
- Local News and Weather Forecast.
- 7.35-8.0.—Interval.
- 8.0.—THE DOVERMOUTH WELSH MALE VOICE PARTY.
- "Our Rhyme" Hughes.
- "The Sailors' Chorus" Dr. Parry.
- 8.10.—MINA FURRELL (Soprano).
- "Ruth Pinch Makes a Boastful Pudding" ("Martin Chuzzlewit") (Dickens).
- 8.20.—ALLAN FRANKLIN (Solo Piano).
- A Group of Items by Chopin.
- 8.35.—WILLIAM BYRNE (Solo Xylophone).
- 8.4.—WELSH MALE VOICE PARTY.
- "Land of My Fathers" Jones.
- "Alde Wili M." Dr. Monk.
- 8.55.—Alon Fawcett.
- "Jonas Chuzzlewit and His Wife" (Dickens).
- 9.—Adrian Franklin.
- La Fata Morgana Poldini.
- Lasso Dr. Parry.
- Solo Poldini.
- 9.1.—WELSH BYRNE.
- "Blackbird" Dietrich.
- 9.30.—NEWS S.B. from London.
- Local News and Weather Forecast.
- 9.45.—Welsh Male Voice Party.
- "Martyrs of the Arena" de Rolfe.
- 9.55.—Allan Franklin.
- Suite, "Fata Morgana" Poldini.
- 10.15.—Close down.
- Announcer: W. R. Keene.

CARDIFF.

- 3.30-4.30.—Talkman and his Orchestra relayed from the Capital Cinema.
- 5.0.—"SWAS" "FIVE O'CLOCK" ISAAK J. WILLIAMS, Keeper of Art in The Museum of South Wales. "Some Ancient Records of Peace and War."
- 5.10.—ARTHUR SHORT: On "Singing."
- 5.4.—THE HOUR OF THE KIDDIE WINKS.
- 6.45.—Boy Scouts' and Girl Guides' News.
- 7.0.—NEWS S.B. from London.
- PERCY SCHOLLES S.B. from London.
- Radio Society Talk. S.B. from London.
- Local News and Weather Forecast.
- Dance Night.
- 7.35.—Dance Music (Selected).
- 7.50.—FESTIVAL, THOMAS (Barrington).
- Song of the Clock Rex Burchell.
- "Close Friends" Henry Carter.
- "Barncombe Fair" Kennedy Russell.
- 8.0.—Dance Music (Selected).
- 8.20.—Humorous Sketch: "Fet. Arris conducts the Station Orchestra."
- 8.40.—Dance Music (Selected).
- 8.5.—Ernest (J. Thomas).
- "A Dinder Courtship" Eric Coates.
- "Michael Joan O'Shea" Geraldine Bennett.
- "My Old My Old" Kennedy Russell.
- "Just Because the Violets" Kennedy Russell.
- 9.20.—Dance Music (Selected).

- 9.30.—NEWS S.B. from London.
- Local News and Weather Forecast.
- 9.45.—DR. JAS. J. SIMPSON M.A., D.Sc., Chat on "British Bats."
- 9.55.—Dance Music (Selected).
- 10.15.—Close down.
- Announcer: L. B. Page.

MANCHESTER

- 11.30-12.30.—Concert by the "ZY" Trio.
- 5.0.—MABEL FLEMING, Miss Tait on Chorus.
- 5.2.—Fata Morgana Forecast.
- 5.30.—CHILDREN'S HOUR.
- 6.0.—Boy Scouts' and Girl Guides' News.
- 6.45.—MR. FRANCIS J. STAFFORD, M.A., M. Ed. German Talk.
- 7.0.—NEWS S.B. from London.
- 7.15.—SCHOLARS' HALF HOUR. Local News and Weather Forecast.
- 7.30.—Close down.
- 8.0.—T. H. MORRISON (Solo Violin).
- Andante Portius Kreutzer.
- Moto Perpetuo Dvorak.
- KATHLEEN HARTLEY (Soprano).
- "Car Mio Ben" Gordon.
- "The Service of Dee" Chay.
- VICTOR SMYTHE has something to say.
- MOLLY GRAY (Soprano).
- "Songs of the Sea" R. M. Harvey.
- There are No More R. M. Harvey.
- Kathleen Hartley.
- "Because" Guy d'Hardelot.
- T. H. Morrison.
- "Zigeunerweisen" Sarasate.
- Molly Gray.
- "Glory of the Sea" Sanderson.
- 9.30.—NEWS S.B. from London.
- Local News and Weather Forecast.
- 9.45.—Dance Music. S.B. from London.
- 10.15.—Close down.
- Announcer: Victor Smythe.

GLASGOW.

- 3.45.—Concert: The Muses F. and B. M. Turnbull (Pianoforte Duo), Isa A. Spence (Soprano). J. H. Watson (Bass).
- 4.45.—WOMEN'S HOUR.
- 5.0.—CHILDREN'S HOUR.
- 6.0.—Scholars' Half Hour: Mr. S. Hirst, Talk on "The Absolute Zero of Temperature."
- 6.30.—Boy Scouts' and Girl Guides' News.
- 6.45.—Fata Morgana.
- 7.0.—NEWS S.B. from London.
- PERCY SCHOLLES S.B. from London.
- Radio Society Talk. S.B. from London.
- Local News and Weather Forecast.
- 7.35.—THE WIRELESS ORCHESTRA.
- Music from "The King of Kings" (Gordon).
- 7.4.—ETHEL FOWLER (Soprano).
- "The Unforeseen" Scott.
- "What's in the Air To-day?" Fern.
- 7.55.—WILLIAM A. BATES (Entertainer).
- 8.5.—Orchestra.
- 8.15.—Valse "I Fata Morgana" Waldteufel.
- MR. WEALLANS (Solo Violin).
- Romance in F Beethoven.
- 8.25.—Fata Morgana.
- Over the Land is April Quilter.
- "How Do, Master Sunshine?" Drummond.
- 8.35.—Orchestra.
- Selection, "The Boy" Tait.
- 8.45.—Mr. Weallans.
- "Recit et Polonaise" Mackenzie.
- "S. S. S." Lindo.
- 9.0-9.30.—Interval.
- 9.30.—NEWS S.B. from London.
- Local News and Weather Forecast.
- 9.45.—Orchestra.
- "Polish" Three Dances Kotelbey.
- "Valse" Kotelbey.
- "Tarentelle" Kotelbey.
- 10.0.—William A. Bates (Entertainer).
- 10.10.—Orchestra.
- Selection, "Fallen Fancies" German.
- 10.25.—Close down.
- Announcer: C. E. Parsons.

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.





The
CORNET
—the soul of the Band

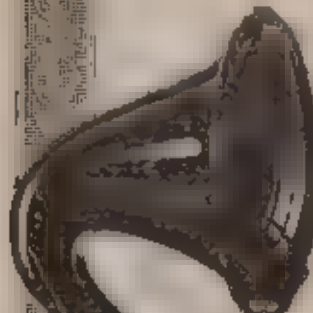
WHENEVER a Guards Band broadcasts from any B.B.C. Station, no item affords greater pleasure than the Cornet Solo.

The **BROWN Loud Speaker**, for several reasons, is peculiarly fitted to reproduce the music of the Cornet. Its non-resonating metal horns, for instance, permits the gradual progress of the sound waves to be unmarred by any intermediate projections such as may be found in any composite horns.

As will be obvious from the illustration of the sound wave above, the faithful reproduction of Cornet music depends largely upon a deep-seated knowledge of the laws of acoustics. In this there is no one who has taken a greater share than the inventor of the world-famous **BROWN Loud Speaker** with its conical aluminium diaphragm.

When purchasing your Loud Speaker remember that the **BROWN** because its diaphragm is as thin as paper, needs fewer Valves to operate it. Further its astonishing sensitiveness enables a much greater volume of sound to be produced with a complete lack of distortion.

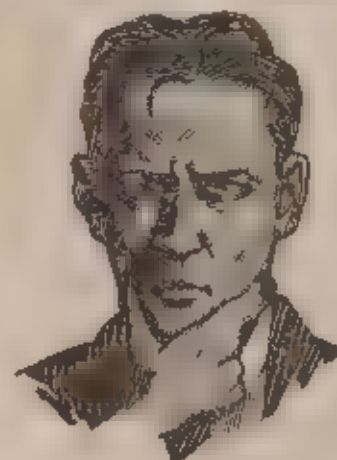
S. G. BROWN Ltd., N. Acton, W.3.
Retail 19, Mortimer Street, W.1,
and 15, Moorfields, Liverpool.



Brown

PRICES

Model H.1, 21in. high.	
3 ohms	£5 5 0
2,000 ohms	£5 8 0
4,000 ohms	£5 10 0
Model H.2, 12in. high.	
3 ohms	£2 5 0
2,000 ohms	£2 8 0
4,000 ohms	£2 10 0



What do you know?

How can you expect to get the best results from your set if you don't know the elementary principles of Wireless? How can you, for instance, expect to pick up American Broadcasting if you don't know how to tune your Set properly? Even a comparatively inefficient Set can perform well in the hands of the man who knows. Start gaining knowledge to-day by reading some of the excellent Radio Press Books written for YOUR benefit.



500 Wireless Questions Answered.

A wonderful Book for Wireless enthusiasts of every grade. The compiler will pick up a tremendous amount of radio information from its own or other sources, and the most representative experience will find it the most useful book in the bookshelf. Get a copy today and find the answers to some of the questions which have been puzzling you.

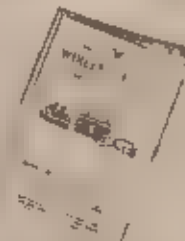
2/6
Post free

Wireless Valves Simply Explained.

By John Scott Tappin F.R.S.P.

The first popular book on the Valve, and still the most widely read. If you own a Valve set, you need this book. Full of interesting and helpful diagrams and explanations.

2/6
Post free



Radio Valves and how to use them.

By John Scott Tappin F.R.S.P. Editor of 'Radio Times'. Just published. The most complete and up-to-date book on the subject. It tells you all the latest news and how to use the valves in your set. It is a book that every radio enthusiast should have. It is a book that will help you to get the most out of your set. It is a book that will help you to avoid the common mistakes that so many people make. It is a book that will help you to get the most out of your set. It is a book that will help you to avoid the common mistakes that so many people make. It is a book that will help you to get the most out of your set. It is a book that will help you to avoid the common mistakes that so many people make.

2/6
Post free



How to make your own Broadcast Receiver.

A splendid constructional book describing step by step how to build a broadcast receiver. It is a book that every radio enthusiast should have. It is a book that will help you to get the most out of your set. It is a book that will help you to avoid the common mistakes that so many people make. It is a book that will help you to get the most out of your set. It is a book that will help you to avoid the common mistakes that so many people make.

1/6
Post free



Complete list of all Radio Press Books and how to request. All Books on sale at every Bookshop.

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

WIRELESS PROGRAMME—FRIDAY (Jan. 18th)

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

LONDON.

8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer H. Cecil Pearson.

BOURNEMOUTH.

8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer H. Cecil Pearson.

Third Symphony Concert.

7.30. CAPT. W. A. FEATHERSTONE Talk,
illustrated by Orchestra, on programme to
be performed.
"GRAND ORCHESTRA."
Conductor: Capt. W. A. Featherstone.
First Movement "Symphonie Pathétique"
Tchaikovsky
MARY JEFFERIES (Soprano).
"The Red Karavan" (With Orchestra Accompaniment).
Grand Orchestra.
Second Movement "Symphonie Pathétique"
Tchaikovsky
Symphonie Variation for Cello and Or-
chestra. (With Orchestra Accompaniment).
Mary Jeffries.
"None But the Weary Heart" Tchaikovsky
(With Orchestra Accompaniment).
Grand Orchestra.
Third Movement "Symphonie Pathétique"
Tchaikovsky
Mary Jeffries.
"Hindu Song" (With Orchestra Accompaniment).
Grand Orchestra.
Finale "Symphonie Pathétique" Tchaikovsky
Overture, "1812" Tchaikovsky
9.30. NEWS. S.B. from London.
Local News and Weather Forecast.
9.45. "OTHELLO," Act III. S.B. from
Announcer: Ian Oliphant.

CARDIFF.

8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer: Ian Oliphant.

Choral Night.

7.30. THE CAERPHILLY MALE VOICE
CHOIR
Vocalist TREFOR EVANS.
Winding March from "Foramors" Rubinstein
Entr'acte, "Le Cyprien" Gabriel Marie
7.40. Part Songs: (a) "The Charge of the
Light Brigade" (Hartford). (b) "Down
Among the Dead Men" (Barnock). (c) "On
the Sea" (Ludlow Buck).
7.50. Songs: (a) "Mister Sun" (Gwendoline
Coleridge-Taylor). (b) "Big Lady Moon"
(S. Coleridge-Taylor).

8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer H. Cecil Pearson.

MANCHESTER.

3.30. 4.30. Concert. The "27Y" Orchestra
Florence Ellis (Soprano), Alice Mellowark
(Contralto), Albert Bradley (Tenor), The
Sullivan Anglers.
5.0. MAINLY FEMININE
5.25. Farmers' Weather Forecast.
5.30. CHILDREN'S HOUR
6.0. 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. THE GARNER WHORFIELD DANCE
BAND
Waltz, "Faded Love Letters of Mine"
Fox-trot, "Every Day"; One-step, "Joe
Is Here"; Fox-trot, "That Red Head
Gai"; Valse, "Honey"; Fox-trot, "Gone,
but Not Forgotten"; Fox-trot, "Just
Rolling Hands"; Blues, "The Cat a
Whisker"; Fox-trot, "Why Did Robinson
Crusoe Get the Blues?"; One-step, "Felix
Kept on Walking"
8.30. JACK WALKER (Baritone)
"Marching Alone", "Maud Valerie White"
"The Little Irish Girl", "Hermanns Lohr"
8.45. T. A. COWARD, M.Sc., on "Bat
Hunting in Winter"
9.0. Jack Walker
"The Desert Lover", "Maud Valerie White"
"Bon Epan"
9.1. The "27Y" Orchestra
Schottische, "I Might Be Your Once-in-a-
While"; One-step, "Mister Gallagher and
Mister Shag"; Valse, "Honey"; Fox-trot,
"Gone, but Not Forgotten"; Fox-trot, "Just
Rolling Hands"; Fox-trot, "Why Did Robinson
Crusoe Get the Blues?"; One-step, "Felix
Kept on Walking"
9.30. NEWS. S.B. from London
Local News and Weather Forecast
9.45. "OTHELLO," Act III. S.B. from
Announcer: Victor Smyth.

NEWCASTLE.

3.45. Concert. Jack Mackintosh (Solo Cornet),
Mabel O'Brien (Soprano).
4.1. WOMEN'S HOUR
4.3. THE "27Y" ORCHESTRA
6.0. Scholars' Half Hour: Mr. W. C. F.
Campaign, B.Sc., Talk on "The Bridges of
the Tyne"
6.25. Farmers' Corner. Mr. R. W. Wheldon,
Talk on "The Potato Crop."
7.0. NEWS. S.B. from London
G. A. ATKINSON. S.B. from London
Local News and Weather Forecast
7.30. The entire Programme S.B. from London
Announcer: E. L. Oliphant.

Popular Programme.

S.B. to Newcastle.
8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer H. Cecil Pearson.

BIRMINGHAM.

8.15—8.30. Interval.
8.30. THE STATION ORCHESTRA
Special Request Items.
8.45. WALTER BADHAM (Hornist) in
Orchestra.
9. NEWS. S.B. from London.
9.45. "OTHELLO," Act III. S.B. from
Announcer H. Cecil Pearson.

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

Did someone forget
to send you one?

If you did not receive a Waterman's Ideal as a Christmas or New Year's Gift, why not buy one for yourself—NOW?

You can't afford to wait until next Christmas on the chance that someone will remember to send you this most useful of gifts.

Waterman's Ideal is always ready for recording wireless messages and for writing to relatives and friends.

Nothing to replace it, nothing to get out of order. It responds instantly to the touch, and gives lifelong service.

Waterman's Ideal Fountain Pen

Three pens 17/6	Lower cost 12/6	Regular safety pen 17/6	Top pen 17/6	and Gold pen 17/6	Note to suit all hands fully guaranteed in Satin and Jewellers everywhere.
Set 32/6	Set 22/6	Set 27/6	Set 27/6	Set 27/6	The Pen Book sent free on request.

L. G. SLOAN, Ltd., The Pen Corner, Kingsway, London, W.C.2
Cap Waterman. Life of Pen. Best of all pens.

Guaranteed
Wireless Sets & Parts



INTERVAL TRANSFORMERS

15/6

Write for Free Catalogue of Sets and Parts

Send 1/- P.O. for Trial Sample on approval.

BRITEZITE The Most Perfect of
Super-Sensitive Crystals.

MONEY BACK IF NOT DELIGHTED.

The BRITISH CENTRAL ELECTRICAL CO., LTD. 55, Roper's Avenue,
Highbury, London, E.C.1

Charge your accumulators at home for a few pence by the
Longton Improved Electrolytic Charger

NOTHING TO ADJUST. SILENT. NO MOVING PARTS.
Price - - - £5 : 15 : 0

Send for it for one week on approval to be used if not satisfied.

H. LONGTON, Manufacturing Electrical Engineer,
43, Johnson Street, Westminster, S.W.1



TrueMusic
Loud Speakers
Clear as Crystal
Headphones

TMC
Wireless

If unable to obtain locally, write
to us direct.

The Telephone Manufacturing Company Limited, Hollingsworth Works, Dulwich, London.
British Empire Exhibition, Wembley, 1924.

(2 P.S. 1)

Do You Keep Canaries?

A Talk from Cardiff, by E. W. Allsopp.

WHILE there is no doubt that birds have been associated with mankind from very early days, yet so far as canaries are concerned we have but little reliable information other than that attaching to the Flemish weavers who settled in Spitalfields some few years ago.

Students of history will remember that these weavers fled from the persecution of the Duke of Alva, bringing with them not only the art of weaving, but also their canaries, for it appears that the arts of weaving and the breeding of canaries had long been associated.

Later, the Flemish weavers settled in the city of Norwich and that is how this city became famous for canaries, for with the development and spread of the weaving the breeding of canaries spread also—a fame that has not perished with the hand-loom and home work for to-day the old city is still famous for its canaries.

Spring and Autumn Visitors

I expect that many people are under the impression that their canaries with the clear yellow or buff coloured plumage free from any dark patches or markings, are brothers, as it were, of the brook-trout in a state of nature; but that is not so.

The canary bird, the *Fringilla canaria*, which our several varieties are descended, are accidental spring and autumn visitors to our British Isles.

Their home is mainly in the Canary Islands, Madeira, and the Azores, and, broadly speaking, in appearance they are as insignificant as our country bred sparrow. Not that I will assert that our country friend is not beautiful in his lovely shades of autumn browns, but I mean that in no degree does he appear related to your own pet, or to any of the magnificent exhibition specimens.

To-day, it is possible to purchase a canary either a rich clear yellow in plumage or wholly green, a chaste white, or a lovely rich cinnamon spice shade. To these, breeders hope to add some blacks and some charming blues.

Keep Him Cool.

The general management needed to preserve canaries in health and song necessitates a few simple and yet imperative rules.

Probably a bright cheerful situation dominates the whole scheme, and a freedom from weariness, but ill-conceived regard is, perhaps, the feature that needs particular mention; for there is no doubt that a lot of folk mean well but really do very badly.

For example, during a spell of very hot weather we may see many canaries, parrots and other cage birds hung out of doors in a broiling sunshine without the least protection.

Our canary bird is a true flock, and in common with other species, is a lover of the shady groves during the heat of the day feeding during the early morning and late at eventide, and is not given to seeking the higher atmosphere.

Hang your canary outside if you choose, but please do not risk his very life by hanging him in the direct sunshine of summer.

If convenient, a cold room should be chosen in which to keep your canary, and by this I mean a room that seldom needs a fire or artificial heat.

Canaries will stand cold very well—and will even sing and be happy in a temperature that keeps their drinking-water frozen—providing the temperature remains constant; but they will not stand for long the room that is hot during the day and cold during the night.

the kitchen is not a suitable room, and I am sure if you try, you can find a better place for Dicky.

Do not please do not hang him in the window of the sitting or occasional room for what is more draughtily than most windows.

Hang upon the wall, facing the window and out of reach of the cat will suit very much, particularly if the cage be of the box pattern that is, open only in the front and not at the top, the usual wire cage which exposes the occupants to draughts from all directions.

To Prevent Sore Feet.

Strict cleanliness of the cage and its fittings such as the perches and food vessels is of comparative well-being, and if the perches are the kind usually supplied with the cage, the round, smooth and hardly thicker than a pencil sort, then cast them out.

Instead, substitute perches made from any soft white wood, and planed to about half an inch square, with just the keen edges or corners taken off. These are much more comfortable to grip, and are a guarantee against sore feet, a condition that often prevents free singing. Do not be tempted to sandpaper the perches just to make them look nice, for a rather rough finish from the plane is desirable.

Old age, as usual, seldom arrives unaccompanied, and sooner or later the upper mandible of the beak and the toe-nails become overgrown, becoming a menace to the health and safety of Dicky. These should be trimmed back to the normal lengths by means of a pair of nail clippers, care being taken not to cut into the thread-like blood vessels that extend into each of the toe-nails, and which may readily be seen by holding the toes in a good light.

The Ideal Diet.

With feeding it is well to encourage the simple life. A collection of pretty looking seeds is no criterion of feeding value.

The ideal diet is as follows: To one quart of best Spanish canary seed mix in a half pint of sweet annise rape seed.

This is the staple diet with which the seed box should be kept filled, but while at your corn merchant's, procure a sixpenny packet of a good brand of mixed bird seed. A teaspoonful of this should be offered upon the bottom of the cage, or placed in a separate small vessel, every other day.

Wireless Wisdom.

No one can hope to become a reasonably well-informed of the essential worth of a book who does not unceasingly practise the maintenance of a spirit of generous catholicity. J. R. PERKINS, M.A., Director of Studies, Glasgow University.

No good work is ever done in any department of life by people who are not happy in doing it.—FRANK SCHOLER.

It was a long time before I caught it from him. I was a little bit of a fool then.

"It is not an umpire's duty to teach the rules, his mission is to see that they are properly interpreted."—H. E. HARRIS.

You must know what a thing is trying to do before you can judge whether it succeeds."—ANTONY BERGMAN.

Farming by Wireless.

What Radio Means to Agriculture.

It is fairly safe to say that in the sphere of everyday activity is broadcast, proving of greater practical value at the present time than it is in farming. As a class, farmers are perhaps more conservative than most members of the community, but that they are alive to the possibilities of wireless is shown by the interest taken by many of them in the broadcasting of weather reports and other items of the kind.

With the possibilities of wireless, the farmer's point of view would be surprised if they could realize the part played by radio among the farmers of America, that country the developments of broadcasting in so far as the dissemination of information useful to farmers is concerned, are in the forefront of American.

Accurate Predictions.

At the present time, weather forecasts are being broadcast from over one hundred and fifty U.S. stations, and it is anticipated that this number will soon be increased to five hundred. Hundreds of thousands of American farmers are aware of the immense care taken to ensure the accuracy of such predictions, now rely entirely on wireless forecasts in making their plans for each day's work.

In the minds of a good many English farmers there still lingers some doubt whether climatic conditions can be predicted with any measure of success. Actually more than ninety per cent. of the forecasts give notice of weather conditions that obtain during the succeeding forty-eight hours, and as increasing attention is being paid to the subject by scientists, there is little doubt that in time the ten per cent. of inaccuracies, most of them slight, will be eliminated.

Helping the Harvest.

Last summer a large number of farmers in this country carried their hay and harvested their corn after learning the weather forecasts by wireless, and as a result the operations were not hampered by unfavourable conditions. What this means to the farmer and his helpers can only be realized by those who have had close experience of agricultural work.

There is no doubt that by being forewarned farmers can save money, as well as time and trouble. The Kentish hopgrowers, for example, at a cost of round about £20, represents an investment worth at least £100 a year to him, while some of the Kentish hopgrowers have found the forecasts of unquestionable value. The barometrical readings announced every evening are also of great use.

Talks by Experts.

In addition to the weather reports broadcast from every station, there are talks from most of the B.B.C. stations on various subjects of interest to farmers. These talks are given by experts in almost every department of agriculture, from seed buying and sowing to harvesting and threshing, from the care of cattle to the management of a dairy.

The treatment of animals in certain cases of disease was discussed on a recent occasion by a leading veterinary surgeon, while on another the eradication of various plant pests was the topic of an interesting talk.

An attempt is being made to broadcast a sermon to some explorers near the North Pole. This proves once for all that there is no safe spot where one can go in search of peace and quiet.—From "Punch."

Encourage British Inventors!

A Talk from London, by the Rt. Hon. Sir William Bull, Bart., M.P.

THE history of Patent Law is said to have begun in the reign of Edward III., and he set two friars and two aldermen to report on the prospect of discovering the Philosopher's Stone. The friars solemnly reported that they thought there was a very good prospect of doing so, and the King directly granted Letters Patent under the Great Seal, not to the two friars, but to the two aldermen.

The earliest form of these grants of privilege was to have been that of exclusively conducting new trades or dealing in objects of commerce hitherto unknown, and the privilege was, apparently, used in most cases as a means of raising money.

Rewarding Favourites

The privilege was greatly abused, and under the pretence of providing for the better government of trade, the Crown sanctioned the most oppressive monopolies with a view to rewarding favourites or to raise money. Queen Elizabeth cancelled wholesale privileges which had been abused by patentees. It appears, however, that the Queen did not revoke all the monopolies complained against, and a list of them, dated May, 1603, seems to imply that there were still

Matters did not improve on the accession of James I. The manufacture of alum had been introduced into England from abroad and exercised with much success till about 1580, when Sir Thomas Chamber discovered a mine at Gabor, in Yorkshire, and the art was brought to perfection by Sir John Boucher. The importation of alum was prohibited by proclamation; the King took the whole of the trade into his own hands and made it the subject of Letters Patent.

Abusing the King's Patent.

The case of Mompesson and Mitchell is the most flagrant instance. According to Rapin, the patent was granted to Sir Giles Mompesson and Sir Francis Mitchell for the sole making and selling of gold and silver lace. The patentees proudly abused their privilege, making sophisticated lace and copper and brass matters, and procuring others (who made good lace) to be fined and imprisoned for infringing their patent. Complaints were made to Parliament, and, in consequence, Mitchell was imprisoned but Mompesson was not. A writ of Habeas Corpus was issued ordering a reward for his apprehension.

The King informed the Parliament that he was aware of the abuse of his patent, and would revoke it. The Lords confiscated the estate of Mompesson, who had escaped, and degraded him of his knighthood. Mitchell was also degraded and fined £1000, carried through the streets of London on a horse with his face to the tail and imprisoned for life. The patents for gold and

silver lace and some others were revoked by Royal proclamation.

Invention as we know it is somewhat of a modern institution. Curiously enough, neither Parliament nor our grants in industry encouraged to any extent the organisation of science and invention until we were plunged into the great war. The consciousness that with the inventor and manufacturer should work arm-in-arm was slumbering in the incubator.

Without knowing it, we are passing through a revolution at the present time. I urge every body to study the history of England for the thirty years that succeeded Waterloo in 1815. Remember that after twenty years of war, with our backs to the wall against all Europe, we had thirty dreary years to get back to peace and prosperity, and we should not have done it then but for invention. It was the development of Watt and Stephenson's locomotive engine wedded to an iron rail which helped forward our prosperity by leaps and bounds. Other labour-saving machinery followed—made for the rest of the world. Why, when I was a boy, on the Continent I never saw any other engines but those of British make, whilst another British firm built all the railways simply because no one else knew how to do it or had the capital.

A Long Felt Want.

We must find an invention of similar usefulness to help us now. How is it to be done? I will tell you. The association known as the Institute of Patentees comes into being at the opportune moment. It fills a place which has never been filled before. It is of the greatest assistance to inventors. It will assist trade and commerce. It is destined to lubricate the wheels of industry and to stimulate progress.

The last piece of legislation passed by Parliament was not conceived in a spirit helpful to inventors and traders in this country. Patentees received shabby treatment in respect of the five years' disturbance during the War and only received two years' extension

the life of their patents.

One very necessary link which the Institute of Patentees is to urge upon various legislatures within the Empire, is the adoption of an Imperial system of Letters Patent. It is a grave hardship and a costly one which imposes upon the inventor, often a man of small means, the burden of taking out a separate patent in each of the Dominions, and there seems no reason why what has been done with copyright should not be done with patent rights.

One service that the war has rendered us is that it has shaken those in authority out of their attitude of indifference, and legislation, instead of preparing the way, has invariably lagged behind. It has been towed by the ship of science, instead of being the tug leading her into harbour.

There is, perhaps, no nation the future happiness and prosperity of which depends more on science and invention than our own.

It is only by wisely utilizing and encouraging invention that we have any hope of maintaining our population in plenty and comfort. Science, however, will do this for us if we will only let her. She may be no fairy godmother, indeed, but she will richly reward those who love her.

Inventors Incog.

If the country is to progress, inventors, rich and poor, must be encouraged and every assistance possible given them to stimulate the existing genius. The Institute of Patentees is carrying out this work, and by early advice and help, many inventors are saved time and money and their genius is directed into channels which will not only be of benefit to themselves, but of value to the nation. Hundreds of the people you pass in the street are inventors, or

potential inventors, and yet, in many cases, the individual is nervous of the fact being known. He is afraid of being held up to ridicule and his ideas being laughed at. This feeling is undoubtedly caused by the stupendous lack of encouragement which has been afforded him.

Manufacturers must encourage invention and adequately reward employees who help them to improve or abate their output. The Government must act to assist the patentee, and the general public should support and encourage enterprise to give invention an important place in the community.

This is one way of decreasing unemployment. The Broadcasting Company has done much in this direction. It has organised an industry now employing thousands and which at a short time will employ thousands more.



SIR WILLIAM BULL.



"'Urry up wiv' that bear, Ern! We're bound put through to the Savoy Hotel!"

FOR THOSE WHO WANT THE BEST "Dunham" Instruments will particularly appeal.

Reaction and regeneration in an entirely new design of receiver make this by far the most sensitive of all two-valve sets. Sensitiveness, quality of tone and ease of operation give it premier place among wireless receivers.



One purchaser received nine American stations during recent tests, whilst practically every owner received two or more stations.

Price £8 15 0, plus 1 B.C. Tax 15/-
plus 4 V 40 discounting H
1 12 19 0
15/-

Write for fully descriptive catalogue and
dealers for trade terms.

C. S. DUNHAM (Radio Engineer),
1545 N. Harvard Boulevard, Los Angeles, Cal.
234/8, Brixton Hill, S.W.2.

Stand by for one minute please and try-

"RABOK" CLEANING
and POLISHING
WOOL

The Best, Simplest and Cleanest Medium for Cleaning
GOLD, SILVER and ELECTRO-PLATE
Removes all tarnish and produces a beautiful finish in one operation
Guaranteed Free from Mercury or Cyanide

"RABON" Manufacturing Co., Oughtsbridge, Nr. Sheffield.
1/3 per packet post free: or Free Sample on receipt of 1d. stamp for postage.

From SAMEL GLA

**TWO
XOX**

POWDERS FREE
*For NEURALGIA
and HEADACHE*

FREE Mention this Journal and
 send in your order for 1 Indus-
 trial Engineering Video Series
 on 3 VHS, 1 and 3 boxes on
 the price of \$149.95 each.
THE IZEX CO., 11 Nation Drive, E.C.

— Buy British Goods Only. —

THE latest addition to the many distinctive features which characterize all Edison Vavac is the special safety cap (Prov. Pat.). The filament pins are shorter in length than the plate or grid pins, thus avoiding a likelihood of surface contacts on the wrong sockets.

ANOTHER BIG REDUCTION.
Types "A.R." and "R" NOW 12 6

"TYPE A.R.D.E."
Dual Emitter)

REDUCED PRICE NOW 21 -

that is, $\delta u = \delta u_1 + \delta u_2$ and $\delta u_1 = \delta u_2 = 0$.
 For $\delta u_1 = 0$, $\delta u_2 = \delta u$, we have
 $\delta u_1 = 0$ and $\delta u_2 = \delta u$.
 For $\delta u_2 = 0$, $\delta u_1 = \delta u$, we have
 $\delta u_1 = \delta u$ and $\delta u_2 = 0$.

TYPE "A.R. 05,"

The LATEST DULL EMITTER 30 -

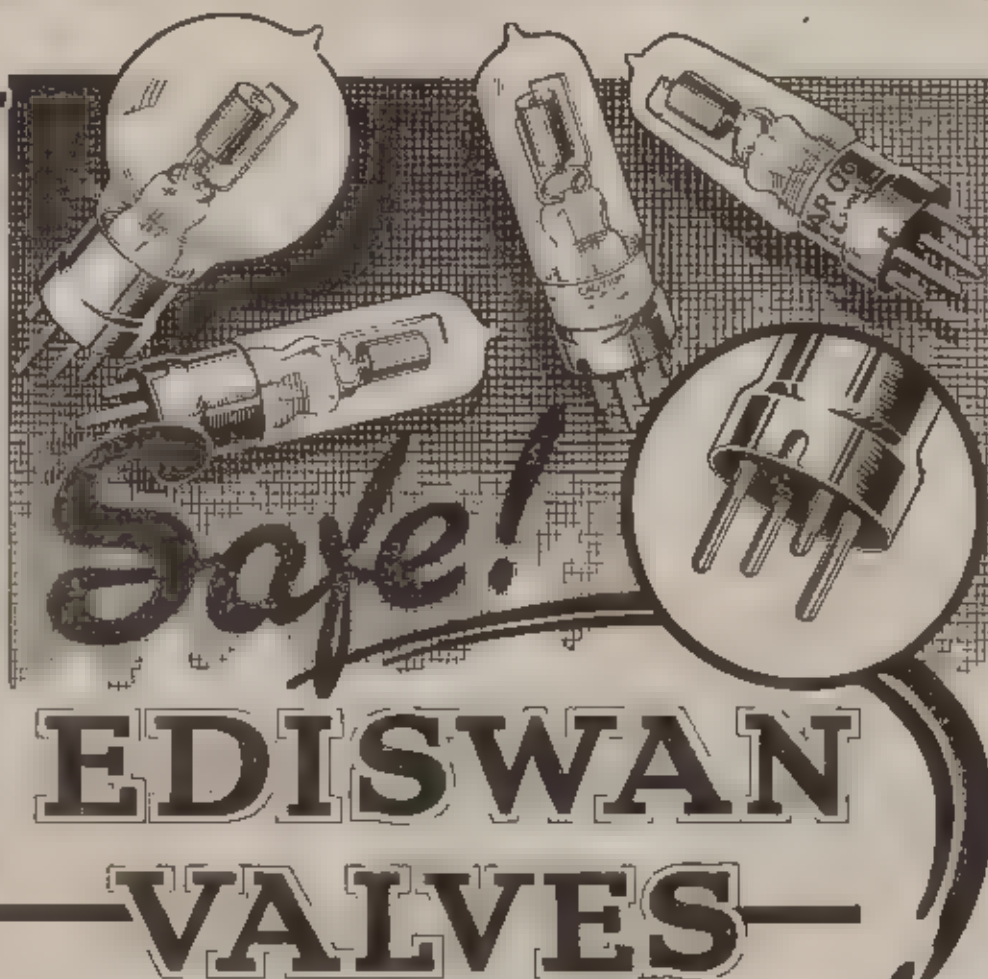
This valve can be run off dry air, reducing upkeep costs by a millionth. The current consumption at a filament voltage of 25 volts is only .05 of an ampere.

Have you a good stock copy of Illustrated Books?
The Thermionic Tube & Lamp and a portfolio in lay

You dealer finds stocks to supply you. If no.
 title is of the nature has better bid orders

THE EDISON SWAN ELECTRIC Co., Ltd.,
123/125, Queen Victoria Street E.C.4.
and 71, Victoria Street, S.W. 1

1. **Warranties:** The oil
 2. **Price:** \$1.00 per gallon
 3. **Quantity:** 500 gallons
 4. **Delivery:** To be determined



WIRELESS PROGRAMME—GLASGOW (Jan. 13th to Jan. 19th.)

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

SUNDAY.

- 3.0-5.0. ORGAN RECITAL. *S.B. from London.*
 5.0-5.30. CHILDREN'S CORNER. *S.B. from Bournemouth.*
 8.30. ST. GILBERT'S CHORUS. 1st Anthem "Hark, Hark My Soul" by Shelley.
 8.40. THE REV. ERIC A. SUTTON, B.A. 2nd Anthem of the New Jerusalem. Religious Address.
 8.50. St. Gilbert's Quartette. Anthem "O Lord Most Holy" by Franz 4th.
 9.0. ETTY FRIEDLANDER (Solo Violin). Czardas "Malagena" by Y. Monti. Accompanist Robert Friedlander.
 9.10. WILLIAM GIBSON (Tenor) and LAURENCE MARSHALL (Bass). Duet "Watchman, What of the Night?" by Sargeant.
 9.15. St. Gilbert's Quartet. "Sweet and Low" by Barnby. "Drink to Me Only With Thine Eyes" by arr. Robertson.
 9.22. ETTY FRIEDLANDER. "Zigeunerweisen" by Sarasate. "Legende" by Wieniawski.
 9.35. ANNE BAIL LANTINE (Contralto). Linden Lea "The Bells of Jura" by Kennedy Fraser.
 9.45. Laurence Marshall. "Watchman" by Squirt. "Bells of Jura" by Kennedy Fraser. "Two Grenadiers" by Schumann.
 10.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 10.30. Special Announcements. Close down.
 11.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 11.30. Special Announcements. Close down.
 12.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 12.30. Special Announcements. Close down.
 1.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 1.30. Special Announcements. Close down.
 2.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 2.30. Special Announcements. Close down.
 3.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 3.30. Special Announcements. Close down.
 4.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 4.30. Special Announcements. Close down.
 5.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 5.30. Special Announcements. Close down.
 6.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 6.30. Special Announcements. Close down.
 7.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 7.30. Special Announcements. Close down.
 8.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 8.30. Special Announcements. Close down.
 9.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 9.30. Special Announcements. Close down.
 10.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 10.30. Special Announcements. Close down.
 11.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 11.30. Special Announcements. Close down.
 12.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 12.30. Special Announcements. Close down.

MONDAY.

- 3.30-4.30. An Hour of Melody.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 7.0. NEWS. *S.B. from London.* JOHN STRACHAN. *S.B. from London.* Local News and Weather Forecast.
 7.30. SYMPHONY PROGRAMME. *S.B. from London.*
 8.15. LORD BURHAM. *S.B. from London.*
 9.30. NEWS. *S.B. from London.*
 9.45. SYMPHONY PROGRAMME (Contd.) *S.B. from London.*
 10.30. Close down.
 11.0. Announcer A. H. Swanton Paterson.

TUESDAY.

- 3.30-4.30. An Hour of Melody, by the Wireless.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 7.0. NEWS. *S.B. from London.* J. R. RUTHERFORD, Hon. Org. Director for Scotland, on "The Object of the British Empire Exhibition." Local News and Weather Forecast.
 7.30. AN EVENING OF PLAYS. *S.B. from London.*

- 8.15. THE RT. HON. STANLEY M. BRUCE. *M.P. S.B. from London.*
 9.30. NEWS. *S.B. from London.*

Request Programme.

- 9.30. ORCHESTRA. Overture, "Kilisevankio" by Carl F. C.
 10.0. HELEN CAMPBELL (Contralto). "Lullaby" (W. Sanderson). "Down Here" (M. H. Brooke).
 10.10. Orchestra. "In a Chinese Temple Garden" by Kriehby.
 10.17. ALEX. MCGREGOR (Baritone). "Up From Somewhere" (W. Sanderson). "The Laird o' Cockpen" (Tradition).
 10.27. Orchestra. "Chant Elegance" by Tchaikovsky.
 10.34. Helen Campbell. "Thank God for a Garden" (Teresa Dr. Price). "My Am Kind Dearie O" (J. Kenyon Lee).
 10.42. Alex. McGregor. "A Sergeant of the Line" (Square). "The Fluter's Ball" (French).
 10.50. Orchestra. "Les Sirenes" (Waldteufel), March. "Pro Patria" (A. Lottel).
 11.0. Special Announcements. Close down.
 11.30. Announcer Mungo M. Dewar.

WEDNESDAY.

- 3.30-4.30. An Hour of Melody.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 6.45. ELLA PROVAN (Elocutionist). "The Death of Sir John Moore at Corunna" (10th January, 1809—Battle of Corunna).
 7.0. NEWS. *S.B. from London.* ARTHUR HADDON. *S.B. from London.* Local News and Weather Forecast.
 7.30-11.0. The entire Programme *S.B. from London.*
 11.30. Announcer Mungo M. Dewar.

THURSDAY.

- 3.30-4.30. An Hour of Melody.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 7.0. NEWS. *S.B. from London.* PERY M. MOLES. *S.B. from London.* Radio Society Talk. *S.B. from London.* Local News and Weather Forecast.
 7.30. Programme. *S.B. from London.*
 8.35. ORCHESTRA. Overture, "Joan of Arc" by Verdi.
 8.45. ELLA DAVIDSON (Contralto). "Dear Little Town" (Sanderson). "Homing" (Teresa del Riego).
 8.55. Orchestra. Entr'acte, "Catinella" by Godard.
 9.0. Interval.
 9.30. NEWS. *S.B. from London.* Local News and Weather Forecast.
 9.45. CRUE DAVIDSON. "Mighty Lak a Rose" (F. N.). "Land of Hope and Glory" (Orchestral Accompaniment).
 10.55. Orchestra. Request Items. Selection, "Balletto" (Verdi). Entr'acte. "O Sole Mio" (Capua). Fox-trot. "Barney Google" (Howe and Conrad). March. "Mars" (Schubert).
 10.30. Special Announcements. Close down.
 11.0. Announcer Mungo M. Dewar.

FRIDAY

- 3.30-4.30. An Hour of Melody.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 7.0. NEWS. *S.B. from London.* G. A. ATKINSON. *S.B. from London.* Local News and Weather Forecast.
 7.30. CERVICAL STEEDS, B.A., in a Story Recital of "DAVID COPPERFIELD" (Dickens).
 8.0. Scene I. "David takes his first lesson of the law" by Mr. Mearns. Mrs. Mearns. David Copperfield.
 8.15. Scene II. "The Flight of Little Emly" by Mr. Mearns. Mrs. Mearns. David Copperfield.
 8.30. DANCE PROGRAMME. ORCHESTRA. Fox-trot, "Louisville Lou" by Fox-trot. "Queen of the Nile" by One-step. "Ob. Harold".
 9.0. THOMAS T. CULLEN (Hon. Secy. Glasgow Elementary Intermediate Schools Football and Athletic Association) on "Schools Football".
 9.10-11.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 9.45. "OTHELLO," Act III. *S.B. from London.* Announcer: Herbert A. Carruthers.

SATURDAY.

- 3.30-4.30. An Hour of Melody.
 5.0. A TALK TO WOMEN.
 5.30. THE CHILDREN'S CORNER.
 6.0. Weather Forecast for Farmers.
 7.0. NEWS. *S.B. from London.* Local News and Weather Forecast.
 7.15. ORCHESTRA. Overture, "Roumanian Festival" by Keler. D. A. ROBERT WATSON (Baritone). "The King Went Forth to War" (Koenigsmann). "Song of the Flea" (Moussorgsky).
 7.35. Orchestra. Selection, "Hail, Annie" by Fuchs.
 7.45. GEORGE HUTCHISON (Humorous Reader). "A Humorous Sermonette on Love" (N. Jackson). "Mrs. Duff Views the Procession" (Duff Rowntree).
 7.55. Orchestra. Serenade, "White Moon" by M. R. Robert Watson.
 8.0. "Sea Fever" (J. Ireland). "A Dider Courtship" (Eric Coates).
 8.10. Orchestra. Suite, "Sylvan Scenes" by Fletcher.
 8.25. George Hutchison. "A Burns' Night in Falklands" extract from the Glasgow Radio "The Football Enthusiast" (J. T. Stoddart).
 8.35. Orchestra. Waltz, "Love and the Wind" by Waldteufel. March, "David May Care" by Robert Watson.
 8.45. "The Love of the Leal" (Traditional). "The Wee Cooper o' Fyfe" (Traditional).
 9.30. NEWS. *S.B. from London.* Local News and Weather Forecast.
 9.45. Dance Music. *S.B. from London.*
 11.0. Close down.
 11.30. Announcer Mungo M. Dewar.

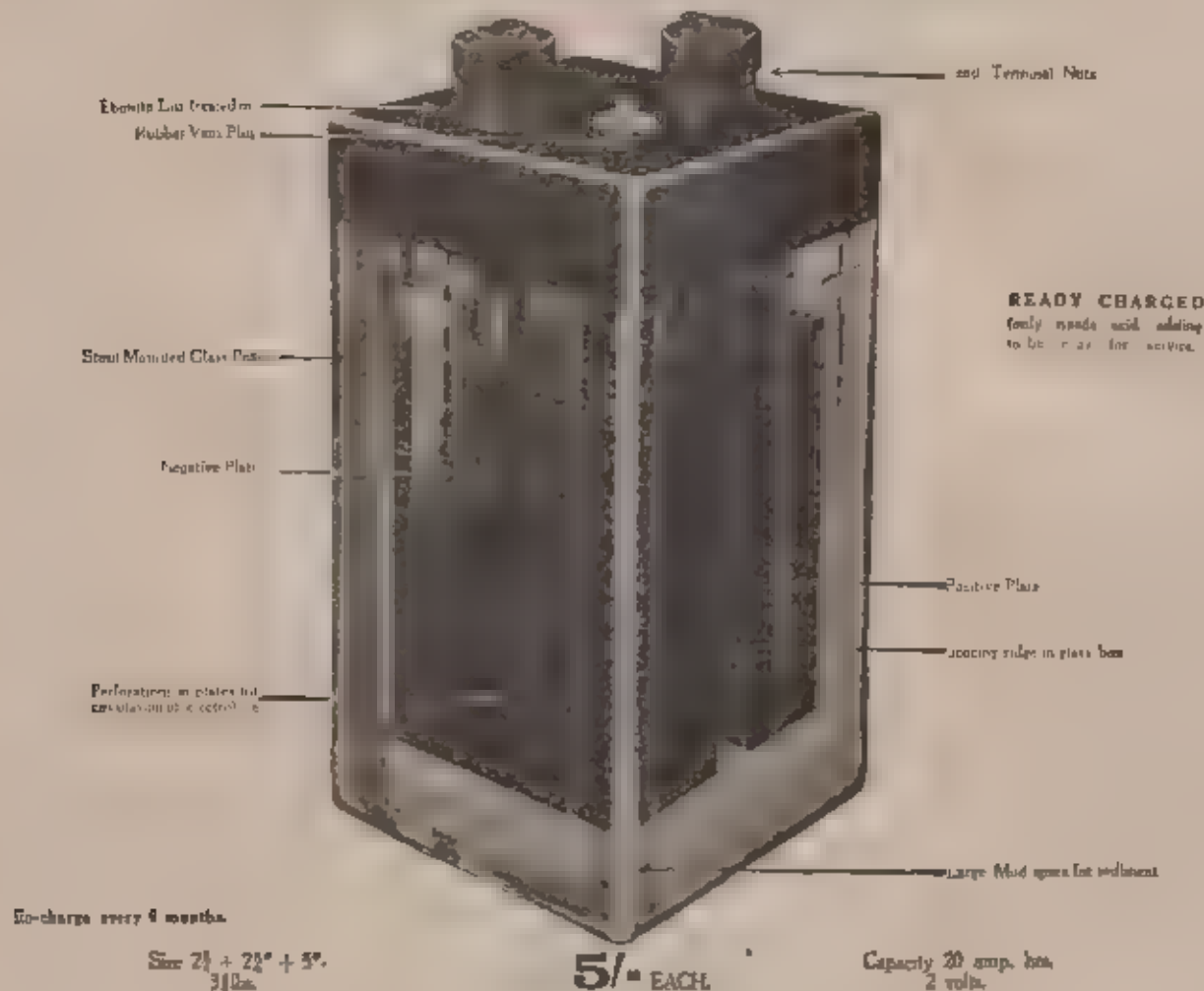
To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

Exide

The long life battery.

NEW TYPE D.T.G.

Specially designed as a substitute for Dry Batteries, Leclanché Cells, etc., Suitable for Wacovalve, "Peanut," Marconi Type D.E.3, B.T.H. Type B.5, and similar DULL EMITTER VALVES, also suitable for ELECTRIC CLOCKS, ELECTRIC BELLS, TELEPHONES, FIRE ALARMS, SIGNALLING CIRCUITS, ETC.



Order now from dealers or Exide Service agents.
Orders can only be executed in strict rotation.

CLIFTON JUNCTION, Nr. Manchester
LONDON 219-229, Shaftesbury Avenue

The Chloride ELECTRICAL STORAGE
COMPANY LIMITED

BIRMINGHAM: 57-58, Dale End.
MANCHESTER: 1, Bridge Street

USE CHLORIDE BATTERIES FOR HOUSE LIGHTING.

SUNDAY'S PROGRAMME.

(Continued from page 87)

NEWCASTLE.

- 8.10. LEONORA HOWE (Soprano)
Lead. by Mr. J. G. Allen. Baritone.
8.15. THE REV. GEORGE ALLEN, Rector.
Group Address.
9.0. Leonora Howe.
9.5. Mrs. M. M. FODSQUINTY.
10.1. Leonora Howe.
10.20. HERMANN MEJED (Solo Violon)
10.30. Hungarian Dance.
10.40. Leonora Howe.
10.50. Far Greater in His Lowly State.
11.0. JAMES GRIFFITHS (Solo Cello).
11.10. O Cara Memoria.
11.15. String Quartet.
11.20. Valse.
11.30. NEWS. S.B. from London.
Local News and Weather Forecast.
11.40. Close down.
Announcer: E. L. Odhams.

SATURDAY'S PROGRAMME.

(Continued from page 89)

NEWCASTLE.

- 8.10. Jazz Orchestra.
8.15. "Acclamation"; Valse.
8.20. "Three O'Clock in the Morning".
8.25. "Sweet Juliet".
8.30. "Fox Tail".
8.35. "Seven and Eleven".
8.40. "Wonderful One".
8.45. Interval.
8.50. NEWS. S.B. from London.
Local News and Weather Forecast.
8.55. Jazz Orchestra.
9.0. "Three Blind Mice".
9.05. "Valse".
9.10. "Jack Kelly".
9.15. "The Woman".
9.20. "Michael Kelly".
9.25. "A Plantation Holiday".
9.30. Close down.
Announcer: R. C. Pratt.

ABERDEEN PROGRAMME.

(Continued from page 103)

SATURDAY.

- 3.30-4.30.—The Aberdeen Wireless Quartette.
4.30.—WOMEN'S HALF HOUR.
4.30.—MUSICIAN'S HALF HOUR.
4.40.—Weather Forecast for Farmers.
4.45.—NEWS. S.B. from London.
Local News and Weather Forecast.
5.0.—Students' Night.
5.0.—Students' Songs and Choruses.
5.15.—Reproduction of a "Capping Ceremony" (By experienced "Raggers").
5.20.—More Students' Songs and Choruses. (If any forcing prevented after previous effort).
5.25.—Students' Orchestra again. (If put to the vote and carried).
5.30.—Remarks on being "Picked Up" by Two Who Know. (Carefully selected by the Selection Director before being submitted to the raggers).
5.35.—More Students' Songs and Choruses. (If any answer to the roll-call for this item).

Only with the...
vivors' Choir...
10.30. NEWS. S.B. from London.
11.0. NEWS and Weather Forecast.
11.10. Local Music. S.B. from London.
11.20. Close down.
Announcer: W. D. Smith.

EVENTS OF THE WEEK.

SUNDAY, JANUARY 13th.

LONDON. 12.0. Drama. Recital, relayed from the Kingsway Hall. S.B. to all Stations.
CARDIFF. 1.30. Dvorak Night.

Bournemouth. 1.30. "Elijah" Mendelssohn.
MONDAY JANUARY 14th.

LONDON. 7.30. Symphony Concert. S.B. to all Stations.

CARDIFF. 7.30. Band of H.M. Royal Air Force.

TUESDAY, JANUARY 15th.

LONDON. 7.30. An Evening of Plays produced by Mr. Nigel Playfair. S.B. to Glasgow.

CARDIFF. 7.30. "King John" (Shakespeare).

WEDNESDAY JANUARY 16th.

LONDON. 7.45. "Aida" (Verdi) relayed from The Opera House, Covent Garden. S.B. to all Stations.

FRIDAY, JANUARY 18th.

Bournemouth. 7.30. Third Symphony Concert.

Aberdeen. 7.30. Mozart Night.

LONDON. 8.45. "Otello" (Verdi) relayed from The Opera House, Covent Garden. S.B. to all Stations.

LONDON HEARD AT THE CAPE.

NEARLY every day news arrives of London wonders in long-distance wireless. The latest comes by a Reuter message from Cape Town which states that the London Broadcasting Station was picked up at Middleburg (Cape Province), the programme having been heard from 10.30 in the evening until 2.30 the next morning. It was later reported that Camps Bay, near Cape Town, had also picked up items from the London Station.

Up to the time of going to press, no official confirmation of this achievement had been received by the B.B.C., but there seems no reason whatever to doubt its veracity.

Results like this open up wonderful possibilities for the listener, and it is probable that in a very short time the entire civilized world will be his happy hunting ground.

The B.B.C. engineers are working hard with the idea of opening up new possibilities, and it is hoped that the Continent, and not merely Paris, will very soon be brought into constant touch with British listeners.

Developments during 1924 are certain to be of an amazing character, and everyone with a wireless set can congratulate himself that he has many almost undreamed-of treats in store.

THE PUBLISHER'S ANNOUNCEMENTS.

RATES OF SUBSCRIPTION to "The Radio Times" (including postage to any part of the world): Six MONTHS, 6s. 9d.; Twelve MONTHS, 12s. 6d.

Messrs. George Newman, Ltd., have now prepared a handsome case in red cloth with gilt lettering for "The Radio Times," complete with cord down the back to hold a copy of this publication. A pencil is indispensable to the listener during the course of the programme, and this is included conveniently in a slot at the side. Listeners should order this to-day from any Newsagent. It is published at 2s. 6d. or send 4d. extra to cover postage for a case from the Publisher, 8-11, Southampton Street, Strand, London, W.C.2.

Foreign Stations.

FRANCE.

Eiffel Tower, FL. Paris. 2,000 metres.
6.40 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, S.F.R. Paris. 1,780 metres.
12.30 to 2.0 p.m.; 4.30 to 6.0 p.m.; 8.30 to 10 p.m. (On Sundays and Thursdays Radio Dancing at 10 p.m. Close down at 10.45)

L'Ecole Supérieure des Postes et Télégraphes. 450 metres.

Sunday, 9.0 p.m.; Tuesday, 8.15 to 9.20 p.m.; Wednesday, 9.0 p.m.; Thursday, 9.0 p.m.; Friday, 9.0 p.m.; Saturday, 9.0 p.m.

SWITZERLAND.

Radio Station Marconi. T.S.F. Geneva. 1,100 metres.

Wireless transmissions daily (Sundays excepted), 1.15 to 1.30 p.m.

Lausanne. HBZ. 1,100 metres.
4 p.m. Tuesday, Thursday, Saturday; 7 p.m. Monday, Wednesday, Friday, Saturday.

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. WGV. Schenectady, N.Y. 380 metres.

Radio Corporation of America. WJZ. New York, N.Y. 455 metres.

John Wanamaker WOO. Philadelphia, Pa. 500 metres.

L. Bamberger and Co. WOR. Newark, N.J. 405 metres.

Post Dispatch. KSD. St. Louis, Mo. 515 metres.

Rensselaer Poly. Inst. WHAZ. Troy, N.Y. 380 metres.

THE CHIEF ENGINEER'S LECTURES.

CAPTAIN P. P. ECKERSLEY the Chief Engineer of the British Broadcasting Company, is to speak in Edinburgh on the 14th and 28th January, also the 11th and 18th February, 1924, in connection with a course of Eight Lectures to be given on Wireless at the Royal Scottish Society of Arts, 117 George Street, Edinburgh.

The subject chosen is the "Thermionic Valve and its Application to Broadcasting." The first two lectures will deal in a popular way with the principles of the valve, and the last two with the achievement of telephony by means of the thermionic valve and its application to broadcasting. The last lecture of all will be of a most popular nature.

Captain Eckersley will be taking some apparatus with him in order to do one or two simple experiments—though with no idea of demonstrating broadcasting. There will also be some lantern slides.

So many people to-day are using what is surely the most wonderful invention of the century, and have little knowledge of its fundamental principles, that it is felt these lectures, of a fairly popular character, should be of wide interest.

To ensure getting the "Radio Times" regularly, ask your newsagent to deliver your copy every Friday.

THE CHILDREN'S CORNER. CONDUCTED BY UNCLE CARACTACUS.

A Tale of Great Adventure.

HERE'S a story from another of those wonderful Glasgow tales. It's a tale of great adventure—but I don't know how it ends.

You heard about Soosie the cat from Annie's letter, and you may remember that on the other day from the Studio of another visitor that had arrived at "58" whose name was Jimmy. It turns out that Jimmy is an old friend and admirer of Soosie's.

He used to stand on the mantelpiece in the parlour in Anniesland when Soosie used to warm herself in the glow of the fire. Jimmy was a lanky chap with long legs and a long waist and a head that keeps on nudging above his shoulders. His face is cheery, something the colour of a strawberry ice-cream, with a fresh strawberry in each cheek to show it's a real strawberry, a nose with a funny turned-up point, and red hair that won't be down. He wears a large white collar, a little blue jacket reaching to his waist, and long nankeen trousers with white and blue stripes. The trousers are long, but Jimmy's legs are longer. They grew a bit lately and now his ankles and white socks stick out below them, showing the dinkiest pair of black patent leather shoes.

A Narrow Escape.

He is rather worried about his hat, for he has a cap which he sets tightly on his head to keep his hair down. He has got large, bright blue eyes that look out in wonder upon the world and seem to threaten to jump out of his head—but so far they have not jumped out yet.

He used to look down at Soosie and wish he could jump down and pat her and scratch her behind the ears, and under the chin, and listen to her grateful purr; but the mantelpiece was high and the floor was hard, and the fire was too near. One day Soosie, naughty puss, climbed on to the mantelpiece, went up to Jimmy, and kissed him! Oh! how he jumped! It was nearly the end of him, for he just escaped tumbling off the shelf on to the hearth, where he certainly would have been broken into small pieces and perhaps roasted above.

Then Soosie disappeared and poor Jimmy was lonely and sad. The first day he comforted himself. He said she had taken a holiday and had gone to the seaside, but she would be back to-morrow, but when day after day passed and no Soosie came, he grew sadder and sadder and lonelier and lonelier. He was a brave little man, though, and he looked as cheery and bright and dapper as ever.

In Search of the Studio.

At last, one day he heard that Soosie was at the Studio. Poor Jimmy didn't know where the Studio was, or what they did there, but to the Studio he resolved to go.

The next morning, when the maid was dusting the parlour, she lifted Jimmy down, and set him on the floor. What a chance. He watched her till she was busy with the clock, then he slipped out at the door, unnoticed. Quickly he made his way through the hall. The front door was open and the milk girl was standing there with the morning's milk-can. She got such a fright when she saw Jimmy making

towards her that she dropped the milk-can and the milk splashed all over Jimmy and his nice clothes, but Jimmy didn't mind. He was too excited at escaping from the parlour and going off in search of the Studio.

When he was going down the stairs he nearly fell and broke his neck, but never stopping he slipped along to the corner of the front garden, where he slipped into a garden, where he slipped under a begonia leaf and rested till his poor little heart ceased to beat so quickly and he began to breathe.

Now Jimmy knew very little about the world outside the parlour where he stood so long on the mantelpiece.

He had from his post there looked out of his window and seen the people and the tram-cars and the motor-cars passing, but he had never been out before, and it was new to him, and the noise and bustle was very terrifying, so that he was glad to be under the begonia leaf and gather his thoughts and make up his mind what to do next.

He soon recovered, and wiped the dew from



The Kitten on the Keys.

the leaf, and freshened himself up. He had to find Soosie, and he mustn't lose time. It wasn't possible to see much from the begonia, and he looked round for some better position for himself.

There was a rose growing near, and he thought that if he could clamber up the stems, he would see about him and make up his mind what to do next. With Jimmy, to plan was to act, and he strode to the rose and commenced to climb.

Remember, Jimmy was very small—much smaller than the smallest of your kiddies—smaller even than your baby brother or sister. He was active, though, and a real sport, and hard though it was, he climbed up with his hands and knees till he reached a branch quite two feet from the ground. There he paused for breath and looked around.

He saw a trim garden surrounded on three sides by a low wall and railing. A path led from the front of the garden to the door of what seemed to Jimmy a very fine large house. It wasn't really large, but it was a bright cheery little house, with Highland Pride growing up the wall by the side of the door as high as the window above.

The morning sun struck the window panes and they threw back the glad rays as if they too, wanted to do their part in making the day and the poor old world bright and happy. A tidy little maid, dressed in a nice clean print was at the door, polishing up the brass plate on the door, and the Old Sun rejoiced to see his bright face reflected in the polished brass.

The dew still sparkled on the flowered grass, and Jimmy thought "What a lovely place! what a jolly world!"

Jimmy's eyes had been wandering all about the garden and the house, and now they came back to the rose bush where he sat, and there, just above him, he saw hanging a lovely rose, with dark crimson petals, soft and deep like velvet.

A Terrible Night.

Everything was so beautiful that poor Jimmy's heart was nearly bursting. He had neither seen nor dreamed of anything like it in the parlour at Anniesland—pleasant though that had been—and his poor little soul seemed all at once to have become too big for his body. What might have happened to him I don't know, if a noisy little Airedale terrier hadn't just then bounded out at the door, barking and frolicking about for sheer delight, pulling at the man's skirt, and then dashing off in pursuit of some imaginary rabbit round the garden. He looked so fierce and barked so loudly that poor Jimmy was quite frightened, and dashed up the bush to the beautiful rose that seemed so undesired by the Airedale's excitement.

Presently, the dog saw a friend on the other side of the street, and with a joyful bark, scampered off to have a talk with him, and wish him "Good morning," and Jimmy felt safe again.

Then he heard a faint sound, and he went to a window and looked out.

A woman came down on him. She waved her hand to him, and Jimmy drew out his pocket-handkerchief and waved back. He always carried a pocket-handkerchief with the corner just showing above, out of the breast pocket of his jacket.

Tommy and Peggy.

The girl asked "Come, Tommy, see this funny old man in the rose-bush," and a little boy's head appeared at the window, and he, too, shouted to Jimmy and asked him to come in and have breakfast.

Jimmy slid down the rose bush, and though the thorns scratched him, he didn't mind that—in fact, he didn't think anything about it till long afterwards, when the sting had almost gone, in such a hurry was he to reach the two friends. He peeped at the windows. He raced to the house, climbed up the Highland Pride till he got close to the window, and then, just as he thought he had reached it, the stem he was swinging down with his weight, and he would certainly have fallen on top of the little maid, who was still busy with her polishing, had not Tommy stretched out his arm and caught him, just as his fingers were slipping. Tommy lifted him up, and the little girl, whose name was Peggy, took him in her lap, and mothered him and kissed him, and asked him if he was a fairy who had lost his way, and Jimmy looked up at her and smiled and went to sleep.

UNCLE ALEX

But the doesn't tell us how Jimmy found Soosie—does it? I expect Uncle Alex will tell you that next week.

CARACTACUS.

(Continued on the facing page.)

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

THE ADVENTURES OF SABO.

By E. W. Lewis.

but the morning was wet: so she took from the cupboard a cardboard box filled with coloured wool and sat down with it in the middle of the floor.

There was enough black wool to make a whole family of golliwogs, and before the day Isobel had made one—not a family, but the first and most living member of it. He had a black body and a brown face, eyes of blue and a red mouth, and, with the help of a pair of scissors, Isobel gave him black hair, crisp and frizzy, all over his head.

When she had pushed him she
she up and caught him in her hands. He
as a feather and she called him Sam.

14 And as he read, and he came into the
Mead, while a strong wind had broken up the
heavy clouds and driven them off the field
the sky, Isaac looked up and saw that it was
the day of the Lord.

... took chest in the hall, went off to play soon after she had gone, a lively guest of

Loose papers were flying about in all directions. The glass pendants on the chandelier rattled like little bells. And Sabu was blown about like a leaf in a storm.

Having created this disturbance, the wind
 played through the leaves and branches
 as if he had been awake out of sleep.
 He found his voice and saw the
 light and the sun and the moon
 and the stars and the clouds
 and the rain and the snow
 and the wind and the fire
 and the earth and the sky
 and the world and the universe
 and the God who made them.

2.4.11.1. *Agaricus bisporus* (L.) Berk. (button mushroom)

stone terraces and flower-beds in full bloom, strange and new to Sabo, but very beautiful, he began to feel a real attraction to the place. He began at once to explore

What fun it was! Once he got lost in the flowery jungle of the herbaceous border; and as he pushed his head up through a clump of crimson snapdragon in order to see where he



“ Oh, my precious ” she cried. “ There
you are ! ”

was, a bee, mistaking him, no doubt, for a
flower and alighting upon his nose, as was
a Turkish proverb.

by a tall hedge, with a sly puff of air, as if
 for a long moment he were dead
 as he was in a gray puff of wind, which
 had got somehow inside the hedge and was
 leaping out not near, blew him off the stump.

at the round head of a water lily.

[illegible]

Q. Did you find him anywhere?

She rescued me from the raft. You just have drowned yourself," she said.

[illegible]

Pen-wiper! Sabo did not like the name. He pulled himself, and when somebody tried

but a thread of wool into the tub and applied it

So it did. For nobody afterwards used him.

... a pen-wiper—to his great ...
... to the rack of an ornament, and his

Another "U.S. School" Story Next Week!

(Another "Saba" Story Next Week)

**NOW ON SALE
AT ALL BOOKSTALLS**

PITMAN'S

RADIO YEAR BOOK

The HANDY BOOK for all who "Listen in."

THE 1924 YEAR BOOK IS ENORMOUS VALUE

Following selection from the contents will show

Post Office Broadcasting Conditions—Licenses for Wireless Reception—Broadcasting: A Landmark in Radio Progress—The Wireless Societies—The Wireless Association—The Reception of Wireless Broadcast—List of Broadcasting Stations—List of Amateur Radio Stations—Tune Signalling from Stations—The B.B.C.—A Line of Experiment—Some Wireless Problems: The Inventor's Guide—International Morse Code—One-Hundred-and-One Radio Novels—Buy or Sell?—Loose Coupling—Common Detectors—Various Diodes—Various Antennae—Trade in Receivers—Continuum—Measure Resistance Value—Antenna Tune to Detect and Remedy—How to Start an Amateur Transmitting Station—Some Needed Wireless Inventions—Weather Chart—Close.

Contributors include Alan A. Campbell Swanton, Esq., F.R.S., M.I.E.E.; Philip Courtney, Esq., B.Sc.; Capt. P. P. Eckersley, Prof. J. A. Fleming, M.A., D.Sc., F.R.S.; Prof. G. W. O. Howe, D.Sc., M.I.E.E.; Leslie McMichael, Esq., M.I. Rad. E.; J. C. W. Reith, Esq., General Manager of the B.B.C.; James Swinburne, Esq., F.R.S.

The Magazine and Bookletter's Review says: "Pitman's Radio Year Book is selling like the proverbial hot cakes."

Last Year's Radio Year Book had to be reprinted three times before all demands were satisfied.

GET YOUR COPY NOW at your usual bookstore or send for particulars post free to

PITMAN'S, Parker Street, Kingsway, LONDON, W.C.2.

Prize

1/6

net

Clarnico CHOCOLATE LILY BRAZILS



SAFETY FIRST!

Protect your Wireless Set with

ROBINS' Combination Lightning Arrester and Leading-in Tube.

Provisionally protected by U.S. Patent No. 1,540,000. It is the only lightning arrester which can be used without a fuse.

PRICE 3/6

Postage 3d. extra

To be had from any of the leading wireless dealers from the following firms:

Robins Electrical & Wireless Depot & Institute, Ltd.

Cardiff

Robins Electrical & Wireless Depot & Institute, Ltd.

Cardiff

CARDIFF

EARN £3 A WEEK AT HOME.



This is what Mrs. Baldy, of Bedford, says:

"I have been able to earn £3 a week at home by doing the work of a typewriter. I have no capital and no experience. I have only a few shillings and a few hours of my spare time. I have been able to do this work for several months now and I have been able to keep it up. I have been able to do this work for several months now and I have been able to keep it up."

FREE BOOK.

SEND FOR IT TO ALL PERSONS who are interested in earning money at home.

SOUTH BRITISH MFG. CO., Dept. 356, 91, CLERKENWELL ROAD, LONDON, E.C.1.

ALL GOODS ADVERTISED IN THIS PAPER CAN be obtained from

YOUNG'S

GLASGOW, LTD.

41, Stockwell St., Glasgow

Established 1884

Telephone 1000

Telex 1000

FINEST QUALITY

ENGRAVING

WE CAN ENGRAVE ANY DESIGN IN AN ART OR ORNAMENTAL MANNER. ANY LARGER QUANTITIES YOU MAY REQUIRE. PROMPT DELIVERY.

F. OSBORNE & CO., 28 EASTCASTLE ST., OXFORD ST., LONDON, W.1



Collecting is one of the few hobbies that can be enjoyed whilst listening to

S.O.S.

To Collectors: I am breaking up a valuable private collection, 35,000 varieties, rich in rarities, and shall be pleased to send an approval sheet from any country. Want lists have my personal attention.

HILLIER, "Stamp Club," Horsmonden.

Parla l'italiano

Hable Ud español?

Parlez vous français?

"Babel Tower calling!"

Sprechen Sie deutsch?

Worzu kommt es denn, wenn?

ALL

LANGUAGES

are spoken at

BERLITZ

The BERLITZ SCHOOLS teach

French, Spanish, Italian, English, German, Portuguese, Russian, Polish, Swedish, Norwegian, Danish, Dutch, Hungarian, Bohemian, Rumanian, Greek, Turkish, Arabic, Hebrew, Japanese, Chinese, Hindustani, etc., etc.

For 45 years the BERLITZ SCHOOLS have taught Languages all over the world with conspicuously increasing success. No other method has attained results comparable to those achieved by the BERLITZ METHOD as taught in the BERLITZ SCHOOLS.

For superiority of their method, the BERLITZ SCHOOLS have gained the highest awards at various International Exhibitions.

Ask for Prospectus "R."

LONDON 37, Oxford St.
A Kensington Rd. S. Kensington.
2 Queen's Road. Citywater

BIRMINGHAM 22, Paradise St.
LIVERPOOL May Buildings,
Lord Street.

MANCHESTER 41, Oxford St.
BRADFORD Fanny Bank
Buildings.

NEWCASTLE Barras Bridge
GLASGOW 152, Southside St.
EDINBURGH 100, Princes St.

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 dear old lady came to listen the other evening. Directly she put on the headphones her message came through: "ZY callin' Good gracious!" she exclaimed. "Wireless! marvelous! Fancy two dead wives calling!"—G. T. WATSON, Manchester.

One evening some friends came to listen and I happened to say that we were having another new wave lunch very shortly.

"Dear, dear," cried one of my friends, "do the old ones keep breaking?"—E. T. OGDON, Woking.

A friend of mine, having recently purchased a wireless set, was listening the other evening when a whistling part came in during an orchestral selection.

He jumped up in a great rage and rushed out of the house. On his return, his wife asked him what the matter was.

"Matter!" he shouted. "Why, those wireless boys are not satisfied with the music they hear from their sets in the room, so they started whistling!"—E. J. HARRIS, Barking.

There was a wireless on the mantelpiece in the street the other day. It was a very small one, and it was projecting above a chimney-pot.

"Look," said one, "there's a funny kind of aerial."

"At sea?" cried another.

"On land," he said, "disastrously. It's at sea, clearing the channel, so let the wireless be in better!"—C. J. ALLIER, Bournemouth.

One evening recently I was astonished to find that my loud speaker rendered such distortion that I assumed something had gone wrong with the set.

I was mentioning the trouble to my wife when my little son, aged three and a half years, came in and, pointing to the loud speaker, said:

"Dad, will you get my marbles out of there? I put them in for Uncle Caractacus to play with!"—L. HART, London W.

When erecting my aerial I tried to get one nearly fifty feet high. The first attempt to put it up failed, and it was smashed.

One of my employees, when he heard of this, said: "I know something was going to happen, so I kept away from it. Heaven won't allow it!"—E. J. HARRIS, Barking.

On one occasion, I was listening and my dog, "Bulldog," happened to enter the room. For a joke, I put the phones to her ears and was astonished when she suddenly started whining and wagging her tail in evident delight.

Taking over the phones myself I discovered that Mr. Norman Long was singing "I'm a free blow no blunder."

My dog had recognized her own name, but what a remarkable coincidence!—A. S. S. S. S.

Other People's Opinions.

THE PERFECT WIRELESS PROGRAMME.

THE crystal set, now so popular, will in the next few years pass entirely. It has served its purpose by making listening possible for people of very limited means; but in future the price of all wireless apparatus will come down. Then the valve, or the development of the valve principle, will take its place and reign.

With perfected apparatus, television and a wide range of entertainments to choose from the perfect wireless programme will be no more a scientific dream, but a reality. That day is not so far distant as many people think. I, for one, believe it is quite near.—PETERSON, A. M. Low in the *South Wales Echo*.

WATCH YOUR SET

THE longer you wait the more you will find out about your set. As long as they do not use reaction, the sets cannot oscillate. Let me disabuse them at once. Almost any set containing a tuned anode or a tuned high-frequency transformer will oscillate quite readily without any reaction at all. And do not make a second mistake which is to imagine that you are not causing interference unless you can actually hear squeals or howls in your receivers as you move the controls. Howling is a sign of terrific oscillation.

Re-tuning had enough to cause serious interference can occur long before this stage is reached. I have mentioned several times before the only reliable test for oscillation. This is to tap your aerial terminal with a wet finger. If the set is re-radiating there will be a sharp click in the telephone every time the finger touches the terminal. Should this occur, you may be perfectly certain that you are making other people's reception "noisy" and that

your own is to some extent distorted. It cannot have perfect reception of telephone when any oscillation is present.—*Intercontinental*.

TESTING THE LOUD-SPEAKER

WHEN working with a loud-speaker, experienced persons frequently get a wrong idea of the quality of the reproduction by remaining too close to the instrument. It is a good plan to go into another room of a house and to listen carefully to what is being sent from a loud-speaker. At a short distance will be found that the ear is far more critical and will, in the case of distortion, often find it difficult to pick up the words, whereas when in the room where the loud-speaker is situated it is far easier to understand what is being said. Clear speech, however, should be easily discernible even at a considerable distance from the loud-speaker.—*For the Listener*.

ARE WIRELESS WAVES MATERIAL?

HITHERTO, wireless waves have generally been regarded by scientists throughout the world as waves in the universal medium called ether, but having no material existence. Now, however, some prominent American scientists have put forward the theory that wireless waves are just as material as the waves of the sea, and can be weighed theoretically, like other infinitely small quantities of matter such as the atom.

This new material theory of wireless energy is based, curiously enough, upon what may be described as a revised edition of the old corpuscular theory of light, which was first put forward by the Greek scientist Pythagoras about 520 B.C.—*Popular Wireless*.

EXPERIENCE



The best all-round set in Britain. More trans-Atlantic Telephony has been heard on this than on any other on the market.

4-VALVE SET AS ILLUSTRATED,
WAVE-LENGTH RANGE 300-4,000 metres.

This set will give exactly the same results as the famous Lyrian Cabinets.

Price - - - £26 10 0.
B.B.C. Tax - - - £1 5 0

Our new 50-page Catalogue free on request

RADIO INSTRUMENTS, Ltd.

WIRELESS OFFICES & SHOWROOMS
12, HYDE ST., NEW OXFORD ST., W.C.1

LISTEN IN AND LEARN TO SPEAK FRENCH

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

Perfectly Simple. Wonderfully Fascinating.
Entertainment and Instruction Combined.

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

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

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

Even if you are already at present with a teacher, or by your own efforts, the Linguaphone Language Records will help you undoubtedly especially to think in French, to speak in French, and to understand French.

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

German, Spanish and Italian. Write for special information if these are required. Write for full particulars.

THE LINGUAPHONE INSTITUTE,
34 & 35, High Holborn, London, W.C.1,
ENGLAND.

Demonstrators Required.

*Make a point of going to the Opera
at Covent Garden
if you can't get in there*



Hear it at home on an Ethophone

By using an Ethophone V.R. you can get the same effect as if you were sitting in the stalls of the theatre and hearing the great voices of the opera singers.

The opera season opens on January 7th to six weeks of every day at Covent Garden. It is a pity that you cannot go to the opera every day.

The Ethophone V.R. is a very simple and easy to use. It is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

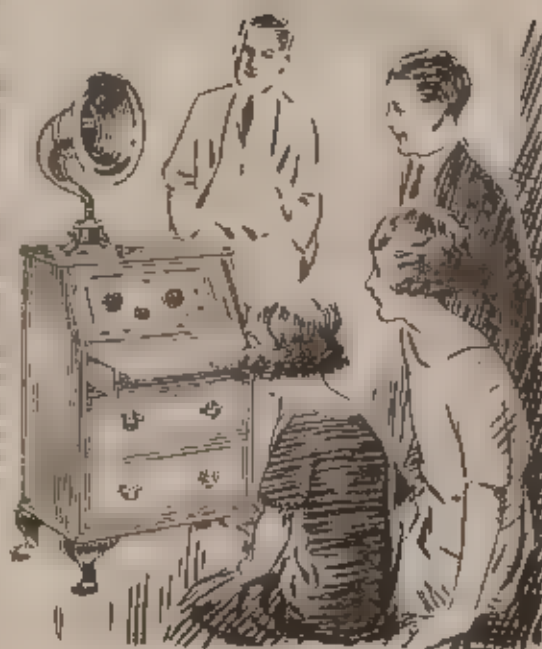
257:10:0

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable.

The Ethophone V.R. is a very good and reliable. It is a very good and reliable. It is a very good and reliable.



BURNDEPT LTD.

Head Office: Aldine House,
Bedford Street, Strand, W.C.2.

New Telephone No.
Phone Gerrard 9072.

Leeds
Newcastle
Cardiff
Northampton

BURNDEPT

RADIOBRIX



The latest type of Receiving Set—

"Cosmos" **RADIOBRIX** are made by the manufacturers of the well-known "COSMOS" RADIOPHONES.

"Cosmos" **RADIOBRIX** comprise a comprehensive range of units by various combinations of which the radio experimenter or amateur can build up any type of receiving set or circuit.

"Cosmos" **RADIOBRIX** have been designed to secure the utmost flexibility. They enable the "listener" to build up his set gradually as his means allow, yet the bricks obtained at first never become useless but can be utilized as part of a more elaborate set.

"Cosmos" **RADIOBRIX** are thoroughly well made and moderate in price.

Ask your regular Wireless dealer to show you "Cosmos" **RADIOBRIX**. If he has not yet obtained his stock, write, sending his name to the manufacturers:—

METROPOLITAN Vickers

ELECTRICAL

CO. LTD

TRAFFORD PARK

MANCHESTER



The above illustration and diagram shows a three valve set made up with **RADIOBRIX**. Get a copy of the new book, **BUILDING WITH RADIOBRIX**, full of useful circuits with theoretical and wiring diagrams, obtainable everywhere, 1/- or post free 1/5.

BUILD YOUR RADIO SET WITH R.A.D.I.O.B.R.I.X.



Would you run on three cylinders only?

TO let your Car run on three cylinders only when it should use four would be the height of folly.

But to use Valves in your Set which may use only three-quarters of the electron emission given off by the glowing filament is just as unwise.

Remember that every Valve depends for its efficiency upon the use of the electrons which travel from the filament to the Grid and the Anode.

In a Valve using an ordinary tubular Anode a portion of the electron stream from each end of the filament leaks out, and does no useful work.

But see what happens in the Cossor. Here we have an arched filament glowing inside a hood-shaped Grid and Anode.

The filament is so hidden as to be almost invisible. The electrons travelling from the filament strike first the Grid, then the Anode—practically none can escape to the sides of the glass.

The result is a Valve of very high efficiency.

It is a noteworthy fact that the consistent performance of the Cossor at demonstrations held by various Wireless Societies has been most favourably commented upon. If such discriminating users as experimenters of several years' standing select these Valves to the exclusion of all others, why shouldn't you benefit by their experience?

Types:
P 1 Detector and
Note Magnifier

P 2 (Red Top)
High Frequency

12/6 each

"Wincell"

The Improved
Dial Emitter
working at less
than one volt - 30/-
From all Dealers.

COSSOR VALVE CO., Ltd., Highbury Grove, N.5.

Senatore G. MARCONI

G.C.V.O., LL.D., D.Sc.

has written an interesting
article in

The Wireless 1924 Annual

for Amateurs &
Experimenters.

Full to overflowing with valuable information, the Annual includes amongst other things Dr W. J. Eccles, Sir William Noble, Philip R. Coates, Major H. C. Barker, Captain P. F. Barker, W. C. Mansel, etc. In addition the Annual provides you with a full, up-to-date list of Amateur Call Signs, including French stations, Regular Listening lists, of European Wireless Stations, Call Signs of all Land and Aircraft Stations, Directories of Wireless Societies, Manufacturers and Retailers of sets and accessories, Definitions of Technical Terms in five languages, a host of useful tables and other general information.

2/6

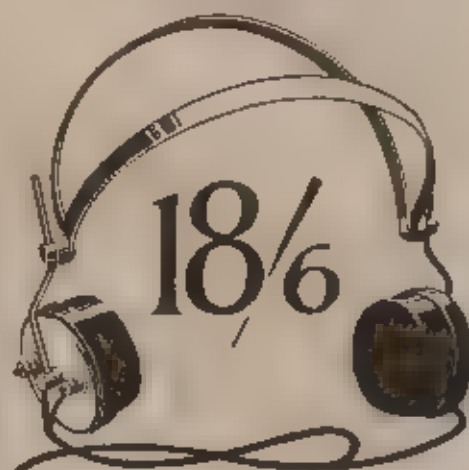
Postage in

GET YOUR COPY TO-DAY.

THE WIRELESS PRESS, Ltd.,

Dept. B.T.

12-13, Henrietta St., London, W.C.2.



THE NEW FELLOWS LIGHTWEIGHT PHONES

These headphones are of an extremely comfortable design. With the special springs of adjustment, the ear-cups may be tilted up or down and pivoted in any position to suit the user. The use of the special 'Fellows' design of ear-cups in these headphones, which are very light and comfortable, makes them very suitable for use in the car, or for use in the home.

Price 18/6 each, including postage.
London, S.W. 1

FELLOWS



Western Electric

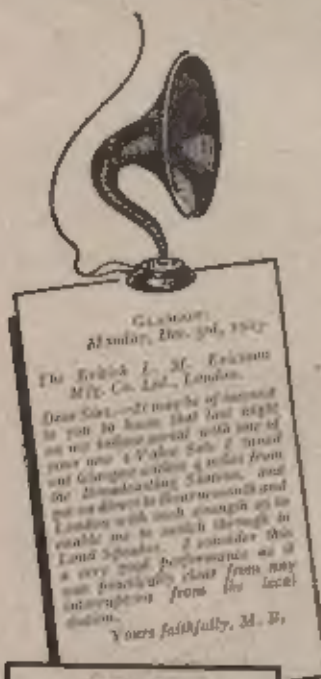
LOUD SPEAKERS

MAKERS OF OVER HALF THE WORLD'S TELEPHONES

BUY BRITISH GOODS ONLY



**How one
Listener
cuts out Local
Broadcast**



Selling Depots:
MANCHESTER: 20, Bridge Street,
Deansgate. BIRMINGHAM: W. J.
Pace & Co., Traffic Street. BIRMINGHAM:
HAB 14-15, Stone Hill. COVENTRY:
221, High Street. GLoucester: W.
H. Smith & Son, 51, Newmarket Street,
Gloucester. N. K. ENGLAND: Birkham
Rd., Runcorn-on-Tyne.

ARE you a "local listener"—tied down to one station by powerful local broadcast?

If so, the experience of the writer of the accompanying letter suggests a way out for you.

The striking success of this listener is due to the incorporation in Ericsson Multivalve Receivers of the utmost reactance permitted by regulations aided by highly selective loose-coupled circuits.

Nothing is spared or scamped in Ericsson Multivalve Receivers. Every detail is perfect—transformers, condensers, wiring, woodwork, etc.

Write us to-day, stating your needs. Ask for our splendid lists or apply to your nearest Ericsson Agent.

**The British L.M. Ericsson
Mfg. Co., Ltd.,
INTERNATIONAL BUILDINGS,
KINGSWAY, W.C.2.**

Ericsson
VALVE
RECEIVERS

A.J.S.

TWO, THREE & FOUR-VALVE RECEIVING SETS.

The above initials
are known
throughout the world
for

EFFICIENCY and RELIABILITY

A.J.S. Wireless Sets incorporate the Latest in Reaction Circuits and are unsurpassed for Selectivity, Purity of Tone, Volume and Workmanship.

Complete Sets consist of Panel, as illustrated, Valves, Head Phones, High and Low Tension Batteries, Aerial Wire, Insulators, Lead-in Tube, etc.

Patents and further particulars will be furnished on request.

**A. J. STEVENS & CO.
(1914) LTD.,
WOLVERHAMPTON.**

PRICES.

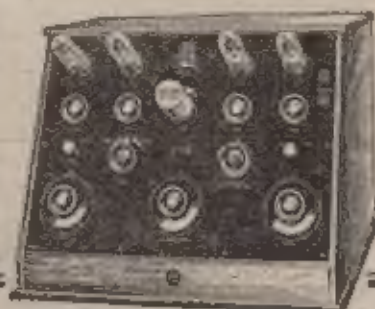
PANELS ONLY.

Two-Valve Panel ... £11: 7: 6
Three-Valve Panel ... £15: 5: 0
Four-Valve Panel ... £19: 10: 0

COMPLETE SETS.

Two-Valve Set ... £17: 10: 0
Three-Valve Set ... £22: 5: 0
Four-Valve Set ... £27: 5: 0

*The above prices include
Marconi and B.B.C. Fees.*



FELLOPHONE SUPER 2.



Mounted in a well-finished mahogany case, it comprises 1 H.F. Valve and 1 detector. This instrument permits the fullest reaction allowed by the P.M.C., and will give excellent results on all the British Broadcasting Stations.

PRICE £9: 0: 0

Plus R.B.C. Tax, 15: 0. Marconi Tax, 5: 5: 0. 2 Valves 15: 5 each. Complete with H.T. battery, Accumulator, 100 ft. 7/11 stranded copper aerial, 2 insulators, 1 pair 4,000 ohms headphones.

FELLOWS

Made at the Fellows Magneto Co., Willesden, N.W.10. (T.D.S. 25.)



Perfection was never achieved in a day, neither was the Polarphone conceived and built overnight. Both will bear the test of minute and careful scrutiny, and to those who seek to enjoy the qualities and benefits of perfection as applied to modern radio reception, there is but one manner of procedure—to install the

Polarphone

"Science's last word — Society's first choice."

The well-known Polarphone 7-valve set in sloping case (as illustrated here), is one of many beautiful models all of which are guaranteed instruments, and which will "give everything that wireless can give."

An exclusive feature of this type is its simplicity in tuning, resultant from the direct-reading wave scale provided.

Other noteworthy features are included in the specifications given in the Polarphone Booklet, necessary to all about to install wireless, and FREE to all who write.

RADIO COMMUNICATION Co. Ltd.,

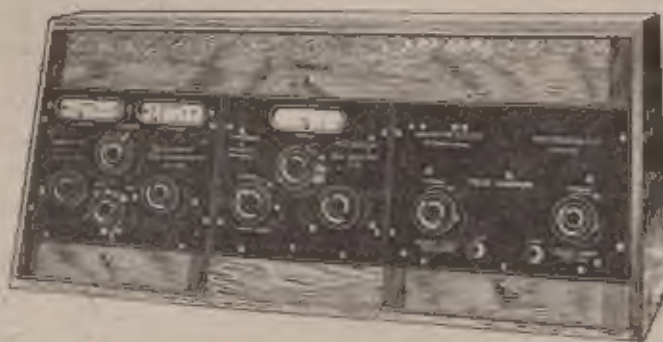
34-35, NORFOLK ST., STRAND, LONDON, W.C.2.

Telephone: Central 8480 (3 lines).

Telegram: Radiocom-Esland, London.

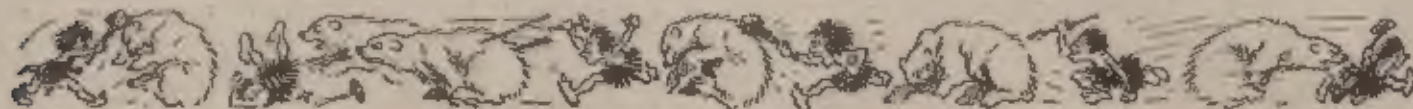
Newton Discovers Gravity.

Now Isaac was no dud
Things to him were clear as mud,
But the force that got his goat was gravitation,
Till a piece of famous fruit,
Caused a rift in Isaac's life—
And put the lid on Willie's wireless station.



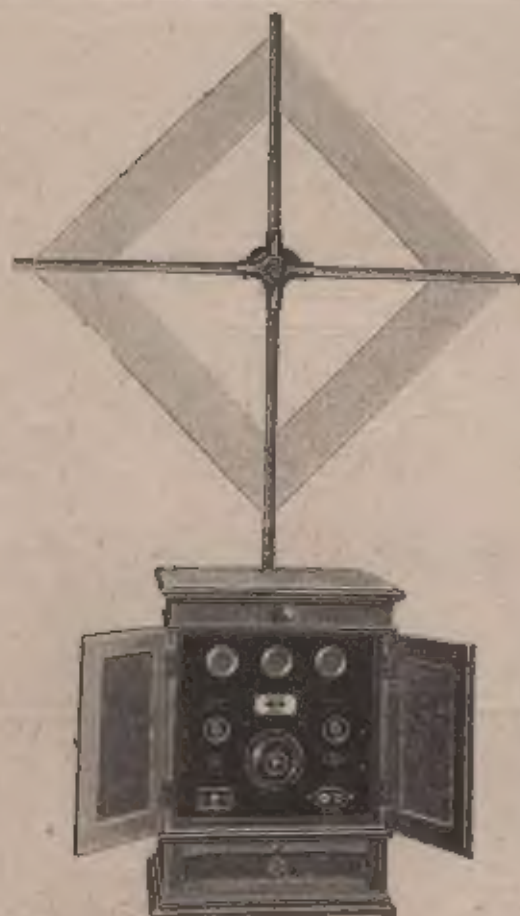
Polarphone Seven-Valve Receiving Set.
(Type R.A. 33-34-35).

Price £48 : 0 : 0
Plus B.B.C. Tax 2 : 0 : 0.



Copyright

Fleet Ad. Co.



STERLING

Threeflex Radio Receiving Set

The Ultimate in Radio Reception.

Gives good Loud Speaker results within 25 miles of a Broadcasting Station.

Wholly British Manufacture.

Write for Publication No. 382.

**This set receives
all British Broadcasting
on a Loop**

**IT REQUIRES
NO AERIAL, EARTH
OR ACCUMULATOR**

AN entirely self-contained super reflex set which will reproduce Radio music and speech with remarkable clarity. It is tuned with a single control and may be erected anywhere, ready to receive in a few seconds.

The loop is collapsible and occupies very little space when the instrument is not in use. Should the valves be left burning inadvertently, they will be automatically put out of action when the cabinet doors are closed.

The set employs the new D.E.3 wonder valves, the most economical, efficient and sensitive of any. They operate from dry batteries contained in the base of the cabinet.

Complete in highly finished walnut cabinet with loop, one pair of "Sterling" super quality head phones, high and low tension dry batteries, and plug and lead for a loud speaker.

PRICE £31 : 10 : 0

EXTRAS:—Three D.E.3 Valves @ 30/- each **£ 4 : 10 : 0**

B.B.C. Tariff 16/- extra, net.

Obtainable from all Electrical Dealers and Stores.

STERLING TELEPHONE & ELECTRIC CO., LTD.,

Manufacturers of Telephones & Radio Apparatus, etc.

TELEPHONE HOUSE, 210-212, TOTTENHAM COURT RD., LONDON, W.2.

Telegrams: "Cucurbs, Wendo, London."

Telephone: Museum (14) 17 Huns.

BIRMINGHAM:
29, Edmund St.

CARDIFF:
10, Park Place.

GLASGOW:
33, Robertson St.

MANCHESTER:
24, St. Peter's Sq.

NEWCASTLE-ON-TYNE:
22, Mosley St.

Works: DAGENHAM, ESSEX.