

# The Broadcaster & Wireless Retailer

Incorporating The RADIO TRADE REVIEW

LARGEST  
AUDITED  
NET SALE

PART-EXCHANGE  
RESALE  
PRICE LIST

No. 329. Vol. XXVI. SATURDAY, FEBRUARY 9

Circulated weekly to the Radio, Music, & Gramophone Industries at 10/6 per annum

# PROFIT



in

## BATTERY CHARGING

A question which largely governs your choice of a new battery charging equipment, is undoubtedly that of the profits to be made. BUT... when considering this point, it is important also to take into account that portion of your profits which must be spent on maintenance, replacements and current consumption.

Model "X" may charge as many batteries as, and yet the initial cost be cheaper than, the Westinghouse Metal Rectifier Charging Set under comparison. But, the Westinghouse plant requires neither attention, nor maintenance, nor are rectifier renewals necessary. The sole cost on your profits is, therefore, that of current consumption: and as this is always in direct proportion to the number of batteries on load, it is as low as possible. Bear this point in mind . . . .

Write to Dept.  
"B" for a copy  
of "At the  
Correct Rate."

 **WESTINGHOUSE** 

### BATTERY CHARGERS For Maximum Profit

The Westinghouse Brake & Saxby Signal Co., Ltd., 82, York Rd., King's Cross, London, N.1

The **NEW**  
**COSSOR**  
**UNIVERSAL**  
**RECEIVER**  
 for D.C. or A.C. MAINS

This new Receiver incorporates all those up-to-date features which are associated with the name Cossor, including the famous "Super-Ferrodyne" developments. Capable of really outstanding performance when working off either D.C. or A.C.—it is the complete answer to your customers who are "waiting until we go over to A.C." or "might be moving to another district." Now meet them—with Cossor efficiency—here's **more** business for you.

**A BRIEF SPECIFICATION.** Cossor Universal Receiver, complete with 4 Cossor Valves: Var.-mu H.F. Screened Pen., H.F. Pen. Det., Super-Power Output and Indirectly-heated Rect. Super-selective Iron-cored coils. Single knob dual-pointer tuning, full-vision scale in wavelengths, illuminated according to waveband in use. Combined "on-off," wavelength change and gramophone pick-up switch. Selectivity and volume control. 8-in. Permanent Magnet M.C. Speaker. Provision for pick-up and for extension speaker. For D.C. 200/250 volts (adjustable) and A.C. 200/250 volts (adjustable), 50 to 100 cycles.

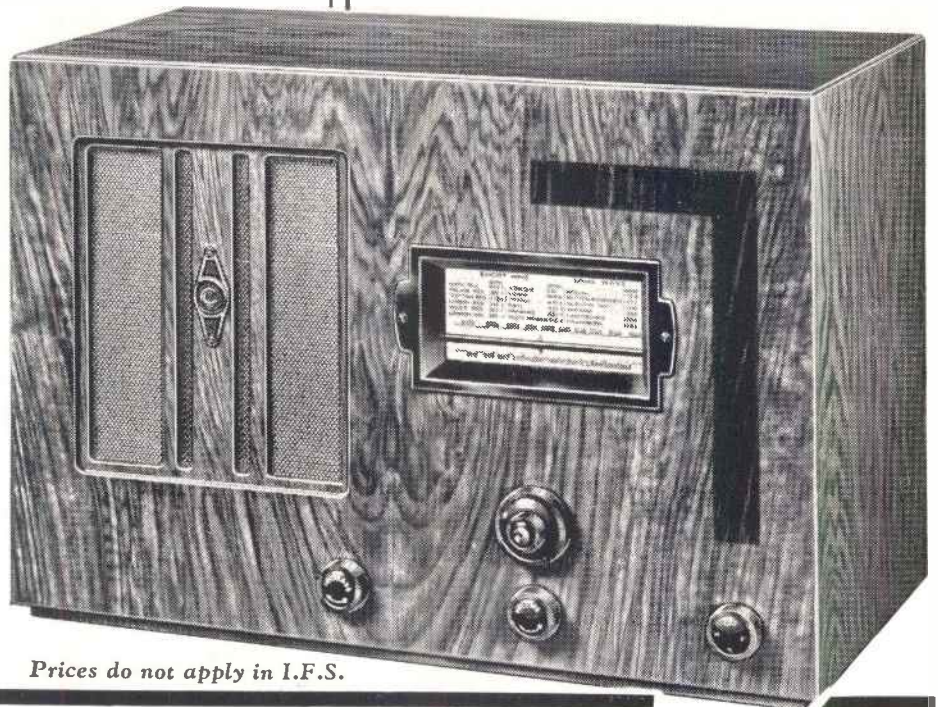
**£8.18.6**

Hire Purchase Terms: 20/- deposit and 11 monthly payments of 16/6.

Super-Ferrodyne

**MODEL**  
**369**

**BRITISH MADE BY A. C. COSSOR LTD.,**  
 Highbury Grove, London, N.5. Depots at  
 Birmingham, Bristol, Cardiff, Glasgow,  
 Leeds, Liverpool, Manchester, Newcastle,  
 Sheffield, Belfast, and Dublin.



Prices do not apply in I.F.S.



KINGS OF THE AIR

with

VARIABLE-Mu H.F. PENTODE  
 IN H.F. STAGE

H.F. PENTODE DETECTOR

SUPER SELECTIVE  
 IRON-CORED COILS

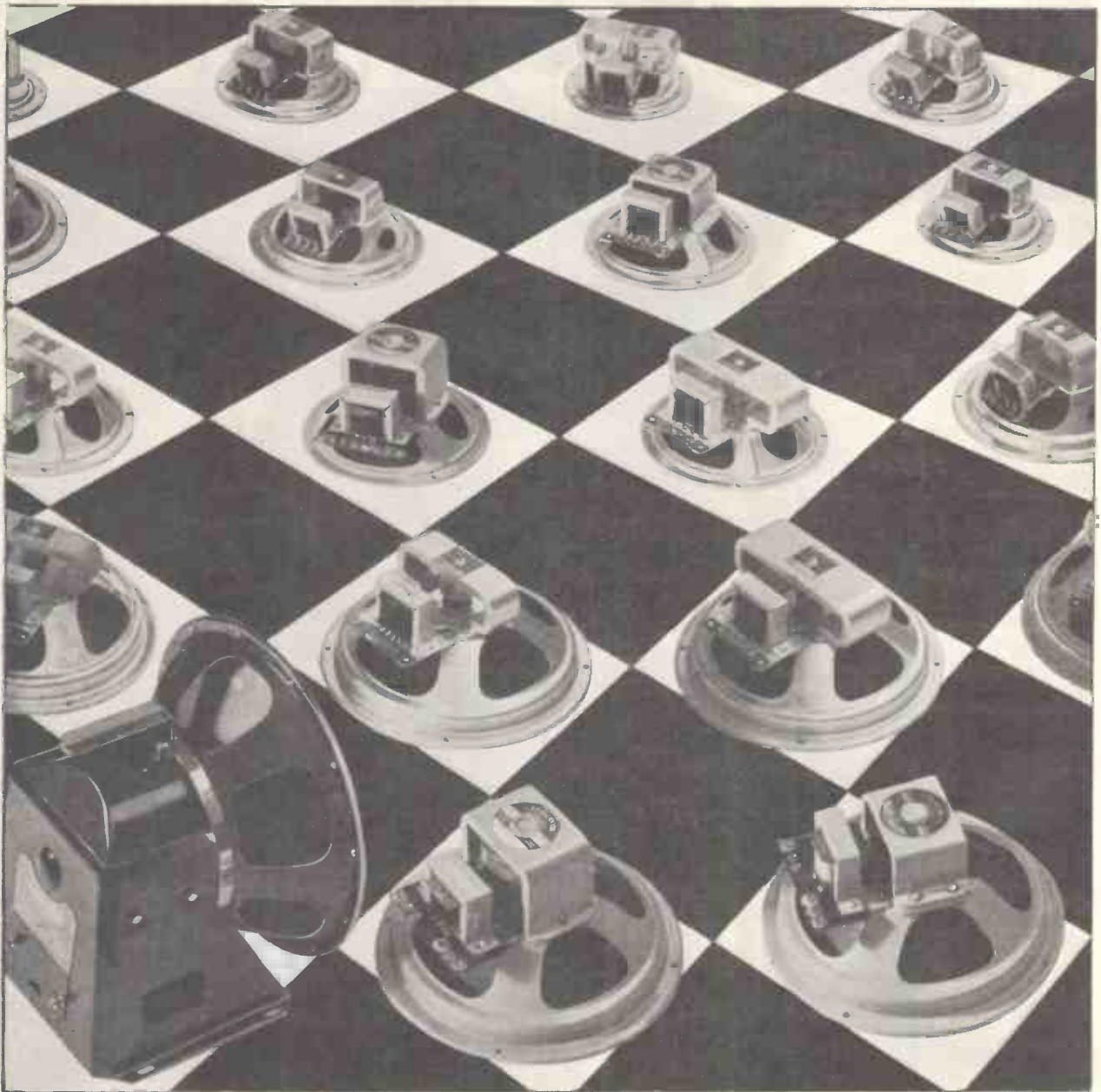
SUPER POWER OUTPUT

SINGLE KNOB TUNING

FULL VISION SCALE  
 ILLUMINATED ACCORD-  
 ING TO WAVE BAND  
 IN USE



# LOUDSPEAKERS



*to meet* **EVERY PROBLEM**

For each and every type of set there is a MAGNAVOX Speaker giving better tonal quality, the uniformity which comes from

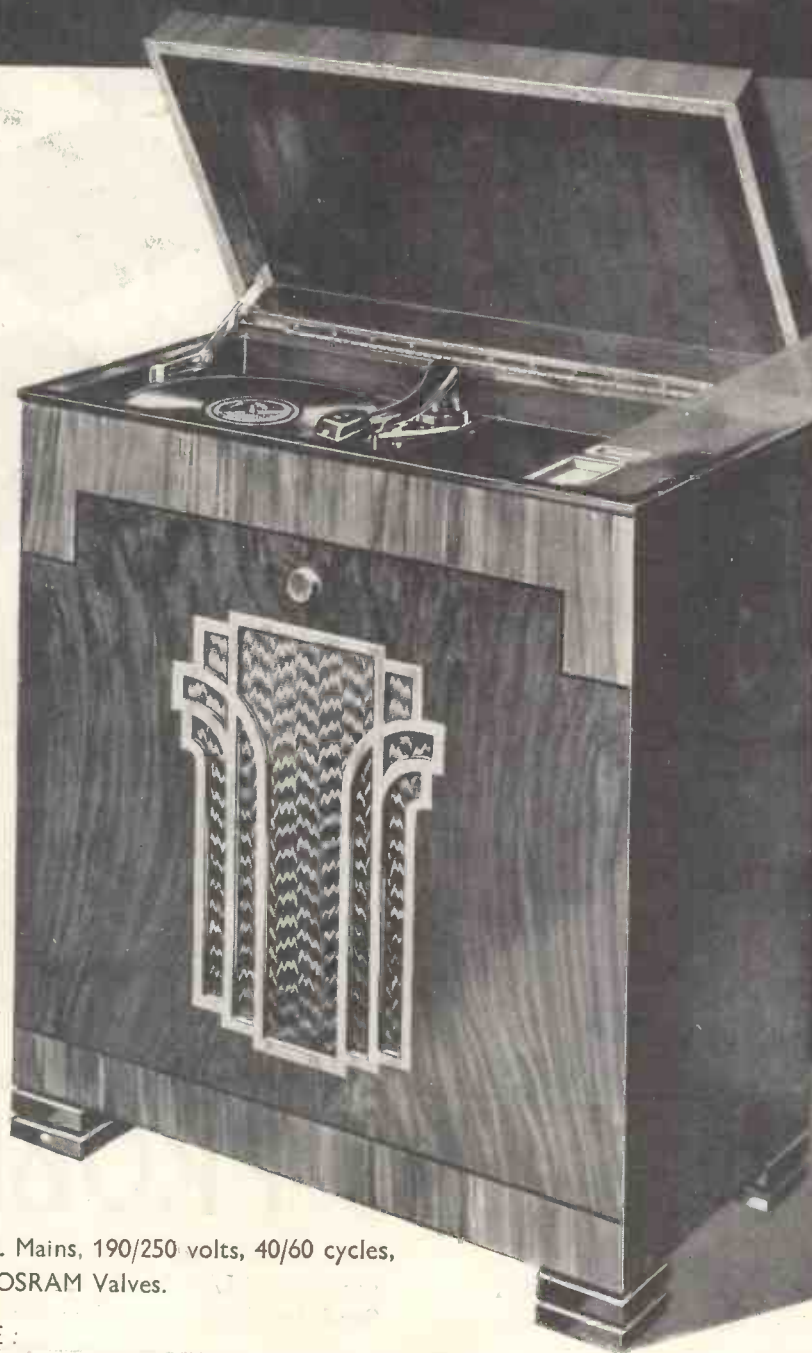
large scale production, and more value for money. MAGNAVOX is the best move! Send for interesting literature.

# MAGNAVOX

MANUFACTURED AND SOLD UNDER MAGNAVOX PATENTS AND REGISTERED DESIGNS BY  
**THE BENJAMIN ELECTRIC LTD. TOTTENHAM · N.17**

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

# G. E. C. ANNOUNCES



**23**  
G N S

**BC3558** for A.C. Mains, 190/250 volts, 40/60 cycles, complete with OSRAM Valves.

**HIRE PURCHASE :**

Deposit **42/-** ; 12 monthly payments of **42/-** or 24 monthly payments of **21/6**.

**MADE IN ENGLAND**

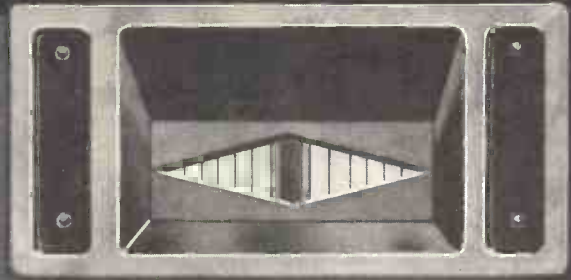
**G. E. C. RADIO THE SETS WITH THE BIG NAME BEHIND THEM**

*Advt. of The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2*

**WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."**



**THE NEW**  
**G.E.C.**



*Shadowband Five*  
**RADIOGRAM**

**SHADOWBAND  
TUNING AND  
SPARKLING  
REPRODUCTION  
WITH HIGH NOTE  
DEFINITION AND  
BALANCED BASS**

**F O R A . C . M A I N S**

Brilliant performance and utmost good value have always been characteristics of G.E.C. Radiograms and made them popular favourites. Now comes the new G.E.C. SHADOWBAND FIVE RADIOGRAM which is even better than any of its predecessors. It is a certain winner from the start and takes its place immediately at the head of all 5-valve superhet radiograms. There is a great demand for radiograms and the new G.E.C. SHADOWBAND FIVE, which will be nationally advertised, offers you the opportunity of maintaining peak sales.

**ABRIDGED TECHNICAL DETAILS :**

New type of Loudspeaker with compensated high note reproduction and balanced bass.

Shadowband Tuning.

Fully delayed and amplified A.V.C.

Inter-station noise suppression.

Duo-col full vision illuminated tuning by station names with light band selector.

3 watts undistorted output.

Horizontal tuning controls.

Internal aerial.

Richly figured Cabinet with new design features.

**RELEASE DATE — FEBRUARY 18th**

**G. E. C. RADIO THE SETS WITH THE BIG NAME BEHIND THEM**

Advt. of The General Electric Co. Ltd., Magnet House, Kingsway, London, W.C.2

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

# ANNOUNCING...

## SPECIAL PRIVILEGE

for "Broadcaster"  
Subscribers

The ordinary subscription to "Electrical Trading" is 7/6d.—truly remarkable value for money. But, by a special arrangement, subscribers to "The Broadcaster," the sister journal, are entitled to receive "Electrical Trading" every month for a year, for the astonishing Privilege Subscription of only 5/-. A single piece of advice from the "Electrical Trading" Advisory Service can repay this small subscription many times over.

## HOW this additional Service CAN HELP YOU

Below are just a few of the highly specialised services which "Electrical Trading" can render you through its board of experts:—

The preparation of all kinds of advertising matter and the planning of displays and exhibitions of electrical goods.

Legal and insurance problems in their relation to the electrical industry.

Hire purchase practice, staff management, problems of buying and of business organisation.

Installation, maintenance, and all matters relating to servicing and technicalities.

Advice on technical books, supply voltages and valuable specialised market data.

Practical help in arranging contacts between manufacturers and dealers.

## A Great New FREE PERSONAL ADVISORY SERVICE

"Electrical Trading" invites you to benefit from  
**45 YEARS OF SPECIALISED EXPERIENCE**

As a subscriber to "The Broadcaster" you have probably used and benefited by its remarkable Free Service.

Now, we are able to announce the important news that "Electrical Trading," our sister publication, has launched a great Free Specialised Advisory Service which can be of immense additional value to your electrical department.

This magnificent, individual Service is the most comprehensive of its kind in the electrical industry. It is presided over by a Service Manager who offers you his personal co-operation in solving scores of urgent business problems. He and his staff of experts are at your beck and call for specialised information and advice which are nowhere else procurable without a substantial fee.

If you sell electrical goods you must read "Electrical Trading" every month and use its profitable service. As a subscriber to "The Broadcaster" you are eligible for a most generous concession—you can have "Electrical Trading" every month for a year and use its Advisory Service Free of charge for the special Privilege Subscription of 5/—(a reduction of 33½ per cent.)

Take advantage of this splendid offer now. Put a P.O. for 5/—, together with your business card, in an envelope, paste on the Business Reply Label below, and post (without a stamp) immediately.

## ELECTRICAL TRADING

\*Phone: Temple Bar 2468. Telegrams: Electrical Trading, Southernwood, Rand, London.

CUT THIS LABEL OUT AND AFFIX IT TO A PLAIN ENVELOPE. There is no need for a stamp, we pay postage.

Postage will be paid by Licensee.	No Postage Stamp necessary if posted in Great Britain or Northern Ireland.
<b>BUSINESS REPLY LABEL.</b> Licence No. 348.	
To THE MANAGER, <b>"ELECTRICAL TRADING"</b> (ODHAMS PRESS LTD.), 68, LONG ACRE, LONDON, W.C.2.	



# DEALERS!

## AN UNLIMITED SOURCE OF PROFITS AWAIT YOU

### In Electrical Interference Suppressing Devices

Interference Elimination form and Descriptive Folders on request.

"GOLTONE" offers you a complete range of Interference Suppression Devices, covered by a free Technical Service, and liberal discounts.

Whether your service call is directed to removing electrical interference at the receiving end or at the source, there is a suitable "Goltone" device available.

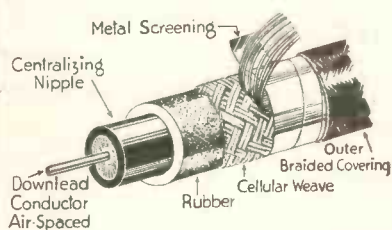


### "GOLTONE" AERIAL STATOFORMER

A system of impedance-matching for long aerial Down-Leads, and to remove direct static pick-up. Also suitable for Television reception.

### HEAVY DUTY H.F. CHOKES

To assist Interference Compensators in isolating H.F. noises on mains supply from set.



### "GOLTONE" "METOCEL" AIR-SPACED METAL-SCREENED DOWN-LEAD. Eng. Pat. No. 414913.

Here is a source of revenue to the enterprising Radio Dealer. A scientifically designed means of solving electrical interference due to pick-up on Down-Lead. Recommend and Install the "GOLTONE" METOCEL DOWN-LEAD. Full particulars on request. Repeat orders received from British and Dominion Governments, B.B.C. and leading concerns.

### R.F. INDUCTORS

Used in about 20% of cases to assist Interference Compensators.

THERE is no Radio Catalogue of such value to the Dealer as that issued by us, full of live quick-selling lines in regular demand—send for your copy.



### "GOLTONE" INTERFERENCE COMPENSATORS

for silencing — Mains noises. Small "unearthed" motors. Flashing signs. Bells and Buzzers. Fans. Refrigerators. Vacuum Cleaners. Hair Dryers. All types of Electrical Motors and Generators. Chargers. Lifts, etc., etc.

DEPOTS AT:

LONDON: 5 Percy St., Tottenham Court Road - W.1. Tel.: Museum 8371-2.

LEEDS: Upton's Yard, 49a, Briggate.

GLASGOW: 80, Blythswood St., C.2.

All communications to Head Office and Works: Pendleton, Manchester, 6



SERVICE TALKS—No. 4.



“Knowing something about Radio . . . . .”

LET us compare the position of the dealer who attempts to satisfy his customers by returning their sets to the manufacturers, with the dealer who is prepared to repair faulty sets immediately. The last-named not only saves a great deal of time, but also builds up a reputation with customers for knowing something about radio. His advice concerning future purchases will carry far more weight than that of the man who can talk only prices. In common fairness the dealer is responsible for the maintenance of the sets he has sold, and if he is to keep faith with his customers he must accept this responsibility and act accordingly.

Faults in radio sets fall in one of the following three categories:—(1) Very simple faults correctable on the customer's premises. (2) More complicated faults necessitating return of the set to the dealer's shop. (3) Difficulties which cannot be put right by the radio service man, but which can be corrected by the manufacturer at his works. These categories will be discussed in detail in subsequent talks.

SEE YOUR FACTOR FOR A DEMONSTRATION OF THE ANALYZER AND OTHER WESTON INSTRUMENTS FOR THE RADIO SERVICE MAN



# AMPLION

## DRAGON

WE INTRODUCE THE 1935 “DRAGON”

The modern equivalent of the original Amplion “Dragon”—the leader in its class in 1923.

The Amplion “Dragon” is designed to match correctly the output characteristics of all modern receivers, in addition to harmonising perfectly with older types. It fully upholds the “Amplion” reputation for quality performance and is far ahead of other makes selling at or near its retail price of 29/6.

THE  
1935  
AMPLION  
“DRAGON”  
29/6



PERMANENT MAGNET M/C SPEAKER.

Extra large magnets are employed—a Universal Transformer is embodied and the 7" cone is in a rigid housing—these are some of the features which make for Amplion supremacy.

SUPPLIES NOW AVAILABLE.

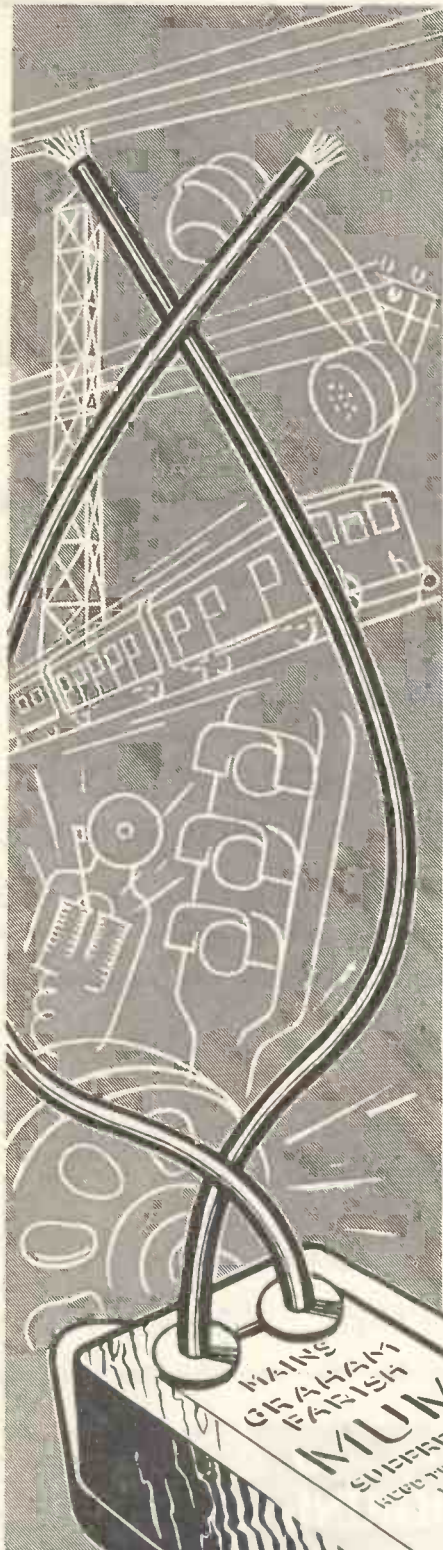
Descriptive Literature on request.



### AMPLION (1932) LTD.

82-84, ROSOMAN ST., ROSEBERY AVE., LONDON, E.C.1  
Telephone: Clerkenwell 5440-5441.





# HERE'S NEWS!



## A really efficient noise suppressor for

# 2! MUM INTERFERENCE SUPPRESSOR

"How can I stop those irritating noises?" You're often asked that question. MUM's the word for the cure of Radio disturbances caused by Trains, Trams, Telephones and other electrical devices. MUM is an invention you can confidently recommend, it is neat in appearance, easily fitted and the price is right for big sales.

Advertising has started in RADIO TIMES and other journals. Order MUM from your wholesaler, it will pay you to give it a good show.

Packed in striking Display  
outers of 1/2 dozen.

PRODUCT OF  
**GRAHAM FARISH LTD**  
BROMLEY • KENT

**CURES  
DISTURBANCE  
IN RECEPTION  
DUE TO  
DOMESTIC  
APPLIANCES  
TRAINS etc.**

With Blue Spot tucked underneath his arm . . .



he proudly leaves your shop

That's the way Blue Spot Speakers sell. When a customer hears what a wonderful difference there is between Blue Spot Speakers and the rest, he wants to take his Blue Spot home with him *at once*.

You can feel proud to sell Blue Spot Blue Star Speakers. They are as near to perfection as a moderately priced speaker can go.

Make a display of Blue Spot "Star" Speakers and you'll have many a customer walk out with one tucked underneath his arm.

**BLUE SPOT "STAR"**

Chassis 70/- Cabinet 98/- Remote Volume Control 10/6

**BLUE SPOT "STAR JUNIOR"**

Chassis 35/- Cabinet 48/6

**BLUE SPOT PICK-UP**

Without Volume Control 21/6. With Volume Control 27/6

**BLUE SPOT SPEAKERS & PICK-UPS**

THE BRITISH BLUE SPOT CO., LTD.,  
Blue Spot House, 94/96, Rosoman Street,  
Rosebery Avenue, London, E.C.1. Telephone: CLE 3570.

Distributors for Northern England, Scotland and North Wales:  
H. C. RAWSON (Sheffield and London), Ltd., SHEFFIELD: 22 St. Mary's Parsonage, Manchester; Strawberry Lane, Gallowgate, Newcastle-on-Tyne; 37, 38, 39, Clyde Place, Glasgow; 45 Springbank, Hull.



**SISTOFLEX**  
REGD.

**INSULATING MATERIALS**

LARGE STOCKS

**SISTOFLEX TUBING**

0.5 MM. to 20 MM., VARIOUS COLOURS

VARNISHED COTTON, SILK AND PAPER TAPES  
FOR MAINS TRANSFORMERS

PRESSPAHN AND BAKELITE SHEETS AND BOBBINS

**SPICERS LTD.**

**19, NEW BRIDGE STREET, LONDON, E.C.4**

Telegrams { Nykoping Lud. London }      Telephones { Central 4211 (18 lines) }

Postage

Saving

Coupon

SAVES TIME . SAVES MONEY

To obtain full details of any of the lines advertised in this issue, send us a list and enclose your trade card or letter heading — We do the rest.

*Are you BOOKING for R.A.P. Armchair Travel?*

FIRST CLASS TRAVEL at THIRD CLASS COST!

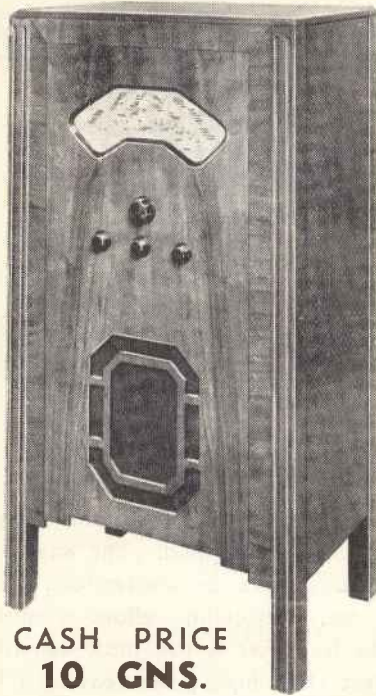
**R.A.P.**  
Long Distance RADIO

Do not miss the wonderful profit-making opportunity presented to you by R.A.P.—the FIRST manufacturers to break away from the old, out-of-date methods of advertising and selling Radio. R.A.P. "Armchair" Travel is going to break all records in popularity this year. Be in on it! Order now! R.A.P. Ltd., Ferry Works, Thames Ditton, Surrey.

BERLIN, NEW YORK, PARIS, LONDON, MADRID, TOULOUSE, GOLDBERG, ALGIERS



# RADIO RENTAL THROUGH THE DEALER



CASH PRICE  
**10 GNS.**

Or 12/6 down and 18 monthly payments of 12/6.  
ALSO AVAILABLE UNDER OUR RENTAL SCHEME.

*What you have been waiting for.*

**A MARVELLOUS OPPORTUNITY OF  
ADDING TO YOUR PROFITS**

We offer the FAMOUS  
**'SPOTLIGHT' TUNING RECEIVERS**  
from **10/-** per month.

*Generous terms given to the dealer.*

Write to-day for particulars of our authorised agents' scheme.

**REGENT INVESTMENT & SALES, LTD.,**  
Brent Crescent, North Circular Road, N.W.10

## It's the *Silver* jubilee—it's your *Golden* opportunity



No larger than an ordinary portable gramophone, this instrument incorporates a Philips all-electric amplifier, and reproduces gramophone records at unusual volume through either one or two moving coil speakers. Output: approx. 5 watts undistorted. Electric turntable, pick-up, automatic brake and scratch filter. Magnetic needle chuck which permits the needle to move freely in the record groove. For A.C. Mains. Price complete with separate moving coil speaker 26 Gns. *Deferred terms on application.*

MAKE REAL MONEY BY SELLING PHILIVOX TO HOTELS, RESTAURANTS & BOARDING HOUSES.

Philips Electric Power Gramophone is the ideal instrument for impromptu dances. It is small in size and finished with exquisite care and it gives unsurpassed reproduction at sufficient volume for large halls. Send us the coupon for full details of this and other models.

**PHILIPS  
PHILIVOX**

**ELECTRIC POWER GRAMOPHONE**

COUPON

Philips Industrial, Philips Lamps Ltd., 145, Charing Cross Road, London, W.C.2.

Please send me full particulars and terms for the Philivox Electric Power Gramophone.

NAME.....  
ADDRESS.....  
.....

# Silent Service

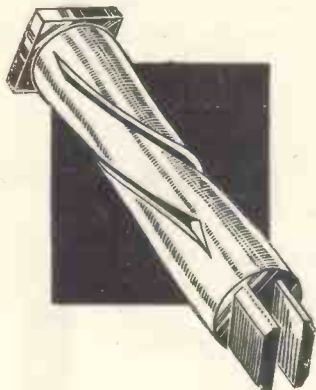
When we had seemingly so perfected the "Clix" range of Valve Sockets that over 80 per cent. of set manufacturers were using them; when everyone was satisfied that they were the best sockets made and that nothing more could be done to better the design or improve the finish, then, instead of resting on our oars as we might have done, we started a metallurgical research into the character of the brass we had been using to see whether it might be improved upon.

A long series of experiments resulted in the discovery of a new alloy infinitely superior to anything previously employed, and another quality was added to "Clix."

And so this silent service goes on, and set manufacturers secure improved quality without increase in cost. It is, indeed, that Service allied to quality that has especially commended "Clix" to the appreciative regard of the set manufacturer.

We have always extended an invitation to set manufacturers to take the fullest advantage of our specialised experience and to protect their interests by relying upon our ability to meet their heaviest demands at short notice.

Your supplies are further safeguarded for 1935, as we have recently taken over a new factory having 30,000 square feet of floor space which is being devoted to our Radio and Electrical products. Additional and better machinery has been installed and the most modern production methods instituted. Behind all this there still stands our desire to give real service—a service as sincere as ever.



Full details of the range of "Clix" Valve Sockets and our special Folder "Clix Aids to Manufacturers" will be sent you on request.

Clix products are fully covered by Patents, Provisional Patents and Registered Designs.

## LECTRO LINX LTD.

79a, Rochester Row, London, S.W.1

TELEPHONES : VICTORIA 3541-2 & 3516.

## PROFIT WORTH WORKING FOR

### MILNES H.T. SUPPLY UNIT

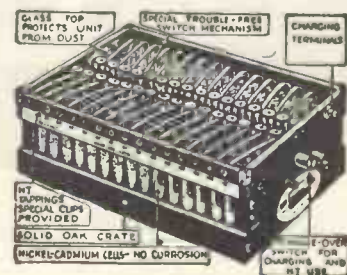
Whether you want to sell H.T. batteries or not, battery set owners must still have H.T. Why not concentrate your efforts on selling Milnes H.T. Supply Units to them and make a profit of 24/8 or more per sale?

It is easy to sell Milnes Units. You are selling, not just another H.T. battery, but reliability, service performance and economy such as none of your battery set customers has imagined. The way to sell Milnes Units is to give a demonstration on the customer's own set. No selling effort is needed. The improvement it effects is the most convincing argument. Against that, high price ceases to be a factor.

Some of our dealers sell Units in 75 per cent. of homes in which they demonstrate. If you sell only a dozen a month you have made a clear profit of £15. That's the equivalent of 300 dry battery sales.

**Write us now for full details and terms.**

We sell direct to the dealer.  
We maintain prices rigidly and refuse to supply price-cutters.  
We give 30 per cent. discount, or 30 per cent. and 5 per cent. for 3 or more Units.  
We advertise extensively in the national newspapers and refer enquirers to our local agents.  
We have already sold approximately 70,000 Units.



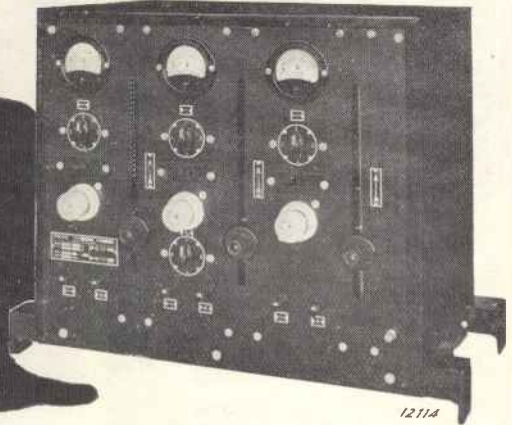
## MILNES RADIO CO. LTD., CHURCH ST., BINGLEY, YORKS.

Telephone : Bingley 600-1-2-3.



# ★ REMEMBER THIS FACT WHEN BUYING BATTERY CHARGING EQUIPMENT

★ The "Oxode" Rectifying Tubes in  
**PHILIPS BATTERY CHARGERS**  
ARE COVERED BY A 2 YEARS  
**GUARANTEE**



Models from 62/6 list.

Write for full particulars of this and other models to:

Type 1365 (illustrated above)  
3 circuit charger.  
40 cells at 1 amp. or 60 at ½ amp.  
40 cells at 3 amps. 12 cells at 6 amps.  
£27.10.0 nett trade or on H.P. terms.

## PHILIPS INDUSTRIAL

Philips Lamps Limited, 145, Charing Cross Road, London, W.C.2

# Ready Sales!

Because T.M.C.-HYDRA Condensers can be absolutely relied upon for—

- HIGH INSULATION RESISTANCE
- ACCURACY
- LONG LIFE
- CONSISTENT PERFORMANCE

—they make quick and easy sales—they are featured by many Set Designers and backed by regular advertising.

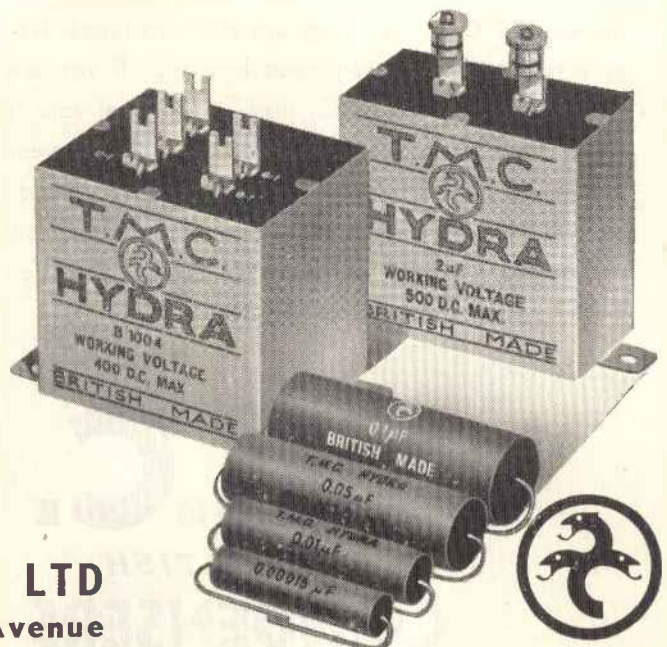
Profit from this constant and ever-increasing demand and arrange for stocks TO-DAY.

★ Watch for announcements of the new Condensers specially prepared for Television requirements.

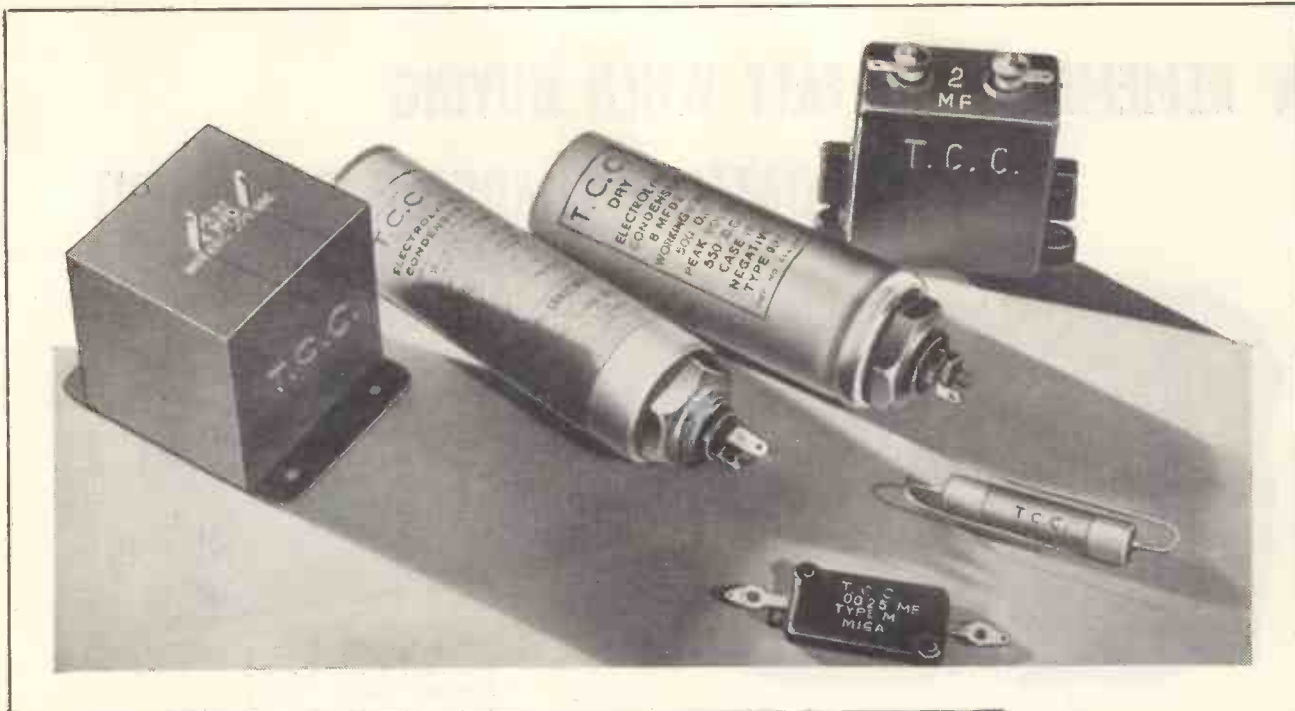
SOLE DISTRIBUTORS:

**T.M.C.-HARWELL (SALES) LTD**  
Brifannia House, 233 Shaftesbury Avenue  
London, W.C.2. (A few doors from New Oxford Street)

Telephone: Temple Bar 0055 (3 lines)



T.M.C.-Hydra Condensers are made in England by Telephone Manufacturing Co. Ltd.



# No Matter what your need, or the need of your customers

● the answer is within the T.C.C. organisation. We show but a few of the many types that go to make up the vast T.C.C. range. They are standard types—types which you as a retailer know mean good business. If you are a set manufacturer, many of the T.C.C. 'stock' types meet your requirements—if not there is a specialised series—with 28 years' condenser pioneering behind it, ready to meet your very need. And above all, whether specialised or stock, every T.C.C. condenser is a recognised standard of **DEPENDABILITY**. Can you ignore that claim? Then insist on T.C.C. **always**.

# T.C.C.

ALL-BRITISH  
CONDENSERS

## The T.C.C. CONDENSERS ILLUSTRATED

4 mfd. Type 87 Paper Condenser. Tested 1,500v. D.C. Normal Working 450v. Built to withstand surges of 650v.

8 mfd. Type 802 Wet Electrolytic. Maximum Continuous Working Voltage of 440. Peak Voltage of 460.

8 mfd. Type 902 Dry Electrolytic. Maximum Continuous Working Voltage of 500. Peak Voltage of 550.

.0015 mfd. Type "M" Mica Condenser. Tested to 500v. D.C. for 250v. D.C. Working.

.01 mfd. Type 300 Tubular Paper Condenser. Tested to 1,500v. D.C. for 400v. D.C. Working.

2 mfd. Type 50 Paper Condenser. Tested 400v. D.C. Working Voltage of 200 Non-inductive.

● Send for the fully illustrated T.C.C. Price List—giving complete data, characteristics, sizes, etc.

**The Telegraph Condenser Co. Ltd.,  
Wales Farm Road, N. Acton, W.3.**



# The Broadcaster

& WIRELESS RETAILER

## ADVERTISEMENT INDEX

	PAGE		PAGE		PAGE
Ace Radio .. .. .	47	Celestion, Ltd. .. .. .	21	Halcyon, Ltd. .. .. .	Back Cover
Aerodyne Radio, Ltd. .. .. .	18	Chloride-Electrical Storage Co., Ltd. .. .. .	20	High Vacuum Valve Co., Ltd. .. .. .	48
Allwave International Radio & Television .. .. .	48	Classified Ads. .. .. .	47 & 48	I.M.S. Radio Company .. .. .	18
Amplion (1932), Ltd. .. .. .	10	Cole, E. K., Ltd. .. .. .	5-8	Itonia, Ltd. .. .. .	48
Automatic Coil Winder & Electrical Equipment Co., Ltd. .. .. .	47	Correx Amplifiers .. .. .	18	Kolster-Brandes, Ltd. .. .. .	43
Balcombe, A. J., Ltd. .. .. .	48	Cossor, A. C., Ltd. .. .. .	Inside Front Cover	Lectro-Linx, Ltd. .. .. .	14
Belling-Lee, Ltd. .. .. .	47	Dubilier Condenser Co., Ltd. .. .. .	19	Milnes Radio Co., Ltd. .. .. .	14
Benjamin Electric, Ltd. .. .. .	1	Dulcetto-Polyphon. Ltd. .. .. .	48	Oldham & Son, Ltd. .. .. .	Inside Back Cover
Brief Ads. .. .. .	47 & 48	Dyson, J., & Co., Ltd. .. .. .	47	Philco Radio & Television Corporation of Great Britain, Ltd. .. .. .	48
Britannia Batteries, Ltd. .. .. .	48	Eastick, J. J., & Sons .. .. .	48	Philips Lamps, Ltd. .. .. .	13 & 14
British Blue Spot Co., Ltd. .. .. .	12	Eburite Corrugated Containers, Ltd. .. .. .	48		
British Rola Co., Ltd. .. .. .	47	General Electric Co., Ltd. .. .. .	2, 3, 37, 38, 39 & 40		
Brown, Wm. F., Radio, Ltd. .. .. .	47	Graham Farish, Ltd. .. .. .	11		
Bulgin, A. F., & Co., Ltd. .. .. .	18	Greenman, S., Ltd. .. .. .	44		
Burgoyne Wireless Co. (1930), Ltd. .. .. .	18				

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ADVERTISEMENT INDEX

	PAGE		PAGE		PAGE
Portadyne Radio, Ltd. .. ..	33	Smith, S., & Sons (M.A.), Ltd. ..	48	Varsity Eliminators, Ltd. .. ..	18
Priestly & Ford, Ltd. .. ..	17	Spicers, Ltd. .. ..	12	Verloc, Ltd. .. ..	47
Radio Acoustic Productions ..	12	Tannoy Products .. ..	18	Ward & Goldstone, Ltd. .. ..	9
Radio Gramophone Development Co., Ltd. .. ..	48	T.M.C.-Harwell Sales, Ltd. ..	15	Westinghouse Brake & Saxby Signal Co., Ltd. .. ..	Front Cover
Radio Instruments, Ltd. .. ..	47	Telegraph Condenser Co., Ltd. ..	16	Weston Electrical Instrument Co., Ltd. .. ..	10 & 48
Radio Resistor Co., Ltd. .. ..	17	Ultra Electric, Ltd. .. ..	48	362 Radio Valve Co., Ltd. .. ..	18
Regent Investment & Sales, Ltd. ..	13				

Classified Advertisement Section, pages 47 & 48.

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 Telephone: Streatham 4122 (6 lines).

**MANCHESTER.**  
 2, Whitworth Street West, Deansgate.  
 Telephone: Central 6830.

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## oil-immersed

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## condensers

# Type 951

Dubilier's new departure in radio and amplifier design is a range of new Oil-Immersed Paper Dielectric Condensers, which will come as a boon to designers of apparatus for Television, Radio and Low Frequency Amplifiers, using the higher voltages.

Each condenser comprises a multiple paper dielectric element, impregnated and oil-immersed and hermetically sealed into a sheet metal container. Leakage of oil is impossible, but expansion is adequately accommodated. In capacity and working voltage these condensers are small and most compact. Their low price enables a capacity value hitherto prohibited to be used in resistance capacity coupled amplifiers.

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1.0	1,500	3,000	13/-
1.0	2,000	4,000	15/-
2.0	1,000	2,000	13/-
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**BATTERY**  
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—the Exide "Indicator". No other battery on the market like it. As soon as it was seen last season it was sold. This season we're ready for all demands. The Exide "Indicator" is exactly what listeners have been looking for for years. We are supporting it with strong advertising in the Press, and readers will come to you for the goods. Be ready.

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Obtainable from Exide Service Stations or your factor. Exide Service Stations give service on every make of battery  
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R 69





# The Broadcaster

& WIRELESS RETAILER



No. 329. Vol. XXVI.

SATURDAY, FEBRUARY 9

## SEEKING FIRST TELEVISION SITE

### P.M.G. SPEEDS UP ORGANISATION OF SYSTEM

One of the first moves of the P.M.G. Television Advisory Committee which met on Tuesday was to discuss possible sites for the new high definition television transmitter for London.

This advisory committee, it will be recalled, was formed on Thursday last week, immediately following the presentation of the Television Report to the House of Commons.

The actual work of site selection has been carried on this week by the technical sub-committee of the full Advisory Committee.

On Tuesday next the full committee is to hold its second meeting to discuss the findings of the sub-committee, and it is probable that the site will then be selected.

It is understood that the P.M.G. is particularly anxious for the work of starting a television service to proceed as rapidly as possible, and with this in view frequent meetings of the Advisory Committee are to be held.

In the House of Commons on Monday Mr. Clarry, M.P., is to ask the P.M.G. if he can state when the B.B.C. will be in a position to announce to radio manufacturers the essential information preparatory to the construction of television receivers, such as the nature of the apparatus, wavelength of transmission and the number of lines to be used.

### Starting Date?

Mr. Clarry is also to ask the P.M.G. to give a date when the Marconi-EMI and Baird companies will be in a position to market receivers, and when the new London station will be in a position to broadcast.

A number of these points, such as the technical details of transmissions, it will be recalled, have been referred to the Advisory Committee.

On the production side, the Marconi-EMI company reaffirms its statement that it will be ready to market receivers when the London service begins.

The Baird company has released preliminary details of two types of receiver which are to be available in time for the start of the London service. Details of these, together with a general description of the Baird transmission system, are given on page 23.

Since the publication of the Television Report last week, set makers have been investigating production in the light of the terms of the report. Little concrete information regarding television plans is available, it being held the time is a little too early to make definite decisions.

So soon as the Advisory Committee makes definite regulations regarding the technical arrangements for the transmissions decisions will be formulated.

Scophony, Ltd., whose system was investigated by the Television Committee, states it

### Ever Ready Discount Increase?

An increase in the retail discounts of Ever Ready batteries appears probable.

Mr. Magnus Goodfellow met representatives of the W.R.A. and S.R.R.A. this week, and an early announcement is promised. Whether prices will be affected is not known.

It will be recalled that on December 31 last Mr. Goodfellow told wholesalers that the reduced prices did not permit Ever Ready to give better discounts, although a bonus "pool" scheme was outlined.

Presumably, therefore, it is possible that Ever Ready prices may be increased.

The following was the statement issued by Captain Bain, of W.R.A., in conjunction with Mr. Magnus Goodfellow:—

"A deputation of retailers, consisting of

the W.R.A. chairman, Mr. P. L. Harrison (Lincoln); the vice-chairman, Mr. J. Fielding (Brighton); Mr. W. Upton (Middlesbrough); Mr. L. Wilde (London); the general secretary, Captain H. A. Bain; and Mr. R. B. Donaldson, president of the S.R.R.A., met the chairman and managing director of the Ever Ready Co., and discussed with him in detail the whole question of the existing battery market in relation to the new Ever Ready H.T. battery.

"As a result an announcement will be made by the Ever Ready Co. in the immediate future regarding an adjustment of the discount position, which it is anticipated will give satisfaction to the organised retail section of the Industry."

proposes marketing television receivers, but adds it is too early to give details.

The general features of the Scophony system are to be employed in the apparatus marketed. This affords optically projected pictures of ample size and brilliancy by means of compact apparatus, which is simple to operate. It is stated that low power and low voltage is used and that the apparatus is capable of long and efficient service without replacements or attention. It is anticipated that the price of Scophony receivers will be distinctly competitive.

The Mervyn Sound and Vision Co., Ltd., has been experimenting with both cathode ray and mechanical reception systems. It hopes to follow in connection with high definition transmissions its policy with regard to the present 30-line programmes, that of producing low-priced equipment.

### Suggestion for Provinces

The company stated it is a pity the Television Committee did not suggest the removal of the present 30-line transmitter to the provinces when the high definition programmes start in London. This would give people in the provinces a carry-over until their high definition stations were erected.

Edison Bell (1933), Ltd., has already constructed commercial models of receivers for high definition work, and is at present making factory arrangements. It is expected complete vision and sound receivers will be

marketed from between £40 and £50, and vision receivers only at about £25. These prices are based on mass production costs.

The question of providing relays of television broadcasts for subscribers is being considered by Rediffusion, Ltd., and Broadcast Relay Service, Ltd. It is stated the companies will be able to relay television programmes in areas adjacent to transmitters free of interference.

Expensive television receivers, it is added, will not be necessary. No details of fees to be paid by subscribers for this service have been arranged.

### American Wire System

Long-distance H.F. transmission of television over wires will soon be possible, according to engineers of the Bell Telephone Laboratories, who delivered a paper before the winter convention of the American Institute of Electrical Engineers in New York at the end of January.

The Bell engineers laid particular stress on new development of co-axial transmission lines which would make possible such long-distance image transmissions.

The co-axial transmission line has two wires like the normal line, but the return wire is a hollow tube. The second wire is strung inside it and the two are held apart by small, widely spaced blocks.

### "JUBILEE" TROUBLES

H. Clarke and Co., of Manchester, have advised a number of set makers that the word "Jubilee" was registered by them as a trade name on November 9 last.

THE BROADCASTER understands that among the manufacturers who have received this communication are some who have so far not used the word "Jubilee."

Atlas sets to be released on or before April 1 are to be called "Jubilee."

### PART EXCHANGE PRICES

(See page 41)

Association News	...	...	30, 31
Brand New	...	...	32-35
Commercial News	...	...	28, 29
Gossip and Leader	...	...	26, 27
Letter Bag	...	...	36
Test Reports	...	...	46

## ROGUES ON THE PROWL AGAIN

### SPECIFICATIONS STOLEN FROM COMPANY'S OFFICE

An Aerodyne Robin 7012 receiver has been stolen from the premises of Bourne and Garner, 8, Hope Street, Hanley, Staffs.

\* \* \*

Smash and grab raiders on Saturday, February 2, stole a receiver from the premises of B. S. C. Lazenby, of Barnsley Road, South Elmshall, near Barnsley.

\* \* \*

E. K. Cole, Ltd., report that an Ekco AC85 chassis, serial number 555531, complete with valves and speaker, together with a Garrard AC6 motor unit and pick-up, has been stolen.

\* \* \*

A Philips "588" D.C. receiver, serial number 200833, has been stolen from H.R.S., Ltd., of 15-16, Alfred Place, Tottenham Court Road, London, W.C.1.

\* \* \*

A Westinghouse type R.G.C.9 charger was stolen from the car of one of the firm's representatives when it was in South Norwood, London. The serial number of the charger is 17658.

\* \* \*

Burglars with a curious taste entered the premises of the 362 Radio Valve Co., Ltd., at Stoneham Road, Upper Clapton, London, on February 1. They took a small amount of petty cash, a number of valves, and certain patent specifications. The company points out that the valves stolen were removed from their cartons, and would therefore be unsaleable through the usual channels.

## NEW PREMISES

S. Chantry is removing to larger premises at 10, Montague Street, Rothesay.

\* \* \*

United Ebonite Manufacturers, Ltd., have moved to Springside Mill, Little Lever, Bolton.

\* \* \*

Dale, Forty and Co., Ltd., have opened excellent new showrooms at Mond Buildings, Union Street, Swansea, where they have special displays of new model pianos.

\* \* \*

Partridge and Mee, Ltd., have closed their London office in New Oxford Street. Business is now being dealt with from the head office at Parmeko Works, Aylestone, Leicester.

\* \* \*

Electrical and Telephonic (Norwich), Ltd., of 15, St. Peter's Street, have removed to larger and more convenient premises at 15, Lower Goat Lane, Norwich.

## RETAILER PREPARES FOR TELEVISION

One Manchester radio dealer, Barratt and Co., of 16, Wilmslow Road, Rusholme, has already decided his plans for cashing in on television—when it comes.

Mr. Barratt has just opened new premises which have an excellent frontage, comprising two windows. One of these will be used to display diagrams and other exhibits to teach the A B C of television. There will be five units to the display, which will be specially illuminated, but the real high spot will be a television receiver.



Over four hundred people were present at the twenty-first annual dinner of Ferranti's, held at the Midland Hotel, Manchester, on Friday, February 1.

## News from Everywhere

The Essex Public Assistance Committee has approved the principle of supplying children's homes with receivers, and has ordered from F. W. Straw (Radio), Ltd., two Bush superhets and four speakers, costing £39 6s. 6d., for the Tendring Home.

Hele and Co., Ltd., the Plymouth organ architects and manufacturers, have recently completed the installation of all-electric organs, with detached consoles, at Kenwyn Church, Truro; Holy Trinity Church, Dorchester; and the Holy Trinity Church, Winchester.

Bristol Public Assistance Committee has accepted the tender of Bristol Wireless, Ltd., to instal a receiver and seventeen speakers at Stapleton Institution, Fishponds, at a cost of £148 10s. It is also intended to extend the radio equipment at the Eastville Institution.

Following a request from twenty-three urban councils, the Parliamentary Committee of Lancashire County Council has formed a by-law for noisy speakers and gramophones in shops, public places and travelling vans. Offenders will be liable to a penalty not exceeding £5.

A general exhibit, featuring receivers by leading manufacturers, was staged by Brown and Co. (Simplex), Ltd., at the Scottish Cycling Exhibition, held recently at the M'Lennan Galleries, Glasgow.

An increase in membership of over 100 per cent. in the past five years is announced in the report of the secretary of the Radio Society of Great Britain. The membership at the beginning of December last was 2,245, as contrasted with only 1,006 in January, 1930.

During 1934 fifty music companies of all kinds were registered with capitals totalling £201,900. The figures are given in the annual review of companies registered issued by Jordan and Sons, Ltd., company registration agents, of Chancery Lane, London, W.C.2. Three of the music companies registered were public organisations with capitals totalling £100,000. The remaining forty-seven were private companies.

Publicity material is required by J. O. Hulme, 66, Market Street, and the City Radio Stores, 38, Market Street, both of Fenton, Stoke-on-Trent.

## M.P.s WATCH NOISY SPEAKER BILL

### BRIDGEGATE DEALERS' NEWSPAPER

Members of Parliament are watching dealers' interests in a clause in the Sunderland Corporation Bill which seeks to control noisy speakers. They are taking steps to have the clause dropped or rendered ineffective so far as dealers are concerned.

Wilson, Peck, Ltd., of Fargate and Leopold Street, Sheffield, rarely follow the popular fashion of promoting clearance sales. They have proved by experience that an occasional special offer of shop-soiled and pianos which have been hired for concerts brings better results.

A charging plant capable of handling 1,500 cells a week has been installed by Ronald Williams, Ltd., of Balham Hill, London, S.W.

James and William Hastings, Ltd., of Bridgegate, are always original in their advertising campaigns. For their winter clearance sale they have circulated 30,000 full-size facsimile newspapers. Considerable space in this is given to pianos and musical instruments.

Henry Hollingdrake and Son, Ltd., of Prince's Street, Stockport, have been appointed Ultra distributors.

### Do You Know?

## Car Radio Licence

"Besides the licence that I hold for my set at home," writes a Brighton dealer, "must I obtain a separate licence for the receiver that I have installed in my car?"

A WIRELESS licence covers the regular use of receiving apparatus at the address thereon, and also the occasional use by the licensee (or member of his household) of a portable receiver at another place, whether in a house, the open air, or in a car. The licence must be carried by the person using the set.

The concession in regard to portable sets does not cover the use of a receiver which is permanently fitted in a motor-car. A separate licence must be obtained for such a set, and must be carried in the car.

Similar queries will be readily answered by THE BROADCASTER SERVICE BUREAU, 29, Bedford Street, Strand, London, W.C.2. 'Phone: Temple Bar 2468, Extension 253.



# BAIRD READY WITH TWO TELEVISORS

## DEMONSTRATION OF £50 AND £80 MODELS

Two Baird television receivers, which will be available at approximately £50 and £80, respectively immediately the newly sanctioned B.B.C. high-definition broadcasts begin, were demonstrated to THE BROADCASTER this week.

A vision and sound programme broadcast on two short-wave channels from the Crystal Palace, London, S.E.19, was received under exacting conditions at the Baird Company's offices in Victoria Street. Then a visit was made to the firm's 40,000 sq. ft. Crystal Palace premises, where the transmitters, studios, laboratories and factories are situated.

The £50 receiver consists of complete sound and vision receivers in a walnut cabinet, 4 ft. high, 2 ft. wide, and 2 ft. deep. An 8 in. by 6 in. picture appears on the end of a cathode ray tube "framed" at the top of the front of the cabinet. Below are five controls, and under these is the usual speaker aperture.

Two knobs provide for tuning the sound receiver and adjusting volume. The remaining three tune the vision set, control the contrast of the picture, and control the average brilliance. Both receivers cover a wave-range of 5-9 metres, which, it is said, would enable as many as 10 transmitters to be received.

The picture, in the £50 set, is in sepia and cream tints, but it is stated that in the production model a black-and-white picture will be obtained. As many as ten people can "look-in" at once.

### REFLECTED PICTURE

For the £80 receiver, a 4 ft. by 2 ft. 3 in. by 2 ft. cabinet, with a top lid, is used. The screen of a giant cathode ray tube is "framed" in the centre of what corresponds to the motor-board of a radiogram, and is seen through a mirror mounted under the lid. This is propped open at an angle of 45 degrees.

The picture measures 12 in. by 9 in., is black and white, and can be seen by as many as 30 people. There are five controls, as in the first receiver.

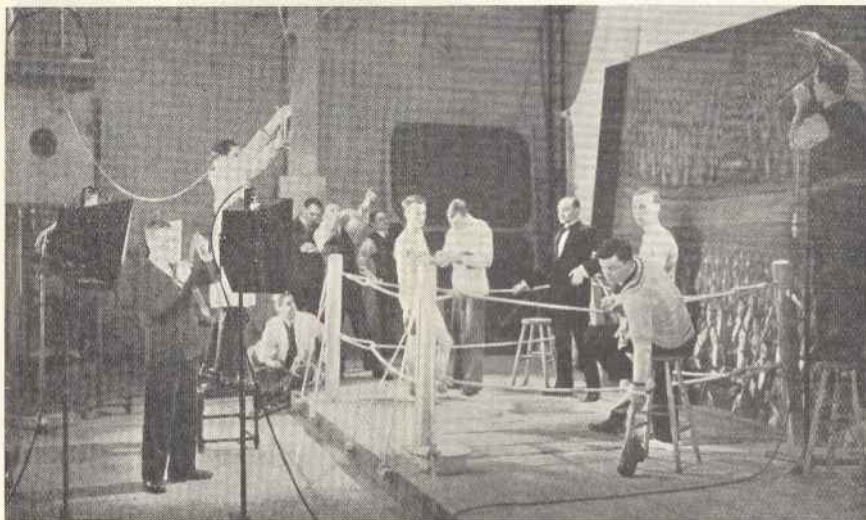
In both sets a number of pre-set controls enable the apparatus to be adjusted for the reception of all transmissions using from 100 to 500 lines and from 12 to 50 pictures per second. Both sets will be supplied with an aerial, consisting of a stiff wire about 10 ft. long, fitted with a connecting table. This aerial, it is said, should be mounted vertically on the roof of the house for best results, but may also be mounted on the side of the house or even used indoors.

It is said that no synchronising adjustments have to be made when tuning in a picture, that no danger attends the use of the sets, and that the designs have been thoroughly tested for reliability and long life, and, consequently, no service troubles are anticipated.

A life comparable to that of radio valves is claimed for the cathode ray tubes, but no price is yet available. It is stated that the £50 receiver is not likely to become obsolete within three years, and that the £80 model will be useful for at least four years.

Further technical details of the receivers are not yet available.

The programme presented at the demonstration was received from the Crystal Palace on wavelengths of 7 metres for vision and 8.5 metres for sound. The picture on the £80 instrument was clearly visible



Behind the scenes during the televising, by the intermediate film method, of a boxing match staged at Baird's Crystal Palace studios. How vision and sound are received on short-wave 180-line "production" televisors is described below.

from all parts of a large room while the normal electric lighting was on. The smaller sepia and cream picture was clear at closer range and it is probable that the improved black-and-white picture, which will be provided in the production receiver, will be entirely suitable for use in normal lighting.

Naturally, greater apparent brilliance is obtained in a darkened room, and the greater part of the demonstration was carried out under these conditions.

The picture received utilised 180-line scanning repeated 25 times a second. It remained rock steady and was entirely free of flicker. The line construction of the picture and the motion of the scanning spot were still perceptible, however.

The quality of the picture and freedom from distortion depended considerably on the nature of the transmission.

The programme commenced with introductory remarks by an announcer and a display of hats and hair-dressing styles by Miss Alma Taylor. These were head and shoulder direct television "shots" by means of spot-light scanning.

### RECOGNISABLE

Mr. Barton Chapple, the announcer, was immediately recognisable, and the details of Miss Taylor's hats were very clear. The line "make-up" of the picture was evident and there was slight vertical compression.

The next items were an exterior scene of horses jumping on the terrace at Crystal Palace, and an interior scene of a boxing match staged in a studio. Both these scenes were televised by the intermediate film method.

With this system the scene is "shot" by an ordinary kinema camera and the film is developed and scanned by the television transmitter, all within approximately 30 seconds. As, of course, the "lookers-in" see the scene 30 seconds after it actually happened, the sound is also delayed by recording it on the film and then reconvert it to electrical impulses simultaneously with the scanning of the picture.

During the exterior "shot" the famous Crystal Palace statuary was recognisable and the horses, which appeared to be some 100 yards from the camera, were seen clearly, but were reduced almost to silhouettes.

Roughness in scanning was particularly noticeable in this scene, but the boxing match, on the other hand, was remarkably free of

defects and possessed high entertainment value.

Finally, the transmission and reception of films was demonstrated. Excerpts from "I Was a Spy," "Jack, Ahoy!" and other Gaumont-British films, were presented. Apart from the characteristics already mentioned, the pictures suffered from lack of brilliance and lack of detail in crowd scenes.

Throughout the demonstration there was practically no interference by static with either vision or sound reception.

It was stated that tests had proved similar results to be obtainable within 35 miles radius of the Crystal Palace.

### STUDIO ARRANGEMENT

At the Crystal Palace an ingenious arrangement of studios and apparatus enables all types of programme to be broadcast in rapid succession. A tele-cine camera for intermediate-film system broadcasts is installed in a room which has windows giving on to three studios on three of its sides and, on the fourth, a window giving on to the terrace. Above the central room is a control room, also with windows looking into the studios, and provided with full control and monitoring gear.

Number 1 studio measures 60 ft. by 40 ft. and studio 2 is 50 ft. by 30 ft. and is provided with kinema-projection apparatus so that animated background scenes can be thrown on a screen behind the actors. Studio 3 is 40 ft. by 20 ft.

Separate from these is the studio for direct television by means of spot-light scanning.

In a "tele-cine room" are two projectors for the transmission of talking films. One employs a 180-line disc scanner and the other utilises an electron scanner.

### 360-LINE RESULTS

Apart from the film projector, the latter has no moving parts, and the definition is immediately adjustable between 100 and 500 lines at 25 pictures a second.

This electron scanner is the latest development, and is expected to bring about very considerable changes at the transmission end as regards both direct indoor and outdoor television and the transmission of films.

A 360-line picture obtained from film by this system was seen. The detail was high, and a trace of "scanning motion" effect was practically the only point which could be criticised.





Over 200 members of the staff of Britannia Batteries, Ltd., attended the firm's fifth annual whist drive and dance at the Works Dance Hall, Redditch, on Friday, January 25.

## N.R.E.A. Adopts its Constitution

### Employment Bureau a Success

Memorandum and articles of association prepared by the working committee were unanimously adopted at a meeting of about 150 members of the National Radio Engineers' Association, held at King George's Hall, Caroline Street, London, on Wednesday evening.

The principal objects of the Association are stated in the memorandum to be: To promote the science and practice of radio engineering and to improve the knowledge and status of radio engineers; to provide educational facilities and examinations and certificates of qualification; to facilitate the interchange of ideas and to assist its members in finding suitable employment and employers in finding suitable engineers.

It is also stated that the Association shall not support or endeavour to impose any regulation, restriction or condition which, if an object of the Association, would make it a trade union.

The Association is to be registered under the Companies Act and members' liability will be limited to 5s.

An entrance fee of 5s. and an annual subscription of 15s. has been decided upon.

The meeting elected W. MacLanachan chairman; J. Gibson (manufacturers' service), vice-chairman; N. de Gruchy (retail service), secretary; and H. King, treasurer. The following were elected to the Council: W. Merrington and H. Harry Morgan (both makers' service); H. M. Watson and C. Palmer (retail service); T. D. Baker (trade service).

Mr. de Gruchy urged those present to "go out and get 10 members each," and said he was expecting meetings to be held at Bristol, Plymouth, Leicester, Blackpool, Newcastle and Glasgow.

Employers, he said, found it hard to discover which engineers were competent and which were not. They were ready to pay for good men, and already the Association's employment bureau was proving of real help to makers.

A proposal that free-lance service men should be eligible for membership was rejected.

### PHILCO SERVICE ASSOCIATION

In an endeavour to raise the status of service dealers and to keep this work in their hands, Philco is launching a service organisation to be known as Radio Manufacturers' Service.

Membership is to be open to all dealers who have service equipment, and is not exclusive to Philco accredited dealers, while the scheme is to embrace all makes of sets.

Application forms for membership are being prepared and from these Philco is to decide whether a dealer is fitted to become a member of R.M.S.

Radio Manufacturers' Service is then to be widely advertised by Philco.

No fees are to be charged for membership.

## L.C.C. GIVES MORE SUPPORT TO MUSIC

A decision has been made to extend the support which the London County Council gives to musical education, and monetary grants will be made to all school music associations.

In addition, the grants given to schools of music such as the Guildhall will be restored to their former level.

The additional money will be expended in giving "appreciation" concerts during school hours at which professional musicians will play and their work will be explained by a lecturer.

There are now 25 school music associations, or one for every district in London. These are run on the basis of co-operation instead of competition, public concerts being given by the children drawn from each of the schools in the area.

They were founded about fourteen years ago, and some six years ago a grant of £50 was made by the L.C.C. to Battersea, the pioneers, and Hackney, for the running of appreciation concerts.

This experiment was successful, and the grant for this year is £450.

Plans are now being discussed for the greatest children's musical festival ever held. It is hoped to hold this at the Albert Hall this autumn, when choirs of nearly 2,000 children will perform.

## MANCHESTER CLUB

### CABLE MAKER TALKS ABOUT METRIC SYSTEM

Mr. Harry Allcock, the export manager of W. T. Glover and Co., cable manufacturers, of Trafford Park, Manchester, gave an address on "Metric Measures and Decimal Coinage" to members of the Manchester and District Radio Trades Luncheon Club at the Grand Hotel, Manchester, on Monday.

He explained that the radio industries were destined to play an important part in the process of bringing the peoples of the world into closer contact and breaking down the insular barriers which at present retard development of international trading.

Every country, when discarding its own national system, had selected the metric system, and no country having once adopted it had ever abandoned it.

Owing to the Jubilee celebrations in May, it was decided to hold the May meeting of the Luncheon Club on the second Monday in the month, May 13.

## NEWCASTLE WHOLESALEERS

A special meeting of the wholesalers in Newcastle, arranged by Reginald E. Fabian, W.E. representative for the North-East Coast, took place on Friday at the Central Exchange Hotel.

This was a result of suggestions by many local factors that such a meeting might be instrumental in forming a local association, whereby it was felt that factors would greatly benefit.

## CABARET BILL FOR R.I.G.S. DANCE

### SYDNEY LIPTON'S BAND TO LEAD HAPPY FEET

The Carlisle Cousins, the Western Brothers and John Tilley have been engaged for the Radio Industry Golfing Society's dance at Grosvenor House on Friday, March 8.

Members of the Society are reminded that applications for tickets should be made to the honorary secretary, 29, Bedford Street, Strand, London, W.C.2, immediately. Sydney Lipton and his band have been engaged for the evening.

It should be noted that applications for tickets from non-members cannot be received. Non-members can only attend as guests of members of the Society.

Tickets are now available, price one guinea each.

## LANCS R.I.G.S. ANNUAL MEETING

### ELECTION OF OFFICERS

About 30 members of the Lancashire and Cheshire Radio Industry Golfing Society attended the annual meeting held at the Grand Hotel, Manchester, on January 31.

On the recommendation of the Committee, it was decided that it would be to the advantage of the Society if the regulation covering the retirement of the Committee should not operate during this, the first year of the Club's existence, as they would lose the services of three valuable committee members. As the result of the appointment of Messrs. J. D. Morrison and C. P. Beardsall as officers, there were, however, two vacancies on the Committee, which were filled by the election of Mr. M. H. Carr and Mr. F. Paulson.

Mr. Vincent Z. de Ferranti was elected president; Mr. J. D. Morrison, captain; Mr. C. P. Beardsall, vice-captain; Mr. Y. W. P. Evans, "Nairana," St. Annes Road, Blackpool, hon. treasurer; and Mr. R. Hollingdrake, of 65, Prince's Street, Stockport, secretary. The constitution of the committee for the ensuing year is as follows: Messrs. L. E. Birchall, J. E. Kemp, J. Hall, C. Gadd, J. McCrea, C. S. Warde, H. Nightingale, M. H. Carr, and F. Paulson.

Following the business meeting there was a talk by Mr. Duncan, the eminent professional golfer, of the Mere Golf and Country Club, Knutsford Hall.

The Society has about 70 members.

## MORE M.T.B.S. ANNUITANTS

The annual meeting of the Music Trades' Benevolent Society is to be held at 4 p.m. on Friday, March 22, at 64, Gresham Street, London, E.C.2.

Following the meeting the Board of Management has decided to hold another election for annuitants, when ten further candidates will be elected. This will raise the total number of annuitants to 96.

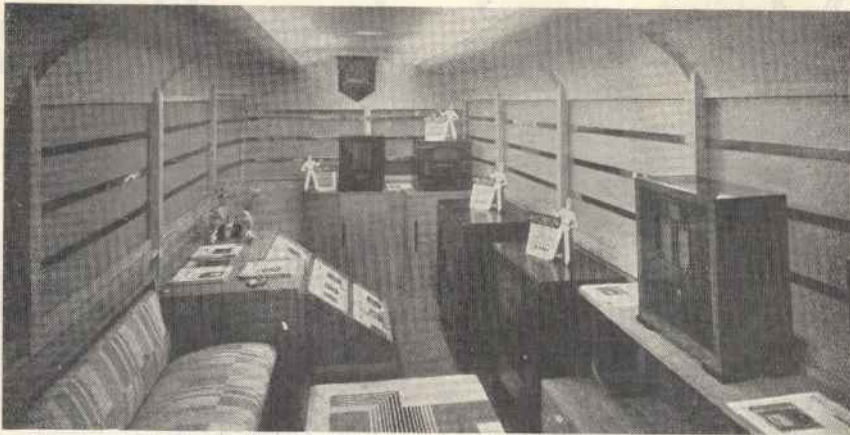
The board earnestly appeals to all employers and employees in every branch of the music industry to rally round the society.

## NOTTS LUNCH CLUB

Mrs. Vera Woodward will speak at the next meeting of the Notts Lunch Club on Wednesday at the Black Boy Hotel, Nottingham, on "The Influence of Radio on Women."

Ald. E. Huntsman, chairman of Nottingham Electricity Committee, is to be the guest of honour at the Club's annual dinner at the Victoria Station Hotel on February 20.





The interior of the Marconiphone mobile showroom.

**MOBILE SHOWROOM NOW ON ROAD**

**MARCONIPHONE COACH TURNED INTO EXHIBITION !**

This week the Marconiphone mobile showroom, the re-creation of the firm's famous P.A. coach, began its tour of the country. This huge vehicle is available to dealers at the fee of £5 a day, and forms a travelling exhibition to which dealers can invite their customers.

Starting this week in South London, the coach will run through Kent to East and West Sussex, various towns in Hampshire, up to Wilts, down to Dorset, from Dorset to Somerset; Somerset to North and South Devon, then on to numerous towns in South Wales. From there the coach will proceed north through Shropshire, Cheshire, Lancashire, into Yorkshire. The coach will spend the Easter holidays in Yorkshire.

**Striking Increase In Redfern's Rubber Profits**

The accounts of Redfern's Rubber Works, Ltd., for 1934 show a striking increase in profits compared with the previous year. Revenue for the year amounted to £25,720, and after allowing £7,194 for depreciation, net profit comes out at £18,526, an increase of £10,300 on 1933. As already announced, the dividend on the ordinary shares has been raised from 2½ per cent. to 7½ per cent., absorbing £6,000, leaving a balance of £6,960 to be carried forward.

**British Homophone.**

At the annual general meeting of the British Homophone Co., Ltd., on Thursday, Mr. W. D. Sternberg, the chairman, said negotiations regarding development proposals being investigated by the company were not far enough advanced for details to be given.

**WESTINGHOUSE TO CHANGE NAME**

**ANNOUNCEMENT AT A.G.M.**

The Westinghouse Brake and Signal Co., Ltd., is the new name of the Westinghouse Brake and Saxby Signal Co., Ltd.

The decision to change the name was taken at the annual meeting of the company on Tuesday.

Lord Southborough, the chairman, said that the Westinghouse Metal Rectifier continued to be of great value in an ever-widening field of engineering science. New fields for its use were constantly being discovered, some of the latest developments being in connection with plating plants, broadcast transmitters and Government telephone services.

Prospects of the company, he added, were decidedly encouraging.

**Part Exchange Price Booklet**

Five hundred different receivers of forty-four makes are listed in the "Part Exchange Resale Price Schedule" on pages 41, 42 and 45 of this issue.

The list is considerably larger than that published in July, 1934, and it has been brought right up to date.

The most complete schedule of its kind published in connection with the part exchange of radio sets, it is again available in booklet form.

The new booklets are waistcoat-pocket size, and will be published immediately.

The price is 1s., post free, but there is a privilege price of 6d. post free to subscribers, and 4d. per copy, post free, for quantities of one dozen and upwards.

**Philips P.A. at Empire Swimming Pool**

A formidable problem was tackled when Philips Lamps Amplifier Department undertook the design and installation of a P.A. system at the Empire Swimming Pool at Wembley.

The arena is constructed almost entirely of reinforced concrete and has a volume of some 4,500,000 cubic feet. Echo in the building was considerable; the arena has a reverberation period of 8½ seconds when empty, and about half this period when reasonably full.

Careful positioning of the amplifying apparatus was thus necessary to ensure not only intelligible speech but pleasing musical reproduction. After some weeks of intensive experiment, and the application of practically every known electro-acoustic principle, completely echo-free reproduction was obtained.

**Special Switching.**

In addition to installing the amplifier and speaker, special arrangements were made for switching the microphones and groups of the speakers.

The apparatus as finally installed incorporated thirteen of the Philips directional-flare type speakers on each side of the auditorium. These units were fixed to the ceiling, each about 4ft. away from the side walls. A similar number of the same type of speaker was slung on 10-ft. steel cords from each of the lamp-inspection holes in the roof.

In addition, six special baffles, on each of which were mounted five non-directional

loudspeaker units, were arranged in two banks of three baffles, one bank being secured to the concrete pillaring on each side of the arena.

A special super-power amplifier, incorporating a power stage dissipating 600 watts, is employed. The valve in this final stage is the type MA 4/600, which gives an undistorted output of approximately 130 watts. Safety precautions are made a special feature.

**Microphone Position.**

The microphone used for announcements is situated in the centre of the south side of the building on the arena level and immediately behind the centre baffle; the band-relay microphone is in the bandstand, which, for the skating, has been placed alongside the rink at the end opposite to the main entrance. When the band is relayed or gramophone music is being reproduced, only six baffle-column loudspeaker banks are used, and the whole of the rink is adequately covered. Incidentally, no "feedback" trouble is experienced.

When announcements to the crowd are made, the directional-flare type speakers are used, a special filter operating on the speech microphone to ensure clarity. In order to avoid the use of speakers in those parts of the building which are empty, it has been found necessary to make arrangements for the switching into circuit of speaker banks covering only the required areas.

**ORDER FORM**

To the Subscription Dept., "The Broadcaster," 29, Bedford Street, Strand, London, W.C.2.

Please send me, post free.....copies of the Part Exchange Resale Price Booklet to the address below.

For Broadcaster Subscribers Only. I enclose Postal Order at the special price of 6d. per copy.

For Non-Subscribers. I enclose Postal Order at the full price of 1s. per copy.

For Quantities. I enclose Postal Order at the quantity price of 4d. per copy which only applies to orders for one dozen or over.

(Cross out section not required.)

Business Name.....

Address.....

Date..... No. of P.O.....

## The Broadcaster & WIRELESS RETAILER

GENERAL OFFICES: 29, BEDFORD STREET, STRAND, LONDON, W.C.2.

Telephone: Temple Bar 2468 (39 lines)

Telegrams: Broadcaster,  
Southernwood, Rand, London

Editor: F. H. Robinson. Asst. Editor: John May.

## PART EXCHANGE

THE first 1935 edition of THE BROADCASTER'S Part Exchange Resale Price Schedule shows one definite tendency.

That is a decided and almost general levelling of the lowest and highest transactions which, with the courteous assistance of a number of dealers, we have been able to record.

The difference between prices obtained for similar sets in different parts of the country is still marked but by no means as acute.

To show the nature of the movements we will instance at random examples taken from the Aerodyne, Ekco, G.E.C., and Marconiphone lists.

The Aerodyne B2, a 1931/32 battery model, shows a lower average but a higher "maximum." This is probably due to the fact that more of the 1932 type are now in the second-hand market.

Levelling up is shown by the figure for AC3 1932/33 receiver.

### A.C. and D.C. Sets

The earlier Ekco models show little change in value.

Some of maximum prices have even increased, but almost without exception the average resale price obtained for an Ekco receiver has been slightly lower.

The Ekco RG5 is the only instrument which shows a definite increase in resale value.

Why, we cannot say. Possibly it may even be the result of a few "lucky deals."

The G.E.C. range shows figures of considerable interest. There are almost as many "ups" as "downs" in the average resale price figure.

The earlier sets naturally tend to show decreases, but dealers who have had part-exchange transactions with the later models report upward tendencies. Again, therefore, is the levelling up process readily apparent.

In the Marconiphone range we come across at once an interesting point. In the 1930/31 range were two sets, the AC3 (39) and the DC3 (39). A year ago the average resale price of the AC was £2 5s. 11d. To-day it is £2 16s. 8d. A year ago the average resale price of the DC3 was £2 6s. 8d., to-day it is £2 2s. 4d.

In both cases the maximum prices have increased, but the movement of average prices is in accord with what might be expected of AC and DC receivers—the resaleability of AC obviously being the greater.

# 'Museum' that Brings in the

RECENTLY I have been taking particular care to make myself known to the "music," as distinct from the "radio," side of our Industry—and the distinction is not intended to be invidious.

So on a Lancashire visit I took to heart the advice which many had given me, to "see Rushworth and Dreaper."

My visit was awkwardly timed for a Saturday morning, and so I was surprised to find that not only did I see Mr. W. Rushworth and Mr. James Rushworth, Mr. Hutchence, Mr. M. Gilbert, Mr. Philips, Mr. Fell, Mr. Millineux and Mr. Bickley, but they all seemed glad to see me and courteously willing to give me as much time as I appeared to require.

Saturday morning calls on retail premises do not, in my experience, usually produce that sort of welcome.

\* \* \*

Naturally, I saw the famous "museum," and, in fact, upset the carefully planned timetable which THE BROADCASTER'S Lancashire representative, Mr. Fred Gronback, had planned for me.

Still, my apology is that I didn't stay there nearly long enough—only just long enough to wish to go again.

\* \* \*

I was lucky enough to see practical proof of the value of the collection quite apart from its monetary worth.

A party of some dozen schoolgirls—average age 12 to 14, I imagine—was being conducted around.

And the rapt manner in which the youngsters followed the remarks of their guide was a sure sign of interest.

That was just one dozen potential buyers "caught young" who are not likely to forget their Rushworth visit.

\* \* \*

I went to Rushworth's partially to obtain information on one particular point. Everyone listened to my problem courteously, and each, in his different sphere, gave me the best of advice.

Then, finally, as I was about to leave, Mr. James Rushworth took me to the radio department and asked for my criticisms and suggestions.

I did my best—I wish my best had been better to return thanks for the kindly advice I had received.

There is an "air" about Rushworth's which, to be honest, I have yet to find elsewhere in radio or music retail establishments.

## Ferranti's Twenty-first Dinner

The twenty-first annual Ferranti dinner at the Midland Hotel, Manchester, on Friday of last week, was, of course, a special celebration.

Well over 400 were present, and the number of guests greater than ever.

Mr. and Mrs. V. Z. de Ferranti were both present, Mr. Ferranti being in the chair.

In his speech Mr. Ferranti gave some interesting facts about the company's progress.

They now employed, he said, ten times the number of workpeople they had in 1905, and the peak output of the works in the best month of the past year was twice the annual turnover of 1905.

There was a special celebration apart from the twenty-first birthday, Mr. Ferranti told us.

Major R. W. Cooper, O.B.E., M.C., a director of the company, was celebrating his



Mr. E. K. Balcombe Alba, managing director, receiving the good wishes of Mr. J. Golding, the sales director, when leaving London on Wednesday for a business visit to the United States. (See opposite page.)

silver jubilee with Ferranti's, but his record was broken by that of Mr. Crawley, who could claim 43 years' service.

Despite the fact that they seem to grow year by year, there is a delightfully informal air about these pleasant Ferranti evenings—and, knowing Mr. Vincent Ferranti, I think it will always remain.

## Mammoth Factory Growing

Mr. C. P. Beardsall gave me a quick "run round" the new Ferranti factory at Mostyn, only seven minutes by car from the Hollinwood Works.

I think it will prove one of the finest in the Trade when running.

At the moment just over 70,000 sq. ft. of floor space is devoted to radio at Hollinwood.

The new factory has 260,000 sq. ft.

The main "shop" is, I imagine, the largest possessed by any radio manufacturer.

It was previously a wire works, and is all on one floor.

The whole radio organisation office, accounts and factory is to go there, and it is expected that the plant will be in full swing in June.

\* \* \*

I shall be very interested to see it in working order, when, I am told, it will contain just 100 per cent. more plant and machinery than is now in use.

Next year's Ferranti output looks like being a big one.

All the rebuilding, by the way, is being done by Ferranti's own labour, and I am told that when Mr. Vincent Ferranti signed, in London, the documents completing the purchase, the fact was teleprinted to Hollinwood at 11.30 a.m., and by 2.30 p.m. on the same day over 200 workmen were busy on the alterations.

\* \* \*

I met Mr. F. M. Saddington at the Clarke's "Atlas" works on Monday and had a long



# Business Future

discussion both with him and Mr. V. Carlisle on the firm's new trading policy.

Mr. Saddington is, of course, "Murphy"-trained, and he absorbed a lot of ideas which we always associate with Murphy Radio.

He is very enthusiastic about the Atlas scheme and promises some startling results.

At the moment he is concentrating upon picking the right dealers for his "restricted" list.

## With the Manchester Lunch Club

Manchester's radio trade luncheon club made me very welcome at the Grand Hotel on Monday, where I was the guest of the Hon. Secretary, Mr. R. H. Ellis.

Mr. J. H. Farthing, the club's president, occupied the chair.

It was my first visit to the Manchester club—the only one in the country to which I had not been.

I was struck by two departures from the usual luncheon club procedure.

First of all, no discussion is permitted; and secondly, the minutes of the previous meeting are formally read and confirmed.

\* \* \*

I must admit that I personally found the veto on discussion a matter of disappointment.

The particular speaker (his remarks are reported elsewhere) was interesting and, I am sure, would have provoked a most interesting discussion.

Usually I have found that radio lunch-club talks have been more interesting than the speeches. Given a good speaker, they *should* be, because of the divergence of the views expressed.

As a guest who had a most pleasurable time, might I, with all due respect, suggest to Manchester that they try out a discussion at one meeting?

\* \* \*

Pertrix held their fifth annual whist drive and dance at their works' hall, Redditch, on Friday, January 25.

Over 200 members of the staff, including the Midland district managers and representatives, and their friends, attended. Mr. John

## STAFF NEWS

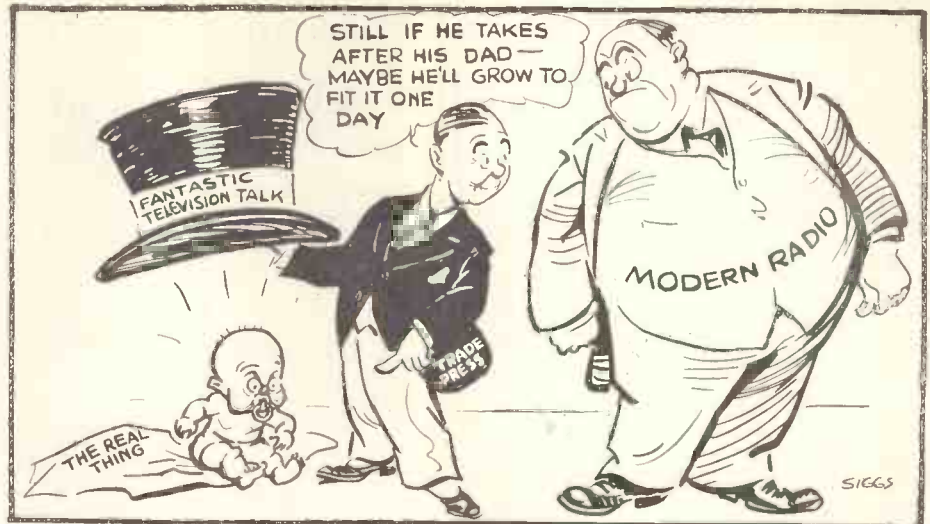
A. Raymond Parker, Ass.I.R.E., is representing Ferranti, Ltd., in Kent and Sussex.

Colin Derham has joined the Northern Steel and Hardware Co., Ltd., of Manchester, and will represent them in Southport, Blackpool, Fleetwood, Lancaster, Barrow, and the Lake District.

A. R. Warrilow has joined the staff of the Electrical and Radio Publicity Service, of Albion House, 59, New Oxford Street, London, W.C.1.

H. Davey Smith has been appointed to cover Notts, Lincs, Leics, and Derbyshire for Portadyne Radio, Ltd.

R. A. Bargeat, West Country representative of Portadyne, is now at 21, New North Road, Exeter.



A PROMISING YOUNGSTER.

Hanchard Goodwin, and members of the executive staff were also present.

Mrs. Hanchard Goodwin distributed the prizes, and Messrs. A. G. Graham and H. A. Lester were dance M.C.s.

Music was provided by E. G. Freeman's well-known orchestra, and dancing continued until 2 a.m.

\* \* \*

Portadyne's social club is planning another dance to be held on March 1 at the King's Head Hotel, Acton.

I understand the directors of the company and members of the executive and outside staff will be present in force, and that a cordial invitation is being extended to the firm's retail friends.

\* \* \*

Mr. E. K. Balcombe, Alba's managing director, left on the *Berengaria* on Wednesday for a visit to the States.

He is going to visit the Crosley factory and discuss refrigeration plans for the coming season. Alba, of course, are the agents here for Crosley Shelvador refrigerators.

It seems that Mr. Balcombe will get a cold reception—and be delighted.

\* \* \*

Last week the finals of the great Cossor billiards and snooker tournament were held. Some hundreds of the Cossor staff were present, including Mr. J. S. Mitchell, sales superintendent, and the guest of honour was Tom Newman, the famous billiards champion.

Mr. Blackwell became Cossor champion for 1934-35 by defeating Mr. Golder in the billiards game, and Mr. F. W. Taylor in the snooker.

\* \* \*

Mr. S. A. Hurren made his first public speech as head of the music and radio departments of the Northern Polytechnic at the Old Boys Association dance on Saturday.

He congratulated the "boys" on being in the music trade. Having stuck it during the bad period, he said, they were now reaping the fruits of their perseverance. They were very fortunate in being in the Trade now that prosperous times seemed to be coming along.

## C.O. Birtles, Murphy "Champion"

C. O. Birtles, Ltd., Sheffield, held a jolly social evening at the Wagon and Horses Hotel, on Thursday, January 31.

The firm's branches were well represented in a company numbering upwards of 70. Supper was served in an interval between games and dancing.

Mr. Birtles was a happy host, and the good spirit existing between him and his employees was well in evidence.

Changing the subject, I take this opportunity to congratulate Mr. Birtles on his success in heading the list of sales of Murphy receivers with a total of £6,235 10s.

The next most successful Murphy dealer was a Derbyshire man who sold receivers to the value of £5,261 5s.

\* \* \*

My weekly half-guinea for a story I award to Mr. I. A. Kelly, of Bishop Bros., the Wellington, Somerset, retailers.

"In the early days," says Mr. Kelly, "I demonstrated a set to a 'dear old soul' one Sunday morning. I thought the service would appeal to the good lady, and, indeed, it did.

"Everything went well until the weather forecast, when, all of a sudden, the beaming smiles left the lady's face. Was it because the forecast was unfavorable, I wondered? But the weather was to be good.

"After looking at me several times with an expression of annoyance and surprise, my prospective customer burst out: 'Well! This is a nice demonstration, I must say! The thing's running down after only a few minutes.'

"The announcer was giving the forecast at dictation speed!"

*The Speaker*

J. B. Allaway, of 613, Welbeck Road, Newcastle, has been appointed to the County Durham area by Itonia, and will operate from the Newcastle depot. Previously he was with H. C. Rawson, of Newcastle, and before that Mr. Allaway travelled the Western States of America with radio and sports goods for the Hudson Bay Co.

A. E. Potton, for many years G.E.C.'s radio manager for South Wales and the West Country, has been transferred from Cardiff to a position at the firm's London headquarters.

R. G. E. Mays, of Swansea, has taken over Mr. Potton's duties. Mr. Mays has been at Swansea six years, and previously was at the Coventry factory.

A. Hoban, A.M.I.R.E., late factory manager of the Gramophone Co., Ltd., has been appointed works manager of R.A.P., Ltd., of Thames Ditton. Mr. Hoban was with H.M.V. five years and organised their factories in Italy and Turkey.



## COMMERCIAL NEWS

A meeting of creditors of **Novo Radio Electric, Ltd.**, will be held at the offices of Keenlyside and Forster, Lloyds Bank Chambers, Collingwood Street, Newcastle-upon-Tyne, on Friday, February 8, at 4 p.m.

Notice is given that the following companies have been struck off the Register and dissolved: **Associated Schools of Music and Recreation, Ltd.**, and the **Robertson Murdoch Music Co., Ltd.**

### Receiving Orders and Adjudications

**Edgar Howitt**, residing and carrying on business as **Howard and Co.**, at 368, South Road, Walkley, Sheffield, Yorks. Petition filed and orders dated January 28; on debtor's petition.

**Clifford Moon**, residing and carrying on business at 24, Market Street, Heanor, Derbyshire. Petition filed and orders dated February 1; on debtor's petition.

### Receiving Order, First Meeting, Public Examination and Adjudication

**Harry Gallie**, 103, Weyhill Road, Andover, and carrying on business at Tidworth Market, Tidworth, both in the county of Hants. Petition filed and orders dated January 31; on debtor's petition. First meeting February 12, 11.30 a.m., at the Official Receiver's office, 12, Rolleston Street; public examination March 7, 2 p.m., at the Guildhall, both Salisbury. Order for summary administration dated January 31.

### Receiving Order, First Meeting and Public Examination

**Eric George Williams**, 49, Rake Hill, Burntwood, near Lichfield, and carrying on business at 37, High Street, Brownhills, near Walsall, both in the county of Staffs. Order dated January 26 and petition filed January 5. First meeting February 14, 11 a.m., at the Official Receiver's office, 159, Great Charles Street, Birmingham; public examination February 28, 11 a.m., at the Court House, Lichfield Street, Walsall.

### First Meetings and Public Examinations

**Edgar Howitt**, residing and carrying on business as **Howard and Co.** at 368, South Road, Walkley, Sheffield, Yorkshire. First meeting February 13, 12 noon, at the Official Receiver's office, Figtree Lane; public examination February 21, 2 p.m., at the County Court Hall, Bank Street, both Sheffield, 1. Order for summary administration dated February 2.

**William Andrew Jolly**, 76, Cedars Avenue, Radford, and trading as the **Globe Equipment Co.**, at 36, Foleshill Road, both Coventry. First meeting February 8, 3.30 p.m., at the Official Receiver's office. 9-11, High Street; public examination March 6, 2 p.m., at the County Hall, both Coventry.

### Adjudication

**Alexander Llewellyn Tebbutt**, 66, Union Street, Wednesbury, Staffs, and lately carrying on business at 75, High Street, Brierley Hill, Staffs, and 26, New Street, Dudley, Worcestershire. Petition filed January 7 and order dated January 28.

### Release of Trustees

**George William Corshy**, 17, Hows Close, Uxbridge, Middlesex, lately trading as **Corshy's Piano Stores** at 1, Wellington Street, Woolwich, and 81, High Street, Eltham, both Kent. Trustee, John Ebenezer Webber, 64, Gresham Street, London, E.C.2; released January 26.

**Sydney Colbert**, residing and carrying on business at 350, Kirkstall Road, Leeds, Yorks. Trustee, Harry Clifford Bowling, 24, Bond Street, Leeds; released January 23.

**Thomas Ward**, 72, Fairfield Road and carrying on business at 7b, Richmond Street, both in Bridlington, Yorks, and formerly residing and trading at 15, Princess Street, Bridlington. Trustee, John Stanley Snowball, Bank Chambers, Scarborough; released January 29.

### Intended Dividend

**Leonard John Smith**, residing at 16, George Street and lately carrying on business at 3, Lower King's Road, both Berkhamsted, Hertfordshire. Proofs by February 19 to John Langman Poland, 29, Russell Square, London, W.C.1.

### Dividends Declared

**Albert Leach**, 79, Colham Avenue, Yiewsley, Middlesex, lately residing at 16, Chevri Terrace and carrying on business at 4, Market Street, both in Otley, Yorkshire. First and final of 1s. per £, payable February 20 at the Official Receiver's office, 24, Bond Street, Leeds.

**Agnes Stevens**, 23, Silver Street, Gainsborough, Lincolnshire. First of 5s. per £, payable February 8 at the office of the trustee, Lloyds Bank Chambers, St. Benedict's Square, Lincoln.

## 'WARE THESE RAMPS!

### Customers in "Coming" Districts

ALL sorts of "smart" dodges are being worked in connection with the many new housing schemes that are being started up on all sides.

Some are aimed at tradesmen who have an eye on the "coming districts" from the new-customer point of view.

\* \* \*

A genuine scheme often met with is for *bona-fide* printing firms to have this arrangement with the builders concerned—they prepare booklets and guides boosting the new estate. Advertisements are sought from traders, and copies of the guides are circulated among incoming tenants. This may be a very useful service, for, sometimes, shop premises are the last to go up, and adjacent traders are helped to get the business.

But there are not a few catch-penny offers, where the scope and nature of the constructional work are much exaggerated.

**James Henderson**, 1, Cambridge Avenue and carrying on business at 17a, Park Avenue, both Whitley Bay, Northumberland. First and final of 2s. 7½d. per £, payable February 11 at the Official Receiver's office, 81, St. Mary's Place, Newcastle-upon-Tyne.

**Lucy Thornton**, 17, High Street, and trading as **Thornton and Boothroyd** at 94, Commercial Street, both Brighouse, Yorks. First and final of 2s. 7½d. per £, payable February 12 at the Official Receiver's office, Halfield Chambers, 71, Manningham Lane, Bradford.

### Release of Receiver

**Colwell Insulating Co., Ltd.**, formerly David J. Patton, Ltd., 45, Colwell Road, London, S.E.—**H. J. R. Harding**, of "Lansdown," Foley Road, Claygate, ceased to act as Receiver and Manager on January 10.

### Appointment of Receiver

**Clang, Ltd.**, Crown Yard, Cricklewood, London, N.W.—**R. A. Rodgers**, of Dominion Buildings, South Place, London, E.C., was appointed Receiver and Manager on January 25 under powers contained in debenture dated January 27, 1934.

### Release of Liquidator

**B. and W. Radio, Ltd.**, Avenue Works, Hanover Park, Peckham, London S.E.15. Liquidator, John Barwick Thompson, 33, Carey Street, Lincoln's Inn, London, W.C.2; released January 31.

### Increases of Capital

**Forbes Plastic Mouldings, Ltd.**, Bridge Works, Stamford Bridge (West), Yorks.—The nominal capital has been increased by the addition of £4,000 in £1 shares beyond the registered capital of £2,000.

**Universal Signature Tunes, Ltd.**, 11, Park Street, Lytham, Lytham St. Annes.—The nominal capital has been increased by the addition of £5,000 in £1 ordinary shares beyond the registered capital of £1,000.

**Varsity Eliminator Co., Ltd.**, Tower Works, Rectory Grove, Old Town, Clapham, London, S.W.—The nominal capital has been increased by the addition of £300 in £1 ordinary shares beyond the registered capital of £100.

### Mortgages and Charges

**Limit Engineering Co., Ltd.**—Debenture, charged on deeds and documents relating to 15-29, Windsor Street, Essex Road, London, N., and the company's undertaking and other property, present and future, including uncalled capital, dated January 22, to secure all moneys due or to become due from the company to Lloyds Bank, Ltd.

**Whitaker Electric Co., Ltd.**, 24, Percy Street, London, W.—Debenture dated January 5 to secure £400, charged on the company's undertaking and property, present and future, including uncalled capital.

**Wirral Electric, Ltd.**, 52, Town Lane, Rock Ferry, Birkenhead.—Particulars filed of £100 debentures authorised January 9, charged on the company's property, present and future, including uncalled capital, the amount of the present issue being £40.

The canvasser talks airily of "thousands of houses" to come, when the actual fact is that, even though a fairly large number are eventually contemplated, the builders concerned have limited finances, and it may be years before more than a few dozens show up.

See that the real position is set out in black and white on any order-form signed, for it is no use telling a judge that the person who called on you "said so and so," and expecting to get back the money you have paid over for space.

\* \* \*

In any event, there is no reason why the up-to-date dealer whose premises are located within a reasonable distance of a growing new estate should not do his own direct advertising, either by calling in person upon the tenants as they take over, or by sending them particulars of his stock.

**R. A. P., Ltd.**, 13, Crook Road, East Molesley.—Issue of January 30 of £100 debentures, part of a series already registered.

**Ultra Electric, Ltd.**, Erskine Road, Chalk Farm, London, N.W.3.—Debenture, charged on the company's undertaking and property, present and future, including uncalled capital, dated January 23, to secure all moneys due or to become due from the company to Barclays Bank, Ltd.

**Varsity Eliminator Co., Ltd.**, Tower Works, Rectory Grove, Old Town, London, S.W.—Debenture, dated January 28, to secure £200, charged on the company's undertaking and property, present and future, including uncalled capital.

### Satisfactions

**Hill and Co. (Radio), Ltd.**, 874, Christchurch Road, Bournemouth.—Satisfaction to the extent of £100 on November 8, 1934, of debentures authorised June 23, 1932, and registered June 29, 1932, securing £1,000. Notice filed January 25, 1935.

**Varsity Eliminator Co., Ltd.**, Tower Works, Rectory Grove, Old Town, London, S.W.—Satisfaction to the extent of £100 on January 25, of debentures authorised September 25, and registered September 26, 1934. According to the register of mortgages, the debentures registered September 26, originally secured £1,000.

**C. F. Struthers, Ltd.**, formerly Struthers, Markham, Ltd., 80, Barnsley Street, Hull.—Satisfaction to the extent of £1,500 on January 12 of debenture dated April 19, 1932, and charge dated December 2, 1932, and registered April 23, 1932, and December 12, 1932, respectively.

### Winding-Up Order

**Electra (Leeds), Ltd.**, 137, Regent Street, London, W.1.—Presentation of petition January 3; order dated January 25.

### Private Arrangement

**Mrs. S. Barnard**, trading as **Philip Barnard and Co.**, 42, Maiden Lane, Southampton Street, Strand, London, W.C.2.—A meeting of creditors was held recently at the above address, when Mr. H. Lever, C.A., presided.

A statement of affairs was submitted which disclosed liabilities of £889 17s. 11d., of which £627 5s. 8d. was due to the trade; there were loan creditors for £216 17s. 5d. and sundry creditors' claims amounted to £45 14s. 10d. The assets consisted of cash at bank, £4 1s. 11d.; sundry debtors, good, £91 2s. 7d., estimated to realise £85; stock of wireless parts and electrical equipment, cost, £225, put down at £90; and furniture and fittings, cost £57, expected to produce £12, making total assets of £191 1s. 11d., from which had to be deducted £68 8s. 6d. for preferential claims, leaving net assets of £122 13s. 5d., or a deficiency of £767 4s. 6d.

It was decided that the matter should be dealt with under the deed of assignment already executed to Mr. H. Lever, as trustee.

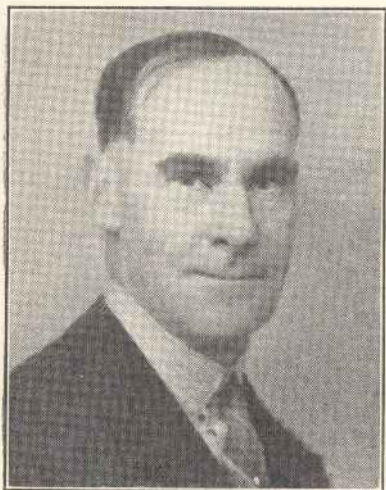
### Voluntary Liquidation

**Modern Appliance Distributing Co., Ltd.**, Manchester.—At the statutory meeting of creditors a statement of affairs was submitted which showed ranking liabilities of £173 13s. 7d. After allowing £22 4s. 10d. for preferential claims the net assets were £107 17s. 1d., or a deficiency of £65 16s. 6d.

(Continued on opposite page.)



## Radio Executives



JOHN HIRST

Managing Director of Hirst, Ibbetson & Taylor, Ltd.

(Continued from opposite page.)

The issued capital was £100, and the deficiency as regarded the shareholders was £165 16s. 6d.

It was reported that the company was formed in September, 1934, with the object of selling electrical equipment and the wiring of private houses and shops on its own hire-purchase plan, with the support of a financial trust house. After the company was formed, however, the financial house did not support the scheme. This compelled them to abandon the proposed programme of house and shop wiring. In addition, it meant that, instead of being in a position to have approved hire-purchase agreements discounted for cash, the company had to depend on manufacturers' H.P. schemes for their electrical equipment and receivers, with consequent book credits in place of cash. They were unable to obtain an efficient outside selling organisation.

Recently a creditor commenced proceedings against the company, and it was decided that voluntary liquidation should take place.

A resolution was passed confirming the voluntary liquidation, with Mr. A. T. Eaves, of Harry L. Price and Co., 47, Mosley Street, Manchester, as liquidator.

**Trojan (Manchester), Ltd.**, Alexandra Road, Manchester.—The creditors met recently at Manchester, when Mr. H. G. Jenkinson, one of the directors, occupied the chair. A statement of affairs was submitted which showed ranking liabilities of £8,606 10s. 2d., made up as follows: trade creditors, £7,306 10s. 2d.; cash claims, £77 5s.; bankers, £722 15s.; and contingent liabilities under H.P. agreements, £500. The assets comprised: stock in trade, £3,449, estimated to realise £1,027 6s. 2d.; book debts, £2,255 17s.; cash in hand, £32 6s. 7d.; furniture, fixtures and fittings, £75; and motor car, £20; making a total of £3,417 9s. 9d. After allowing £85 4s. for preferential claims, the net assets were £3,332 5s. 9d., or a deficiency, so far as the creditors were concerned, of £5,273 4s. 5d.

During the year to June, 1932, the turnover was £13,345, with a net loss of £1,169, and in the following year there was a net profit of £29 on a turnover of £15,194. During the eight months to February, 1934, the turnover was £10,944, with a net loss of £1,342. The turnover for the ten months to December 31 last was £15,850, and there was an estimated net loss sustained of something like £1,800.

In February, 1934, owing to the difficult financial position, the company met eight principal creditors, who agreed to grant a moratorium. At that time it was considered that satisfactory progress was being made, the radio business being profitable. Certain cinema contracts had been entered into which had resulted in substantial losses being incurred.

The deficiency, as regarded the shareholders, was £11,023, which was explained by the losses sustained on the trading and the depreciation written off the assets in the statement of affairs.

It was decided that the voluntary liquidation of the company should be continued with Mr. W. S. Berry, of A. G. Deakin and Co., C.A., Manchester, as liquidator, together with a committee consisting of Mr. A. T. Eaves, and the representatives of Electrical and Musical Industries, Ltd.; Duwes, Ltd.; British Electrical Resistance Co., Ltd.; and the Hewitt Electric Co., Ltd.

Principal creditors include:—British Electric Resistance Co., Ltd., £341; British Insulated Cables, Ltd., £101; Chloride Electric Storage Co., Ltd., £120; Columbia Gramophone Co., £245; Dulcetto Polyphon Co., Ltd., £105; Duwes, Ltd., £433;

## COUNTY COURT JUDGMENTS

The following list of judgments given in the County Courts of England and Wales relating to the Radio Industry has been furnished by the Registry of County Court Judgments.

Only judgments of, or exceeding, £10 are recorded on the register, and no differentiation is made between actions for debts and disputed cases. In certain instances the judgment is entered against a defendant acting in a representative capacity.

The appearance of a judgment in this list does not necessarily indicate that the amount still remains unpaid, and it should be understood that some of the judgments may have since been settled or paid. The name of the court is in brackets.

**Adams, Henry**, 1, Pennant Street, Ebbw Vale, Mon. (Mayor's and City of London.) £12 14s. 7d. January 2.

**Avon Valley Radio Community Service and Electrical Installation Contractors** (a firm), Cymmer, Port Talbot, Glamorgan. (Westminster.) £13 8s. 10d. December 21.

**Brickell, G.**, Salisbury Street, Blandford, Dorset. (Bradford.) £11 1s. 9d. January 7.

**Burman, F.**, 215, Bitterne Road, Southampton. (Bournemouth.) £30 4s. 5d. January 2.

**Curtis, Henry**, 117, High Street, Dovercourt, Essex. (Willesden.) £18 8s. 3d. December 19.

**Day, R. E.**, 30, Sydney Road, Blackley, Manchester. (Manchester.) £10 1s. 6d. January 10.

**Denslow, A. S.**, Market Square, Crewkerne, Somerset. (Birmingham.) £21 7s. 11d. December 19.

**Elburn, S. F.**, 56, Market Street, Watford, Herts. (Westminster.) £14 6s. 6d. December 31.

**Freeman**, 47, St. John Street, Tunbridge Wells, Kent. (Shoreditch.) £1d 17s. 9d. December 31.

**Garner, H. A.**, 108, Wellingborough Road, Northampton. (Cambridge.) £15 11s. 1d. January 5.

**Gladiator Welder Sets Co.** (a firm), 18, Leicester Road, Sale, Manchester. (Edmonton and Wood Green.) £21 11s. 2d. December 18.

**Hackney Radio and Electrical Supplies** (a firm), 210, Mare Street, London, E.8. (Birmingham.) £11 8s. 10d. December 31.

**Heath, F.**, 39, Handysides Arcade, Percy Street, Newcastle-upon-Tyne. (Newcastle-upon-Tyne.) £18 15s. 4d. January 5.

**Pauley, G.**, Frampton Way, Totton, Hants. (Southampton.) £11 11s. January 7.

**Rowbotham**, trading as **Rowes Radio and Electrical Stores**, 280, High Street, Sutton, Surrey. (Shoreditch.) £17 10s. 10d. January 1.

**Slarin, L.**, 71, Gakley Square, Mornington Crescent, London, N.W. (Clerkenwell.) £28 2s. 8d. December 19.

**Van-Islese, J. P.**, 31, Clarendon Road, Whalley Range, Manchester. (Southampton.) £15 6s. 5d. January 8.

**Wards Radio Stores** (a firm), Railway Terrace, Rugby, Warwick. (Birmingham.) £16 14s. 7d. December 31.

**Williams, D.**, 55, High Street, Abertridwr, Glam. (Edmonton and Wood Green.) £14 13s. 9d. December 11.

Ensign, Ltd., £241; Fielding and Co., £175; Falcon Supply Co., £100; Gramophone Co., Ltd., £264; General Electric Co., Ltd., £1,555; Hewitt Electric Co., Ltd., £404; Jackson and Co., Ltd., £304; Kolster-Brandes, Ltd., £115; G. A. Nicholas and Co., £105; Philco Distributors, £247; John Shaw and Sons, £265; Tudor Accumulators, Ltd., £134; Austin Walters and Son, Ltd., £277; Wholesale Fittings Co., Ltd., £103; and E. G. White, £309.

## Bankruptcies

**Ian Arthur Grainger Young and Bernard George Wood**, trading as the **National Radio Supplies**, New Arcade Buildings, Market Place, Burton-on-Trent, Staffordshire, lately carrying on business at New Arcade Buildings, Market Place, Burton-on-Trent, and Midland Road, Derby.

The public examination of Bernard George Wood, partner in the above firm, was held recently at the Court House, Station Street, Burton-on-Trent. The joint liabilities amounted to £986 11s. 10d., and there were assets of £44 19s. 9d., leaving a deficiency of £941 12s. 1d.

Failure was attributed to lack of capital, which necessitated the carrying out of hire-purchase transactions through a finance house at a heavy discount; trading at an insufficient margin of gross profit and general bad trade.

It appeared that in November, 1933, the partnership was commenced with a capital of £50. Premises at Derby were rented, and the partners traded there under the style of National Radio Supplies. Stock was obtained on credit, and transactions were effected mainly on hire-purchase terms, arranged through a finance house. On January 1, 1934, another shop was opened at Market Place, Burton.

In reply to questions, Wood agreed that payments were made to certain creditors before the petition was filed. He said that one firm had issued a writ and threatened to put in the bailiffs. The examination was concluded.

**Richard Sidney Barlow**, Chapel Lane, Spalding, Lincolnshire.—The public examination was held at the Law Courts, Peterborough, recently. Debtor had returned a statement of affairs showing gross liabilities of £2,277 12s. 2d., of which £1,789 14s. 6d. was expected to rank for dividend, and there were net assets of £969 8s. 6d.

Debtor said he commenced business on his own account in July, 1931, as an electrical contractor and radio dealer. Early in 1932 he removed to the Chapel Lane premises. The contracting work gradually declined, and debtor said that he had to depend on the radio department of the business for a living.

Debtor attributed the decline in the contract work to competition. The examination was adjourned.

**William James Richardson**, 14, Highthorne Avenue, Bradford Moor, Bradford.—The first meeting of creditors was held on February 1 at the Official Receiver's office, Hallfield Chambers, 71, Manningham Lane, Bradford, when debtor said that his failure was due to lack of capital and business inexperience.

His liabilities were expected to rank for dividend at £132 13s. 4d., and he had a deficiency of £113 13s. 4d. The case, being a summary one, was left in the hands of the Official Receiver, as trustee.

**Harry Yeo**, Market Place, Stratton, and Delabole, both Cornwall.—The public examination took place at the Guildhall, Barnstaple, recently. The liabilities amounted to £518, there were estimated assets of £194 and a deficiency of £324.

Debtor said he had to purchase stocks on credit as well as allow his customers credit.

The failure was attributed to inexperience, lack of capital, having to give too much credit and losses sustained on part exchange of receivers. The examination was concluded.

## BUSINESS NAMES

The following businesses have been registered under the Business Names Act of 1916. The trading name is given in heavy type. In brackets is the name of the proprietor or proprietors. The date is that of registration.

**Abbott Bros.**, 303, Thorold Road, Ilford (Harold Benjamin Abbott, at the above address). Jan 15.

**Averyhill Cycle Engineers**, 65, Averyhill Road, New Eltham, London, S.E.9 (Rodney Robert Gardner, A.M.I., at the above address). January 15.

**Clarke and Co.**, 3, Victoria Road, Deal (Thomas Newton Stammers, 26, Gladstone Road, Deal). January 18.

**Lockwood, T. H.**, 11, Stanley Grove, Longsight, Manchester (Mrs. Ada Lockwood, at the above address). January 2.

**Ostler, E.**, 98 and 100, High Street, Redbourn, Herts (George William Hoare Ostler, at the above address). January 7.

**Radio Finance Co.**, 3 and 5, King Street, Oldham, Lancs (Frank Thompson, "Annisholme," Thorn Road, Bramhall Cheshire). January 16.

**Radio Repairs**, 141, Dane Road, Coventry (Evelyn Louise Julian, at the above address). January 16.

**Routledge's Radio**, 73, Commercial Street, Willington, Co. Durham (Percival Routledge, at the above address). January 14.

**St. James's Radio Co.**, 43, St. James's Palace, Piccadilly, London, S.W.1 (E. W. Parish, 3, Stratford Mansions, South Molton Street, London, W.1; Kenneth A. M. Tanner, 32, Lorne Gardens, Hanover Gate, London, N.W.8, and Mrs. O. F. Kelly, 40, Wendover Court, Finchley Road, London, N.W.3). January 7.

**Sunley's Garage**, 14, St. Mary's Place East, Newcastle-upon-Tyne (Walter Robinson, senr., "Chadleigh," 1001, Shields Road, Walkerville, Newcastle-upon-Tyne). January 14.

**White's Radio Service**, 226, Smithdown Lane, Liverpool (Arthur Daniels, 13, Britannia Avenue, Wavertree, Liverpool, 15). January 17.

## NEW COMPANIES

**Acratone Radio, Ltd.**—Private co. Capital £100. To carry on the business of wireless engineers, repairers and manufacturers of, dealers in and agents for radio receiving sets, etc. Directors: Richard A. Luth and James C. Kerr. Registered office: 115, St. Vincent Street, Glasgow.

**Coastal Radio, Ltd.**—Private co. Capital £500. To carry on the business of manufacturers and repairers of and dealers in radio, telephony and telegraphy, etc. Subscribers: H. J. Johannesen, Polarly, Ash Tree Avenue, Grimsby; and A. Redpath, 103, Brunswick Street, Edinburgh. The first directors are not named.

**Stockport Battery Service, Ltd.**—Private co. Capital £1,000. To acquire the business of an accumulator manufacturer, agent and repairer carried on by Harry Shelton as the Stockport Battery Service at Wellington Grove, Stockport. Subscribers: Harry Shelton and Ernest Ridler. Harry Shelton is first and permanent director. Registered office: Wellington Grove, Stockport.

**H. and J. Radio, Ltd.**—Private co. Capital £500. To carry on the business of radio and electrical dealers, distributors of wireless sets and parts, batteries, valves, etc. Directors: John H. White and Miss Irene M. Nelson. Registered office: 544, Commercial Road, London, E.1.





## BRANCH REPORTS

### BRIGHTON Supports the Fighting Fund

MEMBERS of the Brighton branch of the W.R.A. gave practical evidence of their support for the Fighting Fund on Tuesday, when the monthly branch meeting was held at the Wattle Lounge, Preston Street.

Shortly before the close of the meeting, the Chairman (Mr. J. Fielding) reminded the members that they had agreed to support the fund. There was an immediate response—in cash.

Earlier, the Chairman had reported that he was one of a W.R.A. delegation that had had an interview with Mr. Goodfellow, of Ever Ready.

Mr. Fielding said that as a result of that interview he understood that there would be a definite readjustment of the Ever Ready "Radio" battery discount, which should be favourably received by dealers.

The Secretary stated that in reply to a complaint which, on behalf of the branch, he made to a national manufacturing firm, that firm had reported that they had ceased to supply sets to a local co-operative stores.

A firm of factors had written stating that they would discontinue supplies to a Portslade "dabbler."

A prospective member, whose premises did not conform with the W.R.A. dealer definition, wrote expressing his readiness to make alterations and asking advice on this point. The necessary information is to be supplied.

The chairman and secretary are to inspect another shop.

Mr. A. J. S. Russell drew attention to a suggestion from the Birmingham branch that the W.R.A. should be absorbed by the E.C.A.

The Chairman said he could not see what Birmingham hoped to gain, since preferential treatment would be given only on cables, lamps and accumulators.

"It seems to me like trying to rob radio of the right to be an individual trade. We are definitely not a branch of the electrical trade," said Mr. Fielding.

Mr. Tingley said that this was hardly a matter for an individual branch to bring forward. It was a question that, if discussed at all, should have been considered by representatives of W.R.A. and the E.C.A.

The branch decided to take no action in the matter for the time being.

One new member was admitted at the meeting, bringing the membership to 43. Supporting the chairman at the meeting were the secretary and about 20 members.

The Chairman reported that details were not yet complete in regard to the proposed combined advertising campaign in the local Press. Further details will be given at the next meeting.

### CARDIFF Down On Cheap Batteries

A LENGTHY discussion on low-discount batteries took place at a meeting of the Cardiff W.R.A. on January 22. It was suggested that dealers should not stock such batteries.

Satisfaction was expressed at the action of Mr. Capel, of Capel's Wholesale, who had notified the branch that his firm had refused supplies to a Cardiff ships' chandler.

The branch is to give full support to Mr. Jones, of Marconiphone, who is organising a Marconiphone dance. This will be held at the Park Hotel, Cardiff, on February 27.

A new member, Mr. Bloom, of Bridgend, was accepted for membership.

It was agreed that every effort should be made to obtain new members, and that each of those present be given a district to work.

New officers were proposed for election at

the next general meeting. Those proposed were: Mr. Fletcher, as chairman; Mr. Price, as vice-chairman; Mr. Phillips, as secretary, and Mr. Paul, as treasurer.

### LONDON AREA Considers Financial Questions

THE monthly meeting of the London and Home Counties W.R.A. Area Council took place on January 31 at First Avenue House, London, W.C.1. There was a representative gathering of branch delegates, together with Mr. A. E. Betambeau, the W.R.A. organiser.

The Hon. Secretary reported the arrangements made by the National Council for the financial organisation of branches and area councils subject to all members' subscriptions being paid direct to head office. Grants to live branches and areas would be made within seven days of meeting of the National Council.

Delegates generally were of opinion that the suggested financial help was insufficient for area requirements, but it was pointed out that unless a revision of the annual subscription was made nothing more could be anticipated.

Reports on an interview with Mr. Gavin D. Morton, of the Radio Centre, Haymarket, were dealt with. In view of the fact that the National Council were dealing with

## Coming Events Next Fortnight

(February 9—February 25.)

Cambridge W.R.A., Tuesday, February 12, 8 p.m., Allin's Garage, Bridge Street.

Lincoln W.R.A., Tuesday, February 19, 7.45 p.m., Albion Hotel.

Manchester W.R.A., annual meeting and dinner, Wednesday, February 20, at 4.30 p.m., and 6.30 p.m., respectively, Grand Hotel, Manchester.

North East Area Council, Tuesday, February 19, 2.30 p.m., Haymarket Theatre Club, Newcastle.

North London R.T.A., Monday, February 11, 8.30 p.m., Delhi Hall, 489, Holloway Road, London, N.7.

Notts Lunch Club Annual Dinner, Wednesday, February 20, 7.45 p.m. for 8.15 p.m., Victoria Station Hotel, Nottingham.

Retford and Worksop W.R.A., annual meeting, Tuesday, February 12, 8 p.m., Lion Hotel, Worksop.

Sheffield Lunch Club, annual meeting, Wednesday, February 13, 1 p.m., Grand Hotel.

Southend, Westcliff-on-Sea and District Chamber of Trades, Tuesday, February 19, 8.15 p.m., Chamber of Trade Offices, Victoria Avenue.

Stoke W.R.A., annual dinner and social, Thursday, February 21, Leopard Hotel, Burslem.

West Herts R.R.A., annual meeting, Tuesday, February 12, Carlton Tearooms, Queen's Road, Watford.

W.R.A. National Council, Wednesday, February 13, 2.15 p.m., First Avenue House, High Holborn, London, W.C.1.

### Future Dates

A.C.M.I.M. Annual Dinner, Tuesday, March 19, Park Lane Hotel, London, W.1.

Brighton W.R.A., Tuesday, March 12, 8 p.m., Wattle Lounge, Preston Street, Brighton.

British Industries Fair, February 18-March 1, at Olympia.

Bury W.R.A., Tuesday, February 26, 5.30 p.m., dinner, dance and whist drive, Boar's Head Hotel.

Manchester Radio Trades Luncheon Club, Monday, March 4, 12.45 p.m.

Newcastle and District W.R.A., March 5, 8.30 p.m., Theatre Club Room, Haymarket, Newcastle.

North Western W.R.A. Council, Tuesday, February 26, 2.30 p.m., Nag's Head Hotel, Manchester.

Oldham W.R.A., Thursday, February 28, 10.30 a.m., Café Momico, Union Street.

Pianoforte Manufacturers' Association Annual Dinner, Thursday, February 28, Trocadero Restaurant, London.

Sheffield Lunch Club, dinner, dance and cabaret in aid of the Wireless for Hospitals Fund, Wednesday, February 27, 7.30 p.m., Grand Hotel.

Sunderland and District W.R.A., Tuesday, March 4, 8.30 p.m., North of England Café, Fawcett Street, Sunderland.

W.R.A. Annual General Meeting, Wednesday, March 27, 3 p.m., First Avenue House, High Holborn, London, W.C.1.

both this matter and the cheap battery question, it was agreed that no useful purpose would be served in dealing with the subjects at this stage.

Mr. Gunn, of the Essex and East London branch, reported much activity in his area in the purchase at Trade prices by private individuals of current models of mains receivers by well-known manufacturers. Certain lines of action were decided upon.

### NEWCASTLE Discusses Local Show Places

AT the monthly meeting of the Newcastle W.R.A. on Tuesday in the Club Room, Haymarket Theatre, Newcastle, Mr. Dodds, chairman, introduced Mr. Percy Bentley, Exhibition Organiser, of Edinburgh.

Mr. Bentley went into the possibilities of holding a Radio Exhibition in Newcastle under the auspices of the local W.R.A. branch. After the dealers present had fired all the questions they could think of at Mr. Bentley, Mr. Tom Payne said, in moving a vote of thanks: "Mr. Bentley seems to me to be a man who knows what he is talking about. I am delighted to have met him."

The members then discussed the cheap battery business and the secretary was instructed to write to those members who were not present informing them that the branch had moved a resolution which said they would not handle the cheap batteries.

The members were asked to attend the next Area Council meeting of the W.R.A., which was to be held in Newcastle at the Club Room, Haymarket Theatre, Newcastle, at 2.30 p.m., on February 19.

After some general discussion, it was generally agreed by all present that the "ticket" business that is now being extended to the Radio Trade was not a desirable way of doing business.

### OLDHAM on Demonstration Set Ramp

HOW to counter the activities of persons who solicit sets for demonstration purposes from dealer after dealer in succession, was discussed by members of the Oldham W.R.A. at their meeting on January 31.

It was revealed that some persons made a practice of approaching dealers for the use of sets professing to have an interest in the purchase of one. Having made a series of tests, the receivers are returned to the dealer, but no sale results.

It was alleged that one person in the town was known to have had the free use of one set after another for a period of 18 months, and even then did not make a purchase.

The suggestion was made that dealers, in their own interests, should keep a close check on sets sent out for demonstrations.

Following a discussion on valve guarantees and replacements, it was agreed to raise the matter at the next meeting of the North-Western Area Council. The difficulty, it appears, arises from the fact that when faults are discovered in valves the manufacturers sometimes decline to make replacements on the ground that more than a reasonable time has elapsed since the valves had been sent out from the factory or depot. It did not appear to be recognised by the valve manufacturers that dealers might have to keep valves on their shelves for many weeks before effecting sales.

The discussion culminated in a resolution "that valves be guaranteed from the time they are handed over to the user." This resolution will go forward to the North-Western Area Council for consideration.

The recent controversy over high-tension batteries was reviewed and the rearrangement in retail prices and discounts evoked considerable criticism. Members agreed that the new proposals were not economic for the dealer.

Mr. J. E. Wildbore submitted the new forms of guarantee and explanations as to the service and coverage provided by the dealer on new set sales. Members voiced satisfaction at the lucid manner in which the undertakings on behalf of the dealer were expressed, and agreed to place orders





A full-colour "talkie" introduction to the Marconiphone Jubilee range has been produced for dealers. The hire charge is 15s. a week. The film is 130 feet long. The picture above shows "shooting" in progress.

for quantities of the folder, which will be distributed to buyers of new receivers.

It was complained that an Oldham firm of coal dealers were now selling receivers. It was decided to refer the matter to the North-Western Area Council and to supply information with the object of tracing the source of supply.

Some trouble has been experienced by Oldham dealers owing to the duplication of guarantee cards. It was alleged that in one case six guarantee cards had been issued in respect of one receiver. The set changed hands six times, and as the seller did not hand over the card to the next owner, the latter obtained a duplicate. It was resolved to request the set manufacturers to exercise caution with regard to the issue of duplicates.

## ROCHDALE Wants Northern Television Transmitter

THAT radio dealers of Lancashire are taking a serious interest in the possibilities of television is evident from the discussion that took place at Rochdale W.R.A. on Monday morning.

With reference to the proposal to establish one experimental station (at London), it is felt that a fairer procedure would be to have simultaneous experiments in Manchester and London, so as to create equal opportunities for dealers and listeners in the north and south country.

Mr. J. R. Sugden, who introduced the discussion, referred to the amount of publicity which had been given to television by the daily newspapers following the issue of the Television Committee's report.

Something should be done by the Lancashire branches of the W.R.A. through the North-Western Area Council, to impress W.R.A. headquarters with the importance of making contact with the B.B.C., to ensure adequate consideration being given to the claims of the North.

Admittedly, television as a commercial proposition might be some distance off, but, all the same, they in that area were being deprived of the chance of getting the public television minded.

Mr. D. Howarth, who presided, pointed out that the W.R.A. Council was composed of representatives from 10 areas, and if Manchester put forward a claim for an experimental station it was probable the others would do the same, and then where would they be?

He understood that Manchester would be the first place to receive consideration after London, where, after all, within 25 miles there was a much bigger population than within 25 miles of Manchester.

Finally, a resolution was adopted declaring that one transmission station was inadequate for the needs of the country, and

in equity another should be provided so as to enable Northern dealers and the millions of Northern listeners to share the experiences of the preliminary transmissions.

It was also remarked that when television did become commercial, London would be placed in a position of great advantage over Lancashire and the other Northern territories, by virtue of the priority given it. The resolution urged the W.R.A. to make representations to the authorities on the lines indicated.

Mr. D. Howarth gave a report on the last meeting of the W.R.A. Council and made particular reference to financial matters. Discussion also took place on the definition of a dealer, reference being made to the B.V.A. and R.W.T.A. definitions. It was stated that some of the big manufacturers were anxious to see a definition as straight and as simple as possible. No resolution on this matter was moved.

Regret was expressed that Mr. J. Mitchell had withdrawn from membership, especially as he had been one of the founder members and had put in so many years of useful service.

A new member of the branch, who had transferred from another district to Rochdale, expressed his appreciation of the work of the Rochdale W.R.A. He confessed that when, after starting in Rochdale, he started drawing the full cash price for goods, he found it a most unusual experience and attributed this to the influence of the Rochdale W.R.A.

## STOKE Annual General Meeting

THE annual meeting of Stoke-on-Trent W.R.A. was held at the Saracen's Head Hotel, Hanley, on Tuesday, when the chairman (Mr. J. Ridgway) presided, supported by the secretary (Miss G. Blades).

A discussion on the battery question followed a report by the Secretary that some members had failed to observe the resolution passed at the last meeting. Certain names were mentioned, and the Secretary strongly criticised this disloyalty, which, she said, queered the pitch of the W.R.A. in dealing with wholesalers and manufacturers.

The meeting then heard the outline of a scheme for service from Mr. Oakes (of Oakes and Liversage, Burslem), in which he showed that service could be definitely profitable.

The members expressed a lively interest, and Mr. Oakes promised to give full details of the scheme and to bring service cards to the next meeting.

The meeting then proceeded to elect officers for next year. Mr. Ridgway was re-elected chairman and Mr. F. Bew, of Burslem, was elected vice-chairman.

There was a long discussion over the



## BRANCH REPORTS

election of a secretary, Miss Blades intimating that she was not prepared to stand for re-election, having held office for two years. Eventually, Mr. J. Templeman, of Hanley, was appointed. Mr. Hammersley was re-elected treasurer, and Mr. Oakes, auditor. The Committee will consist of the officials and Mr. Woods and Mr. Alcock.

## SUNDERLAND Moves Against Dabblers

STRONG efforts are being made by Sunderland W.R.A. to preserve the Trade for the legitimate dealer, and at the February meeting, the Chairman (Mr. W. R. Drewery) had the full and hearty support of the big attendance when he moved a resolution on the matter.

He proposed a motion deprecating trading in wireless goods by anyone who does not come under the W.R.A. definition, and especial protests against the granting of discounts to clubs, provident associations and trading organisations.

His motion also called upon manufacturers to do their utmost to prevent this and other types of unfair trading.

Several instances of this type of unfair competition were given, and during the discussion one member announced that he intended to cancel an agreement which he had with a prominent club.

The resolution was unanimously passed. The Chairman and Secretary presented interesting and informative reports on the last North-East Area Council meeting.

Secretary Michelson was criticised by two members for not announcing to members, through the post, the fact that the association had placed an embargo upon certain cheap batteries.

His retort was that THE BROADCASTER gave such detailed reports of meetings that he considered that any further intimation was unnecessary.

## BURY ASSOCIATION'S DINNER

Bury and District Wireless Retailers' Association will hold a dinner, whist drive and dance at the Boar's Head Hotel, The Rock, Bury, on Tuesday, February 26.

The secretary of the Association is Mr. J. H. Monks, of 180, Princess Road, Bury, and the chairman, Mr. J. H. Smith, of Smith and Son, Stanley Street.

Mr. Bennett, who has filled the office of treasurer, has resigned following his withdrawal from the business in Union Square with which he was connected. He is the oldest dealer in the town, having been engaged in the business 16 years. He intends to take up residence in the South of England.

The principal issue that has been engaging attention in the town recently has been the prices and discounts on high-tension batteries. Members decided to promote the sale of a cheap line of batteries, which they have labelled with the name of "Pep."

## EDINBURGH RADIO DANCE

The members of the Edinburgh branch of the Scottish Radio Retailers' Association held their annual dance in the Wellington and Traquair Rooms, Maximes, Tollcross, Edinburgh, on January 30. It was a most successful gathering, attended by about 150.

Mr. R. B. Donaldson, chairman of the Association, welcomed the guests, and intimated that it was proposed to hold a Radio Trade dance towards the end of March.



## SOUTHEND'S NEW ASSOCIATION

### RADIO SECTION OF CHAMBER OF TRADE

A meeting of Southend radio dealers on Tuesday at the Southend Chamber of Trade, Victoria Avenue, made Association news.

A few months back the local branch of the W.R.A. was re-formed and meetings have been held since with regularity.

There has existed, however, from the first an undercurrent of feeling that the local Chamber of Trade could act efficiently in all matters that concerned local radio.

Mr. L. V. Bridge, who had acted as secretary for the organisation during the past few years, laid before the meeting the case for the formation of a Radio Section of the Southend, Westcliff-on-Sea and District Chamber of Trade.

As a section of the Chamber of Trade they would have all that the Chamber stood for. Its general secretary, Mr. P. C. Cavanagh, was a force to be reckoned with.

The Chamber offered services of an intimate character, such as a black list, that for local purposes was unique. The Chamber was a protective body as well as a negotiating body whose record stood high. It was almost impossible to trade in Southend without being a member of the Chamber.

### Fighting Policy

That being so, why not form a radio section of it at a subscription which would cover working expenses, leaving those members who still wished to remain within the W.R.A. freedom to do so?

With minor modifications the suggestions of Mr. L. V. Bridge met with support.

The new Association was forthwith created, its title to be the Radio Section of the Southend, Westcliff-on-Sea and District Chamber of Trade.

The offices are at Victoria Avenue, and the officials are: Chairman, Mr. S. H. Davis; treasurer and secretary, Mr. L. V. Bridge; minute secretary, Mr. H. G. White.

The subscription is to be 10s. per annum. A fighting policy was agreed to. The 50 non-member dealers within the area were divided up between those present, who promised each to make it a personal matter to rope in his quota.

Various suggestions were discussed with the object of popularising the new Association.

A dinner and a dance, a regular luncheon fixture, instructive talks after the business meetings—these are each to be examined and reported upon.

### United Action

Mr. S. H. Davis warned the members that only by united action was it possible to stave off many of the dangers that faced them. He instanced the several attempts that had been made to plant a relay system upon the town.

It was also essential that they should get united upon many other points that seriously affected their bread and butter. Guarantees were a vital question.

Southend dealers were in complete agreement that three months was ample. The public had greater confidence in the shorter period. It brought more money into the dealer's pocket, and being a square deal it introduced more new business.

Service, it was agreed by those present, should be made to pay.

The ethics of H.P. terms were discussed. It was argued that any dealer carrying his own H.P. must be his own law, but where that law was detrimental to the good of his fellows, the Association should take some action.

Strong comment was made upon the practice of some Southend dealers making free installations.

Here again, it was asserted, unity could produce uniformity.

# Brand New

## Marconiphone Extension Speaker

*Supplies: Available.*

An extension M.C. speaker with many novel points in its design is being released to-day by the Marconiphone Co., Ltd., of 210-212, Tottenham Court Road, London, W.1. It is known as the model 195 multi-functional speaker.

The speaker has been designed primarily for use with the 292 receiver, and contains a unit similar to that built into the receiver itself. It is also suitable for use with the 289 and 296 instruments and other receivers having low-resistance outputs. It is pointed out that the 195 speaker is not a universal model as it is not fitted with an input transformer.

**MAGNET AND CONE.**—High-sensitivity magnet of special design with a flux density of 8,000 lines per sq. cm. The cone is elliptically shaped and constructed of metal-paper.

**CONTROL.**—A volume control built into the side of the cabinet is of the constant impedance type, and actually consists of three ganged potentiometers. There is also an automatic tone compensation device to ensure correct proportions of bass and treble at any volume.

**TECHNICAL DATA.**—Speech-coil impedance, 9-10 ohms at 800 cycles; speech-coil D.C. resistance, 8.5 ohms; max. speech input, 6 watts.

**CABINET.**—Large-sized, in figured walnut, with non-absorbent metal grille fret. Measurements, 15½ in. high, 18½ in. wide, and 10½ in. deep.

**PRICE.**—Eight guineas.

**H.-P. TERMS.**—Deposit of 16s. 9d. and 12 monthly payments of 14s. If purchased with a 289 or 292 receiver on 18 months H.-P., the special terms are 21s. deposit and 18 payments of 9s. 6d.

## Gebescope Talkie Equipment

"Gebescope" is the new trade name adopted by G.B. Equipments, Ltd., of Film House, Wardour Street, London, W.1, for all 16 m.m. sound film equipments marketed by the firm.

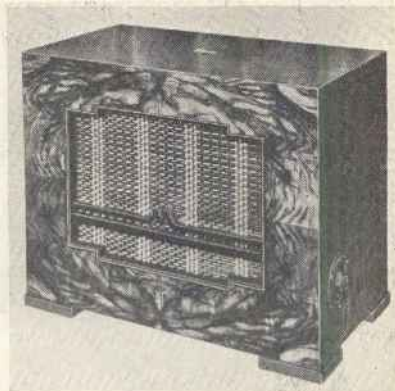
The G.B.E. range is therefore the Gebescope Model A, which was formerly the Home Model; the Gebescope Model B, formerly the Standard Model; and the Gebescope Model C (Cinepro), formerly the B.A.C. model.

## Regent Investment Sets for Retail Sale

The range of Clarendon receivers and radiograms, previously available only for renting, are now obtainable for direct sale from the makers, Regent Investment and Sales, Ltd., of Brent Crescent, North Circular Road, London, N.W.10.

Three receivers and two radiograms are included in the range, there being both straight and superhet types. These are the first branded receivers to be offered by the company.

A four-valve band-pass chassis for universal mains operation is used in two models. These are a receiver on which the retail price is £7 15s., or on H.-P., 10s. 6d. deposit and 16 monthly payments of 10s. 6d.;



*A volume control and a tone compensation device are features of the Marconiphone 195 extension speaker.*

and a radiogram selling at 15 guineas, or £1 deposit and 17 payments of £1.

The superhet models utilise a six-valve, eight-stage chassis, and individual details are as follow:

**CONSOLE.**—For A.C.-D.C. operation. Price 10 guineas, or 12s. 6d. down and 18 payments of 12s. 6d.

**TABLE MODEL.**—For A.C.-D.C. operation. Price £9 19s. 6d., or 12s. 6d. down and 17 payments of 12s. 6d.

**RADIOGRAM.**—For A.C. only. Price 18 guineas, or £1 down and 23 payments of £1.

## C.A.C. Kit for Wireless World QA Set

*Supplies: Available.*

A complete kit of parts for the *Wireless World QA* receiver is being marketed by the City Accumulator Co., Ltd., of 18-20, Norman's Buildings, Central Street, London, E.C.1, to market at £9 10s. excluding valves.

The C.A.C. chassis for this receiver has been specified in the list of components, and this chassis, drilled and complete with valve-holders eyeletted in position, retails at 17s. 6d.

## 362 Super Power Valve

*Supplies: Shortly.*

A directly heated output triode delivering 6 watts is shortly to be released by the 362 Radio Valve Co., Ltd., of Stoneham Road, London, E.5.

This is the PX25, on which the characteristics are as follow:—

Filament, 4 volts 2 amps. Max. anode volts, 400; anode dissipation, 25 watts. Amplification factor, 5; mutual conductance, 5.

**PRICE.**—£1 retail.

## Camel Accumulator

*Supplies: Available.*

An L.T. accumulator specially designed for use with modern multi-valve battery receivers has been placed on the market by Camel Accumulators, Ltd., of 9, Newington Causeway, London, S.E.1.

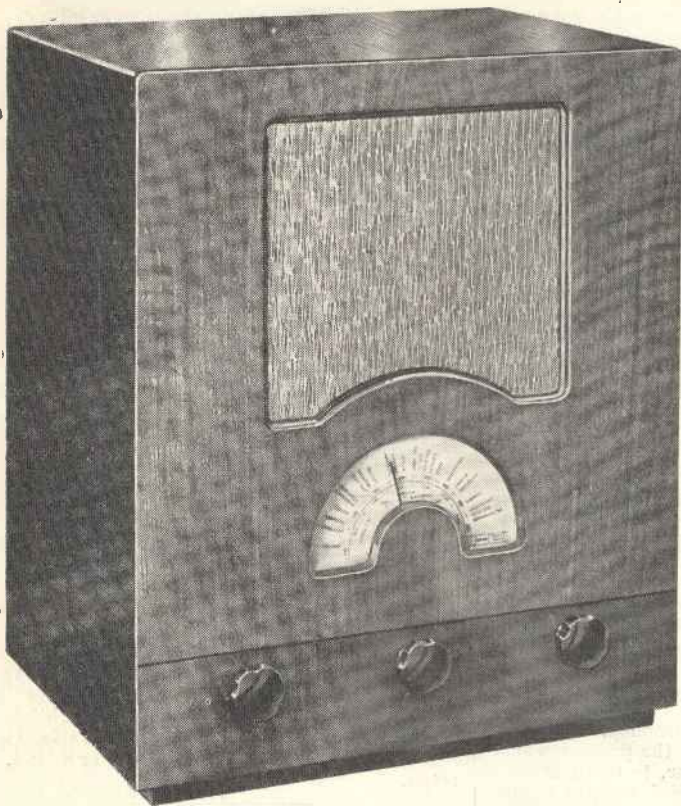
The type number D.F. has been given to the accumulator, which is a glass-container type fitted with a simple carrying handle. The rating is 90 ampere-hours at the 100-hour rate, or 45 ampere-hours actual.

**PRICE.**—9s. 6d. retail.

Supplies of the Ultra 25 Console receiver are available as from to-day, February 9. The release date of the 25 Radiogram has not yet been fixed, however. It will be recalled these two models employ a four-valve A.C. superhet chassis with a rated output of 3.9 watts. Full A.V.C. and shadow tuning are provided. The console retails at 15 guineas.



# Sound Reasons Why the "Portadyne" Jubilee Range spells **S U C C E S S !**



- *Not Mass Produced*  
—each Set receives  
*Individual Attention*
- *Better Tone than*  
*any other receivers*  
*yet produced*
- *Greater Sensitivity*  
*and Selectivity than*  
*has ever before been*  
*obtained*
- *Design and Appearance*  
*that Compel Admiration*

## “PORTADYNE” JUBILEE TABLE MODELS

Immediate delivery can be given  
of the following Receivers :

5-Valve **ELECTRIC (A.C.) Super-Het.**  
5-Valve **BATTERY Super-Het.**

PRICED AT

**£12 . 12 . 0**

or on attractive H.P. Terms.

AN A.C./D.C. JUBILEE TABLE  
MODEL 5-Valve Super-Het. Receiver  
will be released late in February.

THE FOLLOWING MODELS will  
also be ready shortly :—JUBILEE CON-  
SOLE A.C., JUBILEE CONSOLE A.C./  
D.C., JUBILEE RADIOGRAM A.C.  
and JUBILEE RADIOGRAM A.C./D.C.

REALISM IN  
RADIO PROFITS  
*means*  
“PORTADYNE”

*The*  
**Portadyne**

**JUBILEE RANGE  
OF SUPERHET RECEIVERS**

*Write to-day for full details of these Profit-Makers*

**PORTADYNE RADIO, PORTADYNE WORKS, GORST RD, N. ACTON NW10**

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION “THE BROADCASTER.”



A moulded cabinet, available in walnut or black and chromium, houses the Ekco AD36, an A.C.-D.C. set.

## Low Price A.C.-D.C. Set by Ekco

Supplies: February 18.

An appeal to a market not previously covered by E. K. Cole, Ltd., of Ekco Works, Southend-on-Sea, is being made by the Ekco AD36 receiver, a straight A.C./D.C. four including rectifier, to retail at 8 gns.

It is stated that this new model should not overlap the markets already served by the other Ekco models.

In describing the performance of the receiver, Ekco state that it will give excellent reception of the local station, Droitwich, and many Continentals. "In most localities the receiver is definitely more than a local set," it is added.

**CIRCUIT.**—The valves used are a Mullard SP13 H.F. amplifier, a Mullard HL13 detector, a Mazda Pen.3520 output pentode rated at 2.5 watts, and a Standard Telephones Brimar ID5 rectifier. The screened pentode is choke capacity coupled to the tuned grid circuit of the detector on the medium waveband, and tuned transformer coupled on the long waves. R.C.C. coupling is used between the detector and the output pentode. The ID 5 rectifier is indirectly heated.

Highly efficient coils are employed in the two tuned circuits, and there is a special compensating circuit to ensure constant selectivity.

### Colour-Coded Scale

**CONTROLS.**—Three on face of cabinet, the centre large-sized knob for tuning being surrounded by a semi-circular full-vision interchangeable scales, wavelength and station name calibrated. A pointer is used to indicate the tuning point. The wavebands covered are 200-500 and 900-2,000 metres.

Other controls on the face of the cabinet are volume and sensitivity, while on the left-hand side of the cabinet are the on/off switch and the wave-change switch, the latter being colour coded, red indicating long, and green medium waves.

**SPEAKER.**—Eight-inch energised M.C. type.

**MAINS SUPPLIES.**—The series resistance is tapped to cover 200-250 volts supplies. On A.C. mains the set is for 40-100 cycles. Consumption on A.C. 70 watts, and on D.C. 65 watts.

As a safety measure the mains plug on the set must be removed before the back is taken off to make adjustments. A special cowl has been fitted inside the receiver to assist ventilation.

**CABINET.**—Attractive circular moulded design with feet and controls symmetrically arranged. The fret is circular and has two bow-shaped metal bars running across the

## Brand New

opening. Alternative finishes of walnut and black and chromium are provided.

**PRICES.**—Walnut 8 gns., with H.P. terms of 14s. 6d. deposit and 12 monthly payments of 14s. 6d. Black and chromium, 8½ gns., with H.P. terms of 15s. 6d. deposit and 12 monthly payments of 15s. 6d.

## Bulgin Universal Resistor for 13v. Valves

Supplies: Available.

A universal enclosed version of the series filament resistor for 13-volt 3-amp. A.C.-D.C. valves has been placed on the market by A. F. Bulgin and Co., Ltd., of Abbey Road, Barking, Essex.

The new model, type MR56, is similar in construction to the ordinary enclosed type, being housed in a frosted aluminium case.

It is, however, provided with terminals so that any number of valves from three to seven may be connected, and used on any mains from 200-250 volts.

## Graham Farish Mum to Stop Interference

Supplies: Available.

"Mum's the word," and "I'm going for my mum," are the slogans in but two of the teaser advertisements appearing in popular radio journals this week.

They are the first announcements to the public of a new product to be marketed by Graham Farish, Ltd., of Bromley, Kent.

The Mum is the name of the product which is an interference suppressor, to retail at 2s.

It is to be widely advertised, and the public appetite is to be whetted by the continuance for some little time of the teaser announcements.

This suppressor consists of a rectangular moulding with lugs for mounting. There are two flexible leads for connection to interfering machinery and a terminal for connection to an earth point.

Each Mum is sold with a guarantee of replacement should it prove faulty.

Full fitting instructions are enclosed with each Mum, and these describe with diagrams how it can be fitted, for example, to the mains outlet for the set, to the main supply fuse and switchbox, and to interfering apparatus.

For customers who experience difficulty in cutting out mains interference, whether or not they have fitted a Mum, Graham Farish have produced a questionnaire containing nineteen basic questions that seem to cover the whole field.

When filled in, these forms must be sent to Graham Farish, accompanied by a remittance of a shilling. After they have been investigated by experts, suitable advice will be sent.

The Mum interference suppressor is now available to dealers, and is packed in striking display boxes containing half a dozen.

## Two Tungram Double Diode Triodes

Supplies: Not fixed.

Two double-diode triodes, one the DDT4 for four-volt A.C. receivers, and the other an American A.C./D.C. replacement type No. 75, are being produced by the Tungram Electric Lamp Works (Great Britain), Ltd., of 72, Oxford Street, London, W.1.

DDT4 CHARACTERISTICS.—Filament 4 volts,



The chassis of the Union Radio superhet short wave converter, which has a self-contained power pack and is for A.C. mains operation.

.65 amp. indirectly heated; max. anode volts, 250; squelch point, -1.3 volt; average anode current, 4 ma.; amplification factor, 30; slope, 3.6 ma./volt; impedance, 15,000; max. current for each diode, .8 ma.; base, English 7-pin.

PRICE.—About 12s. 6d.

**TYPE 75 CHARACTERISTICS.**—Filament, 6.3 volts, .3 amp.; max. anode volts, 250; triode bias, -2 volts; normal anode current, 1.8 ma.; amplification factor, 100; impedance, 91,000; slope, 1.1 ma./volt; base, small 6-pin.

PRICE.—About 12s.

## W.-B. Knife Switch

Supplies: Available.

A single-pole version of the W.-B. quick-action double-pole knife switch has been placed on the market by the Whiteley Electrical Radio Co., Ltd., of Victoria Street, Mansfield, Notts.

For use as an aerial/earth switch, it incorporates a spark gap and has two contact blades set at a wide angle. The price is 10d. retail.

## Alba Eighteen-monthly H.P. Terms

Arrangements have been made for certain Alba models to be available on H.-P. terms extending over eighteen months. Previously, only twelve-months' terms have been available.

At present the alternative terms have been fixed only for the 68 Lowboy, the 79 Radiogram, and the 79 Auto-changer Radiogram.

Eventually, however, A. J. Balcombe, Ltd., of 52-53, Tabernacle Street, London, E.C.1, hope to extend the terms to all the higher-priced Alba models.

Details of the terms are given below, and it should be noted that the deposit remains unaltered, and is the same for both 12-month and 18-month terms.

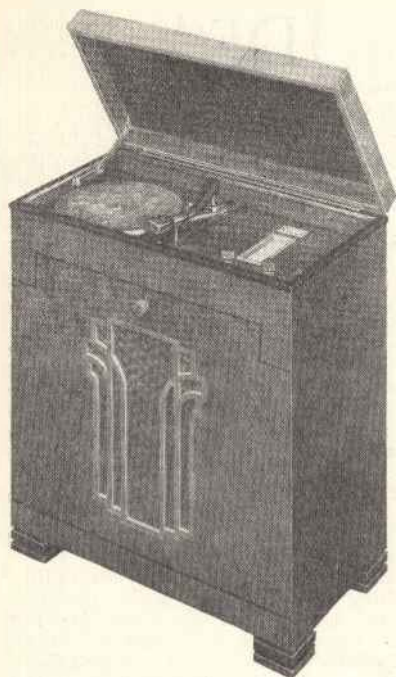
**MODEL 68 LOWBOY.**—A.C. version: deposit, £2; 12 monthly payments of 25s. or 18 monthly payments of 17s. 6d. A.C.-D.C. version: deposit, £2; 12 payments of 27s. or 18 of 19s.

**MODEL 79 RADIOGRAM.**—A.C. version: deposit, £2 15s.; 12 payments of 34s. or 18 of 23s. 6d. A.C.-D.C. version: deposit, £2 15s.; 12 payments of 38s. or 18 of 26s. 6d.

**MODEL 79 AUTO-RADIOGRAM.**—A.C. version: deposit, £3 15s.; 12 payments of 48s. or 18 of 33s. 6d. A.C.-D.C. version: deposit, £3 15s.; 12 payments of 52s. or 18 of 36s. 6d.

No H.-P. terms are being arranged for the two recently introduced receivers of the Ever Ready Co. (Great Britain), Ltd., Hercules Place, Holloway Road, London, N.7. The company is leaving the matter so that dealers can make H.-P. arrangements themselves.





Coloured scale illumination and a "shadowband" tuning device are features of the G.E.C. Shadowband radiogram, which sells at 23 gns.

## Shadowband Radiogram by G.E.C.

*Supplies: February 15.*

The "Shadowband Five Radiogram" is the name given to the latest instrument to be added to the range of instruments for A.C. mains marketed by the General Electric Co., Ltd., of Magnet House, Kingsway, London, W.C.2.

This new instrument is based on the Shadowband table superhet which was released early in January. In the radiogramophone the Shadowband tuner takes the form of a rectangular escutcheon opening mounted on the motor board just above the tuning scale.

**CIRCUIT.**—Five-valve superhet, the valve combination being heptode; I.F. amplifier; double diode triode second detector, A.V.C. valve and L.F. amplifier; output pentode rated at 3 watts; rectifier. Osram valves are employed throughout, these being 13 volt .3 amp types run in parallel and fed from a 13-volt mains transformer.

Band pass circuits are used for the aerial input, and the I.F. filters. The intermediate frequency is 125 kc. It is stated that the average sensitivity over the medium waveband is some 10 microvolts.

**CONTROLS.**—There are four on the motor board to the right of the turntable and one on the front of the cabinet, the latter being for volume on either radio or gramophone. The motor board controls are tone and mains switch, tuning, operating a full vision rectangular scale calibrated with station names, sensitivity and wave change.

Coloured scale illumination is employed, red denoting that long waves are being received, green medium waves, and both colours for gramophone. The tuning point is indicated by a bar of white light.

**AERIAL.**—Ordinarily the set is designed for use with a 30-ft. external aerial, but there is provided a roll-up aerial to give reception from the more powerful transmitters.

**SPEAKER.**—A new type designed to give well-balanced reproduction is fitted. Provision is made for connecting 7,000- to 10,000-

ohm extension speakers, while there is a key for silencing that in the set.

**GRAMOPHONE EQUIPMENT.**—An induction motor is used and it is fitted with automatic stop and start mechanism. The pick-up, of the bakelite housed type, is integral with the motor assembly.

**MAINS SUPPLY.**—Standard model, BC.3558, for 190/250 volts, 40/60 cycles. A 10-ft. mains cord is provided permanently fixed to the chassis. Power consumption, 80 watts on radio, 100 watts with motor in operation.

**SERVICING.**—The design of the top deck and receiver chassis has been designed to permit easy servicing.

**CABINET.**—Console type on stumpy legs constructed of walnut veneered ply, the figured veneer on the front surface being relieved by black inlays. Measurements are 34½ in. high, 29½ in. wide and 16½ in. deep.

**PRICE.**—Standard model, 23 gns. H.P. terms, 42s. deposit and 12 monthly payments of 42s., or 24 monthly payments of 21s. 6d.

**SPECIAL MODEL.**—BC.3558L for 110/130 and 210/230 volts, 40/60 cycles. 10s. 6d. extra.

## Goltone Tubular Condensers

*Supplies: Available.*

Additions have been made to the range of Goltone tubular non-inductive condensers marketed by Ward and Goldstone, Ltd., of Pendleton, Manchester.

Previously values from .5 mfd. to .01 mfd. only were listed, but the range now extends to .00005 mfd.

The new types are available for 250 volt or 400 volt working, the latter being at a slightly higher price. Following are the new types, the two prices being for the 250-v. and 400-v. versions respectively: .005 mfd., 7d. and 1s. 3d.; .003, 7d. and 1s.; .002, 7d. and 1s.; .001, 6d. and 1s.; .0005, .0003, .0002, .0001 and .00005, 6d. and 9d. each.

Another new Goltone line is a double-pole fuse plug in flush and surface mounting types. The plug retails at 1s. 4d. complete with fuse, and the bases at 6d. each. Spare fuses cost 4d. each.

## Two Mullard Valves for Relay and P.A.

*Supplies: Available.*

Two valves designed mainly for relay and P.A. work have been produced by the Mullard Wireless Service Co., Ltd., of Mullard House, Charing Cross Road, London, W.C.2. These are the MZL-100 output triode and the RG2-500 gas-filled rectifier.

The triode MZL-100 is compact in size and is of pipless construction, which, it is stated, reduces the risk of accidental damage.

**CHARACTERISTICS.**—Filament 6 volts, 2.7 amps.; total emission 1.5 amps.; max. anode voltage 1,200; continuous anode dissipation 100 watts; amplification factor 5.6; slope 4 ma. volt; impedance 1,400 ohms. Working into an approximate optimum load of 7,000 ohms with 1,000 volts on the anode and an anode current of 100 ma., the valve gives an undistorted output of approximately 30 watts for a peak grid excitation of approximately 150 volts. The base is a standard four-pin transmitting type, number D.O.S.T.1.

**PRICE.**—Ten guineas.

The gas-filled rectifier RG2-500 is of the mercury vapour, hot-cathode type, and brings the Mullard range of these specimens up to four.

It is stated it is particularly suitable for use in rectifier circuits fed from single-phase or three-phase A.C. supplies where relatively heavy output currents at voltages up to 2,000 D.C. are required, and in voltage doubling circuits giving an output voltage of approximately 4,000 D.C. at full load.

Mullard strongly recommend that gas-filled

# Brand New

rectifiers be always operated in pairs in a full-wave rectifying arrangement, even if a single valve used as a half-wave rectifier can give the required output.

**OPERATING DATA.**—Filament, 5 volts, 10 amps.; max. anode voltage, 2,000 rms.; max. peak inverse voltage, 5,000; max. rectified output current, 500 ma.; max. peak anode current, 2,500 ma. As in the case of other valves in this range, the internal voltage drop is only some 15 to 20 volts.

**PRICE.**—£7 10s.

## Union Radio S.W. Converter

*Supplies: Available.*

A superhet-type short wave converter containing its own frequency changer has been released by the Union Radio Co., Ltd., of Campbell Road, Croydon, Surrey.

Designed for A.C. mains operation, the converter utilises a tuned H.F. pentode and a tuned pentode frequency changer. In addition, there is a power supply unit using valve rectification.

The wavelength range covered is 13-55 metres, which is converted to the intermediate frequency of 500 metres.

The converter is for connection to the aerial and earth terminals of the existing receiver by means of shielded links.

**CABINET.**—Walnut, measuring 12 in. by 10 in. by 9 in.

**MAINS SUPPLY.**—100-130 volts and 200-250 volts, 40-100 cycles.

**PRICE.**—£8, complete with valves.

## Tuning Scales for the New Wavelengths

Tuning scales calibrated with revised station names and wavelengths to meet the B.B.C. "reshuffle" which takes place on February 17, are to be issued by United Radio Manufacturers, Ltd., of Parkhurst Road, London, N.7.

Only a few models of the Invicta series are affected, these being the Multimains 635 and 635D receivers, the 635 RG radiogram and the model T receiver.

New scales will be available at 2s. 6d. each, subject, and the fitting charge is being left to the dealer's discretion.

Revised scales for the H.M.V. models 580 and 800 have been issued by the Gramophone Co., Ltd.

For sets sold, the scales cost 2s. 6d. each, and it is suggested that dealers should make a nominal charge for fitting. For sets in stock the scales will be provided free.

New scales are not being supplied for other H.M.V. models at present, but as soon as the new scheme has proved satisfactory further arrangements will be made.

New scales will be available from H. Clarke and Co. (Manchester), Ltd., on February 15, after which date all receivers manufactured will carry a revised scale.

The replacement scales are priced at 1s. 6d. retail.

The discount to retailers on the new Primus range of H.T. batteries marketed by Britannia Batteries, Ltd., was incorrectly given in the Brand New columns last week. Actually, the dealer discount is 25 per cent., so that the Primus range fill an intermediate position between the Broadcast and Bulldog ranges.



# BIRMINGHAM'S E.C.A. IDEA

Dear Sir—

Your report of the Birmingham Branch W.R.A. meeting cannot be allowed to pass without comment. I have no doubt that many of the Birmingham members are also members of the E.C.A., and it is a great pity that these gentlemen did not take the trouble to explain the constitution of the E.C.A. and its allied organisations.

Had this been done, I feel sure that such a resolution would not have been passed by the radio dealers at the meeting.

The Electrical Contractors' Association was incorporated by the Board of Trade in 1904, and the only function allowed them is to represent and work for the electrical contractors in Parliamentary and municipal matters. Its licence forbids the E.C.A. to work in any way for the financial benefit of its members, or to deal with labour disputes.

The entrance fee to the E.C.A. is three guineas, with an annual subscription of four guineas, plus 5s. per £100 of wages paid in excess of £840 per annum. The maximum subscription is £30! This annual subscription also attaches to two other parallel organisations which I deal with below.

The membership of the E.C.A. is, I believe, in the neighbourhood of 2,000.

## W.R.A. Finance

Mr. Dagnall says the W.R.A. is not a financial success. The W.R.A. subscription is £1 11s. 6d. per annum, and to the shame of the profession it serves its members either will not or cannot pay this small sum for exactly the same benefits as enjoyed by the members of the E.C.A. at a considerably higher subscription. May I inquire, has Birmingham paid its W.R.A. quota?

Now for the "financial benefits" Birmingham is so anxious about. E.C.A. members have obtained rebates on cables and lamps. W.R.A. members have obtained rebates on valves. And in both cases the conditions to secure the rebates are the same, viz.: the E.C.A. man must undertake to buy and stock only C.M.A. cables and E.L.M.A. lamps, and the W.R.A. man must undertake to buy and stock only B.V.A. valves. Strange to say, you need not be a member of either organisation to secure these benefits.

Birmingham will admit that the sale of electrical apparatus is far in excess of radio apparatus, and the buying power of the Electrical Industry leaves radio standing still.

Therefore in order that E.C.A. members should be able to enjoy some sort of preference an allied association of the E.C.A. was formed in 1915 (eleven years after the incorporation of the E.C.A., mark you) known as the N.E.C.T.A., Ltd.

This is a company guaranteed by share capital and membership subscriptions (part of the four guineas referred to above) formed for the purpose of securing for E.C.A. members trading profits. This association enters into trading agreements with certain manufacturers and benefits its members by way of dividend, which may be in excess of the members' subscriptions, dependent on their buying power.

The other allied organisation supported by the E.C.A. subscriptions is the National Federated Electrical Association. This body, in conjunction with the Electrical Trades Union, is responsible for wage rates and labour troubles generally which may occur in the electrical trade.

For further financial help this body takes from the electrical contractor as a subsidy



New Para Radio has opened this attractive branch at 30, Iuegate, Bradford. Ultra Electric, Ltd., provided much of the equipment used.

contribution 10s. per £100 of wages paid per annum for the first three years, and for the next six years 2s. 6d. per £100 per annum. To obtain all these "E.C.A." benefits members must belong to all three organisations, and the subscription is the same for membership of one or all the associations.

I submit that under its constitution the E.C.A. cannot cater for radio dealers. The E.C.A. will admit to membership the "Private House" electrical contractor. The W.R.A. have fought against this tooth and nail, and its definition of a radio dealer calls for business premises being used and rated as such. The private house dealer has filched and is still filching some radio business from the radio dealer, and yet Birmingham is out to undo all the valuable spade-work accomplished by the W.R.A. for the recognition of a proper status for the bona-fide radio dealer.

Birmingham may create many difficulties in pressing this matter, but "It's an ill wind that blows nobody any good," and I hope that the Radio Trade will observe the danger signals and rally to the banner of the W.R.A. in order that such attempts to smash the individuality of the radio dealer may be frustrated.

In spite of adverse reports at the Birmingham meeting, I know that the membership of the W.R.A. is increasing. Whether the subscription might be larger is a matter of speculation, but if everyone interested paid up now the financial difficulties would disappear.

So far as W.R.A. trading benefits are concerned, I can only express my surprise that Mr. Dagnall, as a vice-president of the W.R.A., and possessing a full and inside knowledge of the private and confidential negotiations that have and are still taking place, should so far forget his responsibilities as to make, and allow to be made by others, irresponsible statements which cannot be substantiated by facts.

L. WILDE,  
Hon. Secretary,  
London and Home Counties W.R.A.  
Area Council.

## Service Analysis

I HAVE just completed my records for 1934, and the following figures may be of interest.

Taking the first hundred receivers sold in 1934 (among them are some known as 1935 sets), and remembering that nearly all of them still have a few months' free replacement service available, this is what I find.

Up to the time of writing and during the guarantee period, these sets have required

81 valves, 48 resistances, 39 dial lights, 34 realignments, 31 switches, 19 volume controls, 16 speakers, 15 output transformers, 12 coils, nine A.V.C. meters, seven condenser blocks, and four electrolytics. Five sets have been entirely replaced.

These figures do not include 18 receivers delivered up to September, 1934, which arrived either smashed, incomplete, or in such bad condition that they could not possibly be regarded as new and up to standard, and which were later replaced by maker or factor.

Except for one particular make, the guarantee operates over 12 months, so it is safe to assume that the majority of the above figures will show a big increase before the guarantees expire.

My experience shows that in 1934 most service after sales was due to two things—"frills" and the very unsatisfactory performance of valves.

Frills are definitely not popular with the thinking purchaser, who seeks performance and reliability rather than peculiar tuning arrangements. Valve production has either decreased in efficiency or certain of the later types are never subjected to thorough, prolonged test under load conditions.

Comparative tables, showing profits made in 1934, (a) including service expenses, (b) excluding ditto, during guarantee period, of course, prove that a tremendous amount of hard cash is absolutely wasted. Postal charges alone in connection with "service" during 1934 exceeded £20.

It is high time for all concerned to give the whole question of service their immediate and most careful consideration, before the public loses its last vestige of confidence.

F. WARD.

Portsmouth.

## Makers' Valve Stocks?

SETS of two of my customers are out of commission because I cannot obtain correct replacement valves. These valves have been on order for four weeks, and the excuse given by the makers is that set manufacturers are taking all their stocks. What a pretty pickle!

These particular sets were made 18 months ago, and yet replacement valves are not obtainable from anyone.

In my opinion, set makers should lay in stocks of valves purely for their own replacements.

G. D. HAWSE.

## The 12-Gn. Receiver

WHILE agreeing with much that Mr. G. T. Herbert writes regarding the price of sets, I think the 12-guineas set is the type for which most dealers can find a ready sale.

Industrial depression (strafe that word, but can we avoid it?) has seriously depleted the spending power of our public, and 20 guineas is very much out of the reach of the majority of our customers. I do not see the point in selling a set at this figure to our poorer customers with the inducement of a longer hire period, when, in all probability, the set would be obsolete before half the payments had been made.

With the knowledge that manufacturers possess from past experience, and with up-to-date plant and resources, I see no reason whatever why we cannot have a set retailing at 12 guineas, showing a reasonable return to maker and retailer, and yet proving fairly foolproof and trouble-free.

Burnley.

WM. BURY.

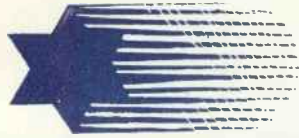


# THE BIG NAME BEHIND BATTERY SALES

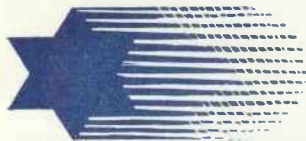
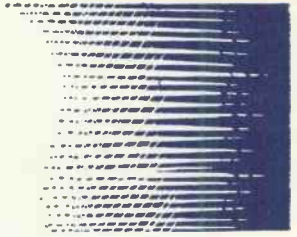
# G.E.C.

# MARATHON

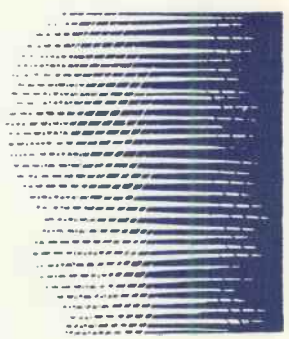
MADE AT THE G.E.C. BATTERY WORKS  
WITTON BIRMINGHAM



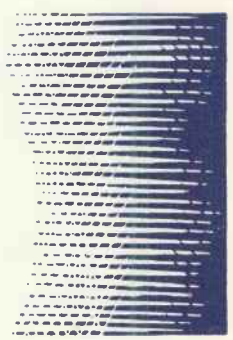
***THIS IS THE NAME  
BEHIND THE BATTERY***



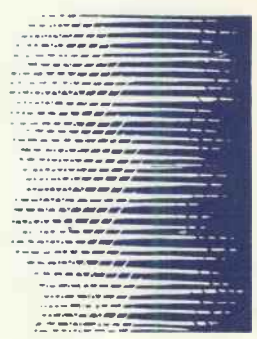
***THIS IS THE POWER  
BEHIND THE SET***



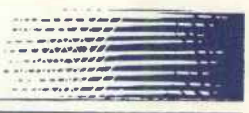
***THIS IS THE FORCE  
BEHIND YOUR SALES***



***THIS IS THE PROFIT  
BEHIND YOUR SALES***



***G E C MARATHON H.T.***





# G.E.C. MARATHON



# 6/6

120  
VOLTS

# 25%

# BATTERIES

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

# G.E.C.

## MARATHON



**THE NAME BEHIND THE BATTERY**

**— THE POWER BEHIND THE SET**

**6/6** 120  
VOLTS

**5/6** 100  
VOLTS

**3/6** 60  
VOLTS

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."



# PART-EXCHANGE RESALE PRICES

THE price you may expect to obtain when reselling any one of nearly 500 types of receivers of forty-four different makes are given below and on the pages following.

The list is considerably larger than that published by BROADCASTER in July of last year. And THE BROADCASTER schedule is still the most complete published in connection with part-exchange.

The figures quoted are the average of the resale prices being obtained by a selection of successful radio dealers in various parts of the country.

As the market value of a set varies considerably from place to place, not only the average figure is quoted below, but the highest and lowest resale figures obtained by the dealers who provided the basic statistics.

It should be noted that where a receiver is dated as, say, 1931-33, the price taken for the 1931 type will be lower in relation to the average figure than that expected for a 1933 model of the same set.

It will be seen that against each set is quoted the year of introduction. Usually this introduction dated from the Olympia Radio Exhibition. A set dated 1932-33 was probably introduced at the 1932 Show, and was retained until at least after the 1933 Show.

No prices are given for sets produced

before 1930. Such instruments have now no resale value.

Large town prices are different from country prices. An area in which a main B.B.C. station is situated returns a lower second-hand value for non-selective sets than an area well away from stations.

The value of sets made by manufacturers that have ceased trading does not necessarily go to nil. Certain types retain some value in the second-hand market.

The trend in resale prices of different types of set should also be noted.

Second-hand superhets keep a better value than older straight sets. Also receivers which, when current, were very popular and well known, hold a greater second-hand value. Instruments fitted with cone speakers are of lower value than those with moving coil speakers.

A.C. instruments are always of greater value in proportion than battery sets, although portable battery superhets hold their price.

D.C. sets do not hold their value so well.

To arrive at his allowance figure the dealer has to deduct from the second-hand value:—

- (i) His profit on the resale.
- (ii) Any advertising costs he may incur in the resale.

(iii) A figure (fair to himself) for putting the set in working and resaleable order, together with replacements at retail price.

The first two deductions will be percentage figures which, presumably, will stay constant whatever the deal.

The cost of service work should be calculated just as if the work were being done for a customer covered by no guarantee or dealer-obligation. Then the total should be deducted from the resale figure with the other items mentioned before an allowance is quoted.

Three means of identification are given in the following list, apart from the manufacturers' names.

The first letters and figures give the type of set and the number of valves, respectively. "B." indicates a battery set; "A.C." or "D.C." indicates mains sets; "U." indicates a universal A.C./D.C. receiver; "R.G." means radiogram; and "R.G.Auto" indicates an automatic radiogram.

This code information should be read in conjunction with the details following in brackets, which give the title of the set or the manufacturer's catalogue, type, or model number for it.

The second column gives the original list price of the set when first released.

Make, Type and Description.	Original Price. £ s. d.	Year.	Resale Price.		
			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
<b>AERODYNE.</b>					
B2 (Battery) ...	4 19 6	1931/32	0 7 6	2 5 0	0 17 3
AC2 (Mains) ...	10 10 0	"	1 0 0	3 0 0	1 16 2
B3 (S.G. Battery) ...	9 9 0	1932/33	1 0 0	3 0 0	1 15 2
AC3 (S.G. Mains) ...	15 15 0	"	2 5 0	5 0 0	3 7 1
DC2 (Mains) ...	10 10 0	"	0 10 0	4 0 0	1 16 4
B3 (Swift) ...	4 4 0	1933/34	0 10 0	2 0 0	1 7 11
B3 (Kestrel Class B) ...	7 19 6	"	1 5 0	4 4 0	2 15 11
B4 (Eagle S.G. Transportable) ...	10 10 0	"	1 10 0	5 10 0	3 9 0
<b>ALBA (A. J. Balcombe).</b>					
B3 (22) ...	9 19 6	1931/32	1 0 0	2 10 0	1 12 2
B3 (33) ...	11 19 6	1932/33	1 5 0	3 0 0	1 18 11
B3 (44 R.G.) ...	16 16 0	"	3 0 0	5 0 0	3 18 10
AC3 (55) ...	17 17 0	"	3 0 0	5 5 0	3 17 6
DC3 (66) ...	21 0 0	"	3 0 0	5 0 0	3 15 11
AC3 (77 R.G.) ...	27 6 0	"	4 0 0	9 5 0	6 14 4
AC3 (88 R.G.) ...	33 12 0	"	3 3 0	10 10 0	7 13 8
AC3 (50) ...	14 14 0	"	2 10 0	4 10 0	3 7 4
AC3 (70 R.G.) ...	23 2 0	"	4 10 0	8 15 0	6 0 9
B4 (222) ...	11 11 0	1933/34	3 0 0	4 10 0	3 17 2
B3 (23) ...	14 14 0	"	3 0 0	5 5 0	4 4 8
B5 (34) ...	14 14 0	"	4 0 0	5 0 0	4 13 2
B5 R.G. (45) ...	25 4 0	"	6 10 0	10 10 0	8 6 6
AC5 (54) ...	13 13 0	"	4 10 0	6 6 0	5 6 0
AC5 (67) ...	16 16 0	"	4 12 6	8 8 0	6 6 1
AC5 R.G. (78) ...	25 4 0	"	6 10 0	12 10 0	9 11 6
<b>AMPLION.</b>					
B4 (Suitcase Portable) ...	24 15 0	1930/31	1 0 0	4 0 0	1 19 7
B4 (Cabinet Portable) ...	23 2 0	"	1 15 0	3 10 0	2 5 6
AC2 (Mains) ...	15 0 0	"	0 10 0	2 12 6	1 8 9
AC6 (Six) ...	21 0 0	1931/32	1 0 0	5 0 0	2 18 8
<b>ATLAS (H. Clarke &amp; Co.).</b>					
AC2 (RA2) ...	10 10 0	1931/32	0 10 0	2 10 0	1 10 6
DC2 (RD2) ...	10 10 0	"	0 5 0	1 18 6	1 4 4
B2 (Battery) ...	6 10 0	1930/31	0 5 0	1 5 0	0 12 11
AC4 (A4) ...	12 12 0	1933/34	3 17 6	7 7 0	5 6 9
B4 (B4) ...	11 17 6	"	3 0 0	5 10 0	4 3 5
AC3 (334) ...	9 17 6	"	2 15 0	4 0 0	3 9 10
<b>AUTOMOBILE ACCESSORIES (BRISTOL) LTD.</b>					
B3 (P.D. Junior 3) ...	4 19 6	1930/32	0 7 6	1 10 0	0 15 10
B3 (P.D. Junior Pedestal) ...	7 12 6	"	0 8 6	2 0 0	1 1 11
B3 (P.D. Junior Console) ...	6 12 6	"	0 7 6	1 18 6	1 0 8
B3 (P.D. Westro) ...	5 12 6	"	0 7 6	1 11 3	0 16 7
B3 (P.D. Westro Console) ...	9 4 6	"	0 10 0	2 2 0	1 2 1
B3 (P.D. Westro Pedestal) ...	10 2 0	"	0 12 6	2 3 6	1 4 5
B3 (P.D. Westward) ...	7 17 6	"	0 8 6	1 19 0	1 0 7
B3 (P.D. Western) ...	7 3 0	"	0 8 0	1 17 0	1 0 2
B3 (P.D. Western Pedestal) ...	11 12 0	"	0 15 0	2 10 0	1 5 1
B3 (P.D. Western Console) ...	10 12 6	"	0 12 6	2 10 0	1 5 3
B3 (P.D. S.G.3) ...	9 15 0	1930/33	0 15 0	2 0 0	1 8 10
B3 (P.D. S.G. de Luxe) ...	11 10 0	"	0 17 6	2 10 0	1 11 11
B4 (P.D. S.G.4) ...	11 0 0	"	0 12 6	2 10 0	1 11 8
B4 (P.D. S.G. de Luxe) ...	12 19 6	"	0 15 0	2 10 0	1 13 5
B4 (P.D. T.S.G.4) ...	16 17 6	"	1 6 8	4 4 0	2 8 10
AC3 (P.D. Mains S.G.3) ...	16 17 6	"	1 6 8	4 10 0	2 19 6
AC4 (P.D. Mains T.S.G.4) ...	26 0 0	"	1 10 0	5 0 0	3 8 3

Make, Type and Description.	Original Price. £ s. d.	Year.	Resale Price.		
			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
<b>BEETHOVEN.</b>					
B4 (S.G. Portable) ...	10 10 0	1931/33	1 10 0	4 0 0	2 6 0
AC3 (SG Mains) ...	14 14 0	1931/32	2 10 0	5 0 0	3 12 7
B4 (SG Transportable) ...	10 10 0	1932/33	1 2 6	4 0 0	2 10 3
B4 (S.G. Major Portable) ...	11 11 0	1933/34	2 0 0	4 10 0	2 18 9
B4 (S.G. Transportable) ...	11 11 0	"	2 10 0	5 5 0	4 2 7
<b>BROWNIE.</b>					
B4 (Dominion S.G.) ...	12 10 0	1931/32	0 5 0	4 0 0	1 14 6
B2 (Baby Grand) ...	3 15 0	1930/31	0 5 0	1 5 0	0 11 10
AC2 (Dominion Mains) ...	7 10 0	1931/32	0 10 0	4 10 0	1 7 5
AC3 (Dominion SGP) ...	15 15 0	"	1 0 0	4 0 0	2 2 6
B3 (Dominion SG Grand) ...	9 17 6	"	0 6 0	3 0 0	1 7 6
AC3 (Dominion SG Grand) ...	13 13 0	"	1 0 0	4 10 0	2 5 10
<b>BURNEPT.</b>					
B4 (Screened Portable) ...	19 19 0	1930/31	1 10 0	6 10 0	2 11 8
B2 (Merrymaker) ...	5 15 0	1931/32	0 10 0	2 0 0	0 19 5
B3 (Merrymaker) ...	7 10 0	"	0 15 0	2 15 0	1 6 10
AC2 (Merrymaker) ...	8 10 0	"	0 15 0	3 2 6	1 10 10
AC3 (Wandering Minstrel) ...	16 19 6	"	1 15 0	5 10 0	2 19 8
AC3 (Ethophone) ...	14 14 0	"	1 15 0	5 5 0	2 15 7
AC5 (Universal Five) ...	31 10 0	"	3 0 0	8 7 6	4 16 5
<b>BURTON.</b>					
AC3 (S.G.) ...	15 15 0	1931/32	0 10 0	5 0 0	3 0 4
AC3 (S.G. R.G.) ...	27 6 0	"	1 15 0	8 0 0	5 16 6
B2 (Empire) ...	3 5 0	"	0 5 0	1 15 0	0 14 10
B3 (Empire) ...	7 15 0	"	0 7 6	2 2 0	1 3 8
<b>BUSH.</b>					
AC3 (S.G.) ...	17 17 0	1932/33	2 10 0	7 0 0	4 7 3
B3 (S.B.1) ...	10 19 6	1933/34	3 10 0	4 10 0	3 8 5
<b>BURGOYNE.</b>					
B3 (Popular) ...	4 4 0	1930/32	0 10 0	3 10 0	1 0 5
B3 (Olympic) ...	4 4 0	"	0 10 0	3 10 0	0 19 5
B3 (Dreadnought) ...	10 10 0	1931/33	0 12 0	4 0 0	1 14 3
B5 (Portable) ...	5 19 6	"	0 5 0	2 10 0	1 5 2
B5 (Portable de Luxe) ...	8 8 0	"	0 18 9	2 1 0	1 8 2
AC7 (Silver Seven) ...	26 5 0	1931/32	2 0 0	6 0 0	4 1 1
B3 (Clock Set) ...	6 12 6	1931/33	0 10 0	2 12 0	1 5 0
B3 (Class B3) ...	6 10 0	1933/34	2 5 0	4 0 0	2 17 6
<b>BLUE SPOT.</b>					
AC4 (W 400) ...	14 14 0	1931/32	1 10 0	6 0 0	3 1 10
B4 (K 252) ...	12 12 0	"	0 15 0	5 0 0	2 5 1
AC4 (W S 400) ...	17 17 0	"	2 2 6	7 0 0	3 6 10
AC4 (Table Grand) ...	21 0 0	"	2 15 0	8 0 0	3 18 7
AC4 (Upright Grand) ...	23 2 0	"	2 12 6	7 10 0	3 16 3
B4 (De Luxe Pedestal) ...	16 16 0	"	2 0 0	6 15 0	2 19 11
<b>CLARION (British Clarion Co.).</b>					
B3 (S.G.3) ...	7.15 0	1932/33	0 15 0	3 0 0	1 9 8
AC4 ...	8 15 0	"	0 18 9	4 0 0	1 19 3
AC5 (S.G.) ...	12 12 0	"	1 10 0	5 0 0	3 0 11
AC5 (S.G. Bivox) ...	14 14 0	"	1 2 6	6 10 0	3 8 1
AC5 (Superhet) ...	14 14 0	"	2 2 0	6 10 0	4 1 1

(Continued on page 42)

PART EXCHANGE PRICES (Contd.)

Make, Type and Description.	Original Price. £ s. d.	Year.	Resale Price.		
			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
AC5 (Bivox Superhet) ...	16 16 0	"	2 7 6	7 0 0	4 4 11
AC5 (R.G.) ...	19 19 0	"	3 0 0	7 7 0	5 4 9
AC5 (R.G. Bivox) ...	22 1 0	"	3 2 0	7 7 0	5 6 7
AC5 (Superhet R.G.) ...	23 2 0	"	3 3 0	8 8 0	5 11 2
AC5 (Superhet Bivox R.G.) ...	25 4 0	"	3 4 0	9 9 0	5 18 8
<b>CLIMAX.</b>					
AC3 (Bandpass) ...	16 16 0	1931/33	1 10 0	4 10 0	2 7 2
DC3 (Bandpass) ...	16 16 0	"	0 12 6	3 15 0	1 17 6
AC3 (Bandpass R.G.) ...	25 4 0	"	1 15 0	8 8 0	4 18 10
DC3 (33 A) ...	15 15 0	1932	1 10 0	3 0 0	2 1 0
DC3 (R.G.) ...	26 5 0	1932/33	2 5 0	8 0 0	4 2 2
B3 (M.C.3) ...	9 15 0	1931/32	0 11 9	4 0 0	1 13 9
AC3 (33A) ...	15 15 0	"	1 5 0	4 0 0	2 10 6
B2 (M 22) ...	5 5 0	1930/31	0 10 0	1 5 0	0 14 9
AC (M 22) ...	9 15 0	1932	1 0 0	2 0 0	1 4 1
AC.4 (S.4) ...	14 14 0	1933/34	4 0 0	6 6 0	5 5 10
AC3 (T.C.3) ...	12 12 0	"	3 3 0	6 6 0	4 11 6
<b>COLUMBIA.</b>					
B2 (353) ...	4 19 6	1931/32	0 10 0	1 10 0	0 16 11
B3 (354) ...	9 17 6	"	1 2 6	3 0 0	1 16 11
B6 (380 superhet) ...	17 17 0	"	2 5 0	4 10 0	3 3 6
AC4 (355) ...	16 16 0	1932/33	2 0 0	7 7 0	4 1 0
DC4 (355) ...	16 16 0	"	2 0 0	4 0 0	2 17 9
RG4 (602 A.C.) ...	33 12 0	1931/32	3 15 0	14 14 0	7 6 1
RG4 (602 D.C.) ...	33 12 0	1932/33	3 0 0	10 0 0	5 16 4
AC7 (356 Superhet) ...	25 4 0	"	3 15 0	7 9 0	6 8 8
DC7 (356 Superhet) ...	25 4 0	"	3 10 0	7 10 0	5 2 9
RG7 (831 A.C. Auto) ...	54 2 0	"	9 0 0	18 18 0	12 15 1
AC10 (840 R.G. Auto) ...	94 10 0	"	5 0 0	25 0 0	18 2 10
AC2 (350) ...	10 10 0	1931/32	0 10 0	2 0 0	1 3 7
AC2 (303) ...	12 12 0	"	0 16 0	2 0 0	1 6 0
DC2 (303) ...	12 12 0	"	0 10 0	2 0 0	1 3 1
AC3 (331) ...	18 18 0	"	1 2 0	5 10 0	2 12 10
B2 (351) ...	4 7 6	"	0 10 0	1 10 0	0 15 10
AC3 (307) ...	21 0 0	1930/31	1 5 0	4 10 0	2 17 6
AC4 (352) ...	24 3 0	1931/32	2 0 0	5 0 0	3 11 9
AC4 (804 R.G. Auto) ...	49 7 0	1932/33	5 0 0	17 10 0	11 8 6
AC5 (302) ...	84 0 0	1931/32	3 0 0	23 0 0	12 12 8
AC4 (608 (R.G.)) ...	42 0 0	"	3 10 0	21 0 0	12 8 4
AC3 (310 R.G.) ...	42 0 0	1930/31	3 10 0	15 0 0	8 5 0
AC2 (309) ...	12 12 0	"	1 0 0	5 0 0	2 5 0
AC4 (620) ...	33 12 0	1932/33	3 15 0	10 0 0	6 7 5
B3 (1005) ...	8 15 0	1933/34	1 10 0	5 0 0	3 6 9
AC4 (1001) ...	11 11 0	"	1 12 0	6 6 0	4 3 5
AC4 RG (1003) ...	21 0 0	"	4 0 0	15 15 0	9 0 9
<b>COSSOR.</b>					
AC2 ...	10 10 0	1930/31	0 15 0	2 0 0	1 4 3
AC2 (with (L/S)) ...	14 14 0	"	1 0 0	3 10 0	1 19 6
AC3 ...	17 17 0	"	1 15 0	4 10 0	2 11 9
B4 (732) ...	12 15 0	1932/33	1 10 0	3 15 0	2 7 9
AC2 (233) ...	8 18 6	"	0 10 0	2 5 0	1 6 10
AC4 (533) ...	18 18 0	"	2 5 0	6 0 0	3 9 5
AC8 (833) ...	31 10 0	1931/32	1 17 0	10 10 0	5 0 0
AC4 (244) ...	18 18 0	"	1 10 0	5 10 0	3 5 7
AC3 (222A) ...	8 15 0	1933/34	2 15 0	4 0 0	3 8 0
B5 (735) ...	12 15 0	"	3 7 0	4 10 0	4 5 5
B5 (834) ...	13 10 0	"	4 2 0	6 0 0	4 14 10
AC6 (635) ...	14 14 0	"	3 10 0	7 0 0	5 8 7
AC4 (3468) ...	10 15 0	"	2 0 0	6 0 0	3 19 2
<b>CROMWELL.</b>					
B3 (SG3) ...	10 10 0	1930/31	0 10 0	3 0 0	1 5 7
AC3 (Monarch Major) ...	15 15 0	"	1 7 0	3 10 0	2 1 3
DC3 (Monarch Major) ...	15 15 0	1930/31	1 2 0	3 2 6	1 17 8
AC3 (Monarch S.G. Console) ...	18 18 0	1932/33	1 10 0	4 0 0	2 10 7
B3 (Monarch) ...	4 14 6	"	0 10 0	1 0 0	0 15 0
AC3 (Monarch 303) ...	15 15 0	"	1 10 0	3 10 0	2 8 7
AC4 (Cromwell 404) ...	18 18 0	"	2 0 0	4 0 0	2 16 10
B3 (B34) ...	5 19 6	1933/34	0 10 0	2 10 0	1 16 1
B4 (R.F.4.B) ...	11 11 0	"	2 0 0	4 10 0	3 3 5
AC8 (SH8A) ...	18 18 0	"	4 0 0	8 0 0	6 11 9
U3 (A.C., D.C.3) ...	12 12 0	"	2 18 0	6 6 0	4 14 9
B8 (SH8B) ...	18 18 0	"	3 0 0	7 0 0	5 10 0
<b>DECCA.</b>					
AC3 (16) ...	16 16 0	1931/32	1 15 0	3 0 0	2 1 10
AC4 (19) ...	19 19 0	"	2 0 0	4 0 0	2 17 6
AC4 (22) ...	23 2 0	1932/33	1 15 0	4 0 0	3 1 4
AC5 (Tallboy) ...	29 8 0	"	1 10 0	5 0 0	3 12 9
<b>EKCO (E. K. Cole, Ltd.).</b>					
AC2 (312) ...	8 2 6	1930/31	0 10 0	2 0 0	1 4 1
AC3 (313) ...	14 14 0	"	1 0 0	3 10 0	1 18 5
AC3 (R.S.2) ...	15 15 0	1931/32	1 5 0	4 10 0	2 13 10
AC4 (R.S.3) ...	25 4 0	"	2 0 0	7 0 0	3 16 5
AC4 (R.C.4 Console) ...	33 12 0	1932	2 15 0	9 9 0	4 14 0
AC4 (R.G.5) ...	45 3 0	1932/33	3 10 0	14 14 0	8 15 3
AC5 (S.H. 25 Superhet) ...	25 4 0	"	3 0 0	8 0 0	4 16 4
AC3 (M.23) ...	17 17 0	"	2 15 0	6 0 0	3 13 10
DC3 (R.S.2) ...	15 15 0	1931/32	0 17 0	3 10 0	2 11 11
AC5 (74 A.C.) ...	13 13 0	1933/34	4 5 0	10 10 0	6 11 2
DC4 (74 D.C.) ...	13 13 0	"	4 5 0	10 10 0	5 18 11
<b>EDISON BELL.</b>					
AC2 (Pentode) ...	14 14 0	1930/31	0 10 0	2 10 0	1 5 3
AC3 ...	19 19 0	"	0 15 0	3 5 0	1 17 5
AC3 (S.G.) ...	25 10 0	"	1 5 0	4 10 0	2 5 0
B5 (459 Superhet) ...	21 0 0	1931/32	1 0 0	4 0 0	2 4 0
AC3 (555) ...	22 1 0	"	1 5 0	5 0 0	2 12 8
DC3 (555) ...	21 0 0	"	0 10 0	3 5 0	1 11 9
AC3 (457) ...	19 19 0	"	0 17 6	3 0 0	1 18 10
DC3 (457) ...	19 19 0	"	0 12 6	3 0 0	1 13 3
AC4 (466 Bandpass) ...	22 1 0	"	1 10 0	5 0 0	2 9 6
DC4 (466 Bandpass) ...	22 1 0	"	1 0 0	2 10 0	1 12 11
AC4 (566 S.G.) ...	25 4 0	"	1 10 0	5 0 0	2 15 11
DC4 (566 S.G.) ...	25 4 0	"	1 0 0	3 0 0	1 18 10

Make, Type and Description.	Original Price. £ s. d.	Year.	Resale Price.		
			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
AC4 (467 R.G.) ...	33 12 0	1931/32	3 5 0	12 0 0	7 14 0
DC4 (467 R.G.) ...	36 15 0	"	2 10 0	12 0 0	5 13 1
AC3 (557 Bandpass) ...	30 9 0	"	2 10 0	6 0 0	3 19 2
<b>E.R.P. (Electrical and Radio Products, Ltd.).</b>					
B4 (P.264 Portable) ...	10 10 0	1930/31	0 10 6	5 0 0	1 14 2
B4 (P.264 S.G. Portable) ...	12 12 0	"	0 12 6	3 0 0	1 10 8
B5 (P.225 Suitcase) ...	9 9 0	"	0 10 0	3 0 0	1 5 4
AC3 (R.G.) ...	36 15 0	1931/32	0 15 0	12 0 0	4 5 10
B4 (Clarendon) ...	10 10 0	"	0 12 6	5 0 0	1 10 6
AC2 (Clarendon) ...	10 10 0	"	0 14 0	4 15 0	1 12 3
DC2 (Clarendon) ...	10 10 0	"	0 10 0	4 10 0	1 8 6
AC3 (Marlboro) ...	14 14 0	"	1 0 0	5 0 0	2 6 10
DC3 (Marlboro) ...	14 14 0	"	0 10 0	5 0 0	2 1 4
AC4 (Gainsboro) ...	18 18 0	"	0 13 0	6 0 0	2 17 7
AC7 (Mayfair Super) ...	37 16 0	"	1 1 0	5 0 0	3 19 4
<b>FERRANTI.</b>					
AC2 ...	9 9 0	1930	0 12 6	2 0 0	1 5 0
AC3 (Inductor Console) ...	15 15 0	1930/31	1 5 0	5 0 0	2 10 10
AC3 (32) ...	14 14 0	"	1 5 0	4 10 0	2 8 1
AC3 (MC Console) ...	42 0 0	"	2 0 0	9 9 0	3 18 8
AC7 (Superhet) ...	23 2 0	1932/33	2 10 0	7 7 0	4 12 9
AC7 (Superhet Clock) ...	26 5 0	"	2 15 0	8 8 0	4 19 10
AC7 (Gloria Console) ...	25 4 0	1933/34	5 0 0	10 0 0	7 16 6
AC6 (Lancastria Magna) ...	15 15 0	"	4 0 0	9 9 0	6 7 4
B5 (Merica Console) ...	17 17 0	"	4 0 0	7 15 0	5 10 7
<b>GAMBRELL.</b>					
AC2 ...	15 15 0	1930	0 10 0	2 0 0	1 9 0
AC4 ...	45 0 0	1930/31	1 0 0	6 0 0	2 19 0
DC4 ...	37 0 0	"	0 10 0	6 0 0	2 15 11
AC8 (Superhet) ...	35 14 0	1931	2 12 6	5 0 0	4 0 6
AC4 (Novotone R.G.) ...	84 0 0	1930/31	4 2 0	26 0 0	10 13 2
<b>G.E.C. (General Electric Co.).</b>					
B3 (Geophone 3032) ...	12 0 0	1930	0 12 6	1 0 0	0 18 6
AC3 (Geophone 3130) ...	18 0 0	"	1 2 6	2 10 0	1 13 1
AC3 (Compact 3) ...	18 18 0	1931	1 5 0	3 10 0	2 6 7
AC3 (Carnival R.G.) ...	31 10 0	1931/32	1 10 0	11 0 0	6 1 6
AC3 (Gala) ...	15 15 0	"	1 12 0	4 10 0	3 1 11
AC4 (Console) ...	25 4 0	"	2 5 0	10 10 0	4 10 11
AC5 (Superhet) ...	27 6 0	"	3 0 0	12 12 0	5 8 7
AC4 (Viking) ...	24 3 0	"	2 15 0	7 7 0	4 10 3
DC4 (Nomad) ...	24 3 0	1932/33	1 12 0	5 10 0	3 7 10
AC5 (Multi Wave Super) ...	25 4 0	"	3 10 0	8 8 0	5 0 3
B6 (All Wave Super) ...	27 10 0	"	3 0 0	8 8 0	4 17 7
AC3 (B.3033 Portable) ...	21 0 0	1930/31	1 0 0	4 0 0	2 0 0
B4 (R.3045 Portable) ...	21 0 0	"	0 15 0	3 0 0	1 13 8
B4 (S.G. Cabinet Portable) ...	21 10 0	"	0 15 0	2 10 0	1 11 5
AC5 (Superhet 5) ...	14 14 0	1933/34	4 4 0	5 10 0	4 16 9
DC5 (Superhet 5) ...	14 14 0	"	2 17 6	5 10 0	4 8 0
AC5 (Superhet 5 Console) ...	17 17 0	"	5 0 0	6 10 0	5 19 8
DC5 (Superhet Console) ...	17 17 0	"	3 0 0	6 10 0	4 19 0
AC5 RG (Superhet 5 Radiogram) ...	26 5 0	"	8 19 6	10 10 0	9 16 5
<b>H.M.V. (Gramophone Co., Ltd.).</b>					
AC4 (435) ...	23 2 0	1931/32	3 0 0	6 0 0	4 6 7
DC4 (435) ...	23 2 0	"	1 10 0	4 4 0	3 5 5
B3 (459) ...	17 17 0	"	2 10 0	4 10 0	3 7 4
AC4 (438) ...	23 2 0	"	3 5 0	6 0 0	4 12 0
AC7 (470) ...	33 14 0	"	4 0 0	9 9 0	6 7 11
AC3 (501) ...	30 9 0	"	3 15 0	8 8 0	5 9 1
DC3 (501) ...	30 9 0	"	1 10 0	8 0 0	4 12 6
AC5 (521 R.G.) ...	50 8 0	1931/32	4 0 0	15 15 0	9 3 14
DC					



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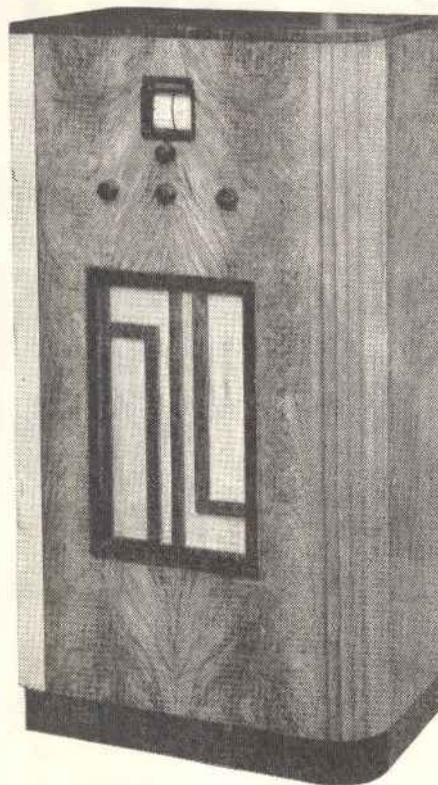
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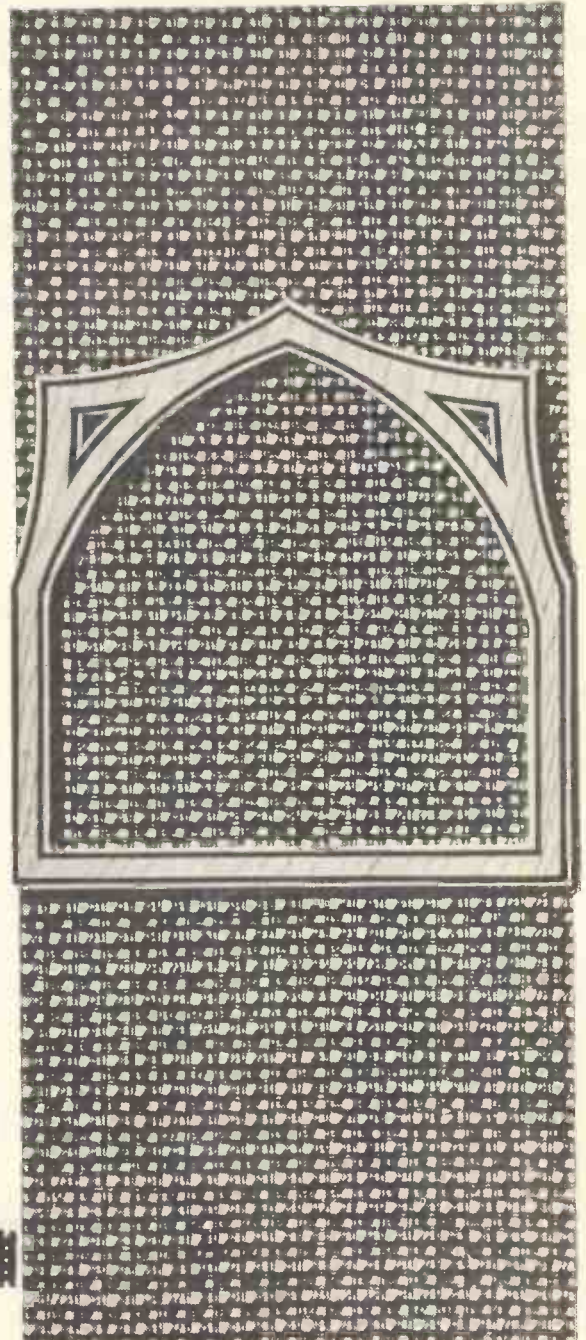
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			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
<b>LOTUS.</b>					
AC3 ...	14 14 0	1930/31	0 10 0	5 0 0	2 3 9
AC4 ...	21 0 0	"	0 12 0	6 0 0	2 13 6
AC2 (Bud) ...	10 10 0	1931/32	0 10 0	2 10 0	1 7 0
AC3 (Bandpass) ...	16 16 0	1932/33	0 15 0	3 10 0	2 9 2
DC3 (Bandpass) ...	16 16 0	1931/32	0 10 0	4 0 0	2 7 0
B4 (Portable) ...	12 12 0	"	0 15 0	4 0 0	1 17 8
B4 (Portable de Luxe) ...	14 14 0	"	0 19 0	4 5 0	2 1 1
<b>MAJESTIC.</b>					
AC5 (Havenwood) ...	15 10 0	1931/32	1 0 0	4 10 0	2 14 5
AC5 (Ellswood) ...	20 0 0	"	1 1 0	5 0 0	3 5 8
AC7 (Knightswood) ...	25 4 0	"	1 5 0	5 10 0	3 11 6
AC7 (Earlwood) ...	27 6 0	1932/33	1 10 0	7 0 0	4 6 3
AC7 (Princetonwood) ...	35 14 0	"	1 12 6	10 0 0	5 2 1
<b>MARCONIPHONE.</b>					
B2 (221) ...	8 0 0	1930/31	0 7 6	2 0 0	0 15 4
AC2 (220) ...	11 10 0	"	0 12 0	3 0 0	1 9 8
B3 (39) ...	15 15 0	"	0 10 0	4 0 0	1 16 11
AC3 (39) ...	21 0 0	"	1 0 0	7 0 0	2 16 8
DC3 (39) ...	17 15 0	"	1 0 0	7 0 0	2 2 4
AC4 (47) ...	35 0 0	"	0 10 0	8 0 0	3 0 3
DC4 (47) ...	32 7 0	"	0 10 0	8 0 0	2 12 7
B4 (47) ...	30 7 0	"	0 10 0	6 0 0	2 16 4
AC4 (560 Console) ...	39 18 0	1931/32	2 10 0	9 9 0	5 6 5
AC3 (42) ...	16 16 0	"	2 0 0	6 0 0	3 13 1
B5 (Portable 55) ...	18 18 0	1932/33	1 10 0	4 0 0	2 7 6
B6 (Portable 255) ...	17 17 0	"	2 0 0	8 0 0	4 4 8
B3 (252) ...	9 17 6	"	1 10 0	4 0 0	2 10 5
B2 (248) ...	4 19 6	"	0 10 0	1 17 6	2 4 2
AC7 (256 Super) ...	25 4 0	"	3 10 0	9 9 0	6 7 0
AC4 (253) ...	16 16 0	"	3 0 0	7 7 0	4 6 3
DC4 (253) ...	16 16 0	"	2 15 0	4 15 0	3 8 4
AC3 (330 R.G.) ...	30 9 0	"	4 10 0	10 10 0	6 7 0
DC3 (330 R.G.) ...	30 9 0	"	2 10 0	7 10 0	4 17 8
AC6 (535 R.G.) ...	40 19 0	"	5 5 0	12 0 0	8 0 10
AC6 (536 R.G. Auto) ...	54 15 0	"	8 0 0	20 0 0	12 13 5
AC6 (258 R.G. Auto) ...	57 15 0	"	10 15 0	25 0 0	14 8 8
B4 (66) ...	13 13 0	1931/33	1 10 0	3 0 0	2 5 1
B3 (283) ...	8 15 0	1933/34	2 10 0	4 15 0	3 7 3
B4 (260) ...	11 17 6	"	1 10 0	7 0 0	3 12 6
AC4 (253) ...	11 11 0	"	3 5 0	8 8 0	4 13 6
AC7 (258) ...	24 3 0	"	5 5 0	10 10 0	7 7 6
AC5 (272) ...	15 15 0	"	4 0 0	10 10 0	6 4 8
AC7 (276) ...	23 2 0	"	3 8 0	17 17 0	8 12 7
AC5 R.G. 274 ...	30 9 0	"	7 15 0	21 1 0	11 8 5
AC7 R.G. 290 ...	44 2 0	"	10 0 0	29 8 0	17 9 1
AC7 R.G. Auto 291 ...	54 2 0	"	12 10 0	36 15 0	21 4 1
AC4 271 ...	24 3 0	"	3 0 0	16 16 0	7 13 3
AC4 R.G. 254 ...	24 3 0	"	3 15 0	16 16 0	8 19 6
B6 Portable 269 ...	15 15 0	"	4 10 0	12 12 0	6 11 10
<b>MURPHY.</b>					
B4 (Battery) ...	17 17 0	1931/32	1 10 0	4 4 0	2 17 11
B5 (Portable) ...	16 16 0	"	3 0 0	7 10 0	4 15 10
AC3 (Portable A3) ...	19 19 0	"	2 0 0	6 10 0	3 19 4
AC4 (Portable A4) ...	14 10 0	"	3 0 0	10 10 0	6 13 9
DC4 (Portable D4) ...	14 10 0	"	2 2 0	10 10 0	4 15 1
AC8 (A8) ...	24 0 0	1932/33	3 10 0	12 0 0	8 6 11
<b>McMICHAEL.</b>					
B5 (M.H. Portable) ...	15 15 0	1930/31	1 10 0	3 0 0	2 3 7
B4 (M.H. Super Range) ...	23 2 0	"	1 15 0	3 0 0	2 8 11
B4 (M.H. Transport Desk) ...	27 6 0	"	1 12 6	6 0 0	2 17 8
AC3 (R.G.) ...	50 8 0	1931/32	6 0 0	15 0 0	10 0 3
DC3 (R.G.) ...	50 8 0	"	6 0 0	15 0 0	8 15 6
AC4 (Mains M.C.) ...	25 4 0	"	3 3 0	7 7 0	4 13 7
B4 (Duplex Portable) ...	17 17 0	1932/33	3 0 0	4 4 0	3 15 5
AC4 (Duplex Transport) ...	17 17 0	"	3 5 0	9 9 0	5 6 0
B4 (Colonial Super) ...	15 0 0	"	2 0 0	5 0 0	3 7 0
AC3 ...	21 0 0	1931/32	2 0 0	4 10 0	3 10 8
DC3 ...	21 0 0	"	1 10 0	5 0 0	3 0 7
AC4 (Twin Supervox) ...	18 18 0	1933/34	5 5 0	12 12 0	7 4 6
B5 (Lodex 5) ...	16 16 0	"	4 4 0	12 12 0	6 6 4
B5 (Superhet 5 Class B) ...	16 16 0	"	4 4 0	7 0 0	5 10 5
<b>PHILIPS.</b>					
B3 (2502) ...	12 10 0	1930/31	0 15 0	3 0 0	1 12 0
B4 (2802) ...	30 0 0	"	1 12 0	5 0 0	2 8 4
AC2 (2515) ...	12 10 0	"	1 0 0	2 0 0	1 10 2
DC2 (2523) ...	12 10 0	"	0 10 0	2 0 0	1 7 6
AC3 (2514) ...	21 0 0	"	1 10 0	3 0 0	2 4 0
DC3 (2524) ...	21 0 0	"	1 0 0	2 0 0	1 15 7
AC3 (2531) ...	23 0 0	"	1 10 0	3 10 0	2 5 11
AC4 (2511) ...	35 0 0	"	1 15 0	4 0 0	2 14 7
AC4 (2601 Console) ...	45 0 0	"	3 0 0	14 0 0	6 7 8
AC4 (2811 R.G.) ...	30 0 0	"	4 15 0	26 0 0	11 2 5
B5 (2522 Portable) ...	25 0 0	"	1 9 0	5 0 0	2 6 8
AC4 (870A R.G.) ...	35 14 0	1931/32	4 0 0	12 0 0	7 10 0
DC3 (2636 Radioplayer) ...	17 17 0	"	1 0 0	6 0 0	2 17 0
AC3 (2634 Radioplayer) ...	25 0 0	"	1 10 0	7 7 0	3 4 0
AC4 (830A) ...	16 16 0	1932/33	2 15 0	5 0 0	4 10 7
DC4 (830C) ...	16 16 0	"	2 0 0	5 0 0	3 12 7
B4 (830B) ...	11 11 0	"	1 10 0	4 0 0	2 16 3
AC5 (830A) ...	24 3 0	"	2 5 0	9 9 0	5 9 5
AC6 (834A) ...	16 16 0	1933/34	5 0 0	9 9 0	7 0 5
B5 (832B) ...	10 10 0	"	2 10 0	6 6 0	3 17 3
AC7 (836) ...	23 3 0	"	7 0 0	12 12 0	9 16 2
AC5 (834A) ...	11 11 0	"	3 8 6	7 7 0	5 1 6
DC5 (834C) ...	12 12 0	"	3 2 0	5 5 0	4 4 6
<b>PHILCO.</b>					
AC5 (56 Baby Grand) ...	16 16 0	1932/33	2 0 0	6 0 0	3 14 10
AC5 (56 Lowboy) ...	23 2 0	"	3 0 0	7 7 0	4 7 7
AC5 (256 R.G.) ...	36 15 0	"	4 4 0	15 15 0	7 12 0
AC5 (55 Baby Grand) ...	14 14 0	"	2 0 0	4 10 0	3 4 5
AC5 (55 Lowboy) ...	19 19 0	"	2 5 0	6 0 0	3 9 6
DC8 (Superhet) ...	30 9 0	"	2 10 0	6 10 0	4 7 6
DC4 (Superhet) ...	16 16 0	"	1 10 0	3 10 0	2 18 6
B5 (237 Superhet) ...	16 16 0	"	1 15 0	3 15 0	2 9 8
AC5 (5 Star Baby Grand) ...	16 16 0	1933/34	4 0 0	12 12 0	6 15 4
AC5 (4 Star Baby Grand) ...	14 14 0	"	3 15 0	10 10 0	6 0 2
AC5 (5 Star Concert Grand) ...	21 0 0	"	4 10 0	17 17 0	9 6 5

PART EXCHANGE PRICES (Contd.)

Make, Type and Description.	Original Price. £ s. d.	Year.	Resale Price.		
			Min. £ s. d.	Max. £ s. d.	Average. £ s. d.
<b>PORTADYNE.</b>					
B4 (B.M.C.) ...	14 14 0	1932/33	1 10 0	4 0 0	2 6 7
B4 (Challenger) ...	12 17 6	"	1 5 0	3 0 0	2 1 6
B4 (Atlantic) ...	12 12 0	"	1 0 0	2 15 0	2 1 5
B2 (M.C.2) ...	6 19 6	1931/32	0 10 0	1 10 0	1 0 1
AC3 ...	17 17 0	1932/33	2 0 0	4 0 0	2 19 7
B4 (M.C.4) ...	11 19 6	1933/34	2 13 0	5 0 0	3 16 7
B6 (S.B.) ...	15 15 0	"	3 15 0	6 0 0	4 15 0
AC6 (S/A.C.) ...	15 15 0	"	3 17 6	7 0 0	5 15 6
<b>PYE.</b>					
B2 (232) ...	5 16 0	1930/31	0 7 6	1 10 0	0 14 5
B2 (275) ...	12 0 0	"	0 8 6	1 5 0	0 10 10
AC2 (275C) ...	17 10 0	"	0 17 6	5 0 0	1 13 11
AC3 (350) ...	25 0 0	"	1 0 0	6 0 0	2 5 0
B4 (460) ...	19 10 0	"	0 18 9	2 0 0	1 10 1
B5 (25C. Port.) ...	19 19 0	"	1 5 0	3 0 0	2 13 7
AC3 (350 Console) ...	36 15 0	"	3 0 0	6 10 0	4 15 0
B4 (M.C./S.) ...	22 10 0	1932/33	2 0 0	5 0 0	3 0 0
AC4 (A.C.4D.) ...	29 8 0	"	3 0 0	7 7 0	4 2 10
DC4 (D.C.4D.) ...	29 8 0	"	1 0 0	5 0 0	2 15 6
AC3 (R.G.) ...	63 0 0	"	4 10 0	20 0 0	10 0 8
AC2 (K.) ...	12 12 0	"	0 12 0	4 0 0	2 3 10
AC4 (M.M.) ...	17 17 0	1931/33	2 10 0	7 7 0	4 2 3
AC4 (G.) ...	18 18 0	"	2 10 0	9 0 0	4 11 7
AC6 (S. Superhet) ...	28 7 0	"	3 10 0	11 11 0	6 12 7
B4 (Q.) ...	14 14 0	"	2 10 0	4 15 0	3 12 9
AC3 (2 S.G. R.G.) ...	42 0 0	"	6 6 0	16 0 0	11 2 2
B5 (P./B.) ...	14 14 0	1933/34	3 15 0	11 11 0	7 1 11
<b>R.I. (RADIO INSTRUMENTS).</b>					
AC3 (Madrigal) ...	18 18 0	1930/31	1 17 6	5 0 0	2 13 3
AC6 (Superhet) ...	27 6 0	"	2 15 0	6 10 0	5 0 0
AC3 (Madrigal Console) ...	35 0 0	"	2 9 0	4 10 0	3 11 7
B4 (Class B.4) ...	15 15 0	1933/34	4 0 0	8 8 0	5 6 7
AC6 (R.G. Madrigal) ...	35 0 0	"	5 5 0	18 18 0	13 0 6
<b>REGENTONE.</b>					
AC2 ...	6 15 0	1931/32	0 10 0	2 0 0	1 2 6
AC3 ...	12 0 0	"	0 17 6	3 0 0	2 4 4
AC3 (Superhet S.G.) ...	15 15 0	1932/33	1 10 0	4 0 0	2 16 8
<b>STANDARD (Standard Telephones &amp; Cables, Ltd.).</b>					
B2 (S.328) ...	5 0 0	1932/33	0 10 0	1 5 0	0 14 4
AC2 (S.322) ...	9 10 0	"	0 15 0	2 17 0	1 9 9
AC3 (S.330) ...	16 16 0	"	2 0 0	6 0 0	3 6 3
<b>SUNBEAM.</b>					
B3 (R.33) ...	8 8 0	1932/33	0 15 0	2 10 0	1 12 7
B3 (S.G. P.3) ...	10 10 0	"	1 0 0	2 2 0	1 14 9
B4 (S.G.4) ...	12 12 0	"	1 10 0	2 12 0	2 0 8
U4 (A.C./D.C.) ...	10 10 0	1933/34	2 0 0	4 4 0	2 17 4
<b>TELSEN.</b>					
B3 (S.91 W.L./S.) ...	5 5 0	1931/32	0 12 6	2 0 0	1 0 10
B3 (S.92) ...	4 5 0	"	0 10 0	1 15 0	1 1 6
B3 (S.93) ...	3 5 0	"	0 10 0	1 10 0	0 15 1
AC3 (312 Golden Voice) ...	12 12 0	1932/33	1 10 0	5 0 0	2 16 1
AC3 (315) ...	15 15 0	"	2 0 0	5 10 0	3 5 7
AC3 (464 Golden Voice) ...	10 10 0	"	2 10 0	6 0 0	3 12 8
B3 (Air Marshal) ...	5 5 0	1933/34	0 10 0	2 10 0	1 13 10
<b>ULTRA.</b>					
AC2 (Blue Fox) ...	10 10 0	1931/32	0 15 0	3 0 0	1 11 9
DC2 (Blue Fox) ...	10 10 0	"	0 10 0	1 10 0	0 19 5
AC					

## Tested by Broadcaster

### H.M.V. Console Five Model 444

Dimensions .....	33 in. x 20 in. x 11 in.
Wavelength Range .....	198-550, 800-1,950 metres
Loading .....	70 watts
Ripple .....	25 volt
Price .....	17 guineas

THE new H.M.V. model 444 makes full use of modern technical practice and incorporates attractive constructional features.

A console model, the set is mounted in a very handsome dark walnut cabinet standing on a plinth type of base. The tuning dial is mounted obliquely in a recessed portion at the top.

The controls are arranged on the face of the cabinet above a rectangular speaker grille. They provide for volume, tuning, tone and master switching. A push-pull movement of the volume control brings into operation a pre-set "Q" circuit giving silent tuning between stations.

Produced on typical H.M.V. lines, a very rigidly-constructed chassis has the valves arranged around the components in more or less logical order. Connections for aerial, earth, pick-up and extra speaker are carried on insulating panels at the back.

At the side of these is a hum-neutraliser and the adjustment for silent tuning. This can be set to suit local conditions and is actually brought into operation by pulling out the main volume control knob.

The circuit contains some interesting features. In the first place the frequency-changer, a MX40, is preceded by a band-pass input incorporating an image rejector circuit. A pair of coupled circuits feed the I.F. valve, which is a VMS4. A further pair of circuits links an MHD4 double-diode triode connected to give delayed and quiet A.V.C. A simple resistance coupling is used between the triode portion and an MPT4 output pentode.

#### Refinements

Particular mention must be made of the various filter circuits, hum neutralising coils and tone compensated volume control, which are all features improving the performance of an otherwise standard circuit.

All the controls work excellently and the tuning scale is very clear. This is marked in main wavelengths and we found the calibration highly accurate.

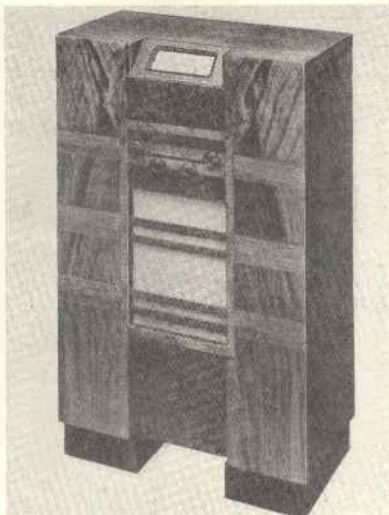
Tests immediately showed that the set is excellently designed. Sensitivity is high, selectivity good, and everything behaves very nicely.

The quiet tuning arrangement was entirely effective when only a reasonable number of stations was required, and even under bad conditions the set appeared to have almost knife-edge selectivity with very quiet background. The A.V.C. circuits are well designed and leave little to be desired.

Making use of the full gain of the receiver in conjunction with a large aerial in the swamp area only the adjacent channels to the local stations were missed on the medium waves. Sensitivity is sufficient to give good room strength of all the main stations on a small inside aerial.

On the long waves selectivity is nearly as good, although we obtained a little side splash on Deutschlandsender when 5XX was at work.

Quality is pleasing, the balance being good, with a reasonable amount of top



This modern walnut cabinet designed with an inclined tuning scale for ease of tuning, houses the new H.M.V. model 444 superhet "five."

response and brilliance and lower registers well in evidence.

The volume control circuits give the impression that the balance remains fairly constant irrespective of the setting of the control and this we regard as a very good feature.

In our opinion, the set is a definite advance on previous models employing a similar valve combination.

### Exide "Ironclad" Cell

Dimensions .....	7 in. x 3½ in. x 3½ in.
Ampere Hour Capacity .....	25.6
Price .....	11s. 6d.

THE Exide IFG-C accumulator is a 2-volt cell built on entirely new lines. The construction is very similar to that employed for traction batteries.

The paste is actually contained in slotted ebonite tubes, of which three are used, mounted side by side. The manufacturers claim that this construction gives the cell greater mechanical rigidity and as a result there is far less possibility of damage to the plates either electrically or mechanically. This means that an exceptionally satisfactory life should be obtained.

The cell is also fitted with the Exide charge indicator in the form of a pointer which is float-operated.

The position of the float varies according to the density of the acid, and the pointer is arranged to show full, half and empty states of charge.

The electrodes are supported on an insulating plate which is sealed with the usual black compound. The terminal heads are shrouded and the indication is by means of colour together with non-interchangeable screws.

Finally there is an ordinary type of filling plug and an indicator plate for the owner's name. The cell is supplied with a carrying handle of the conventional type.

The handle fits the moulded cell nicely and is convenient to use. The terminals are well away from any possible free acid, and the plates are rigidly assembled and firmly anchored. There is good sludge space.

During our discharge the position of the indicator was carefully noted, and it was found to give a true indication of the condition of the cell.

The cell has a nominal rating of 27 ampere hours, and it will be seen that at the 100-hour rate we obtained a capacity which is just

below the nominal value. This we regard as entirely satisfactory for a new cell.

The new method certainly seems to give a very rigid construction. The plates, in fact, give the appearance of being far more robust than the conventional mass type of plate, and as the principle has been well tried in traction practice there is every indication that the new cell should prove highly satisfactory.

### Grosvenor Battery Receiver

Dimensions .....	17 in. x 15 in. x 9 in.
Wavelength Range .....	200-550, 900-2,000 metres
Loading, L.T. ....	.5 amp.
Loading, H.T. ....	6 m.a.
Price .....	£8 15s.

TESTS were recently carried out on a mains receiver introduced by Grosvenor Electric Batteries, Ltd., of Bowman's Place, Holloway, London, N.7. We have now examined the "companion" battery model.

Mounted in a walnut finished cabinet with a small decorative grille, the set has a rectangular straight-line dial calibrated in wavelengths. Green and black colouring distinguishes the two wavebands.

Control is by three knobs which provide for tuning, master switching and volume. The volume control is ganged with a reaction condenser.

There are three connection sockets for an earth and two alternative aerials at the back of a stout aluminium chassis. A multiple cable connects the batteries, which are arranged to stand on a shelf forming a central compartment in the cabinet. The M.C. speaker is screwed to a separate baffle.

A link-coupled band-pass input is used to the first valve, which is a Mullard PM12M. A tuned anode circuit feeds the detector valve, a PM2DX, and the output of this is taken through a directly-connected transformer to a PM22A pentode.

The resistance which controls the grid potential of the PM12M valve is ganged with the reaction condenser. An extension terminal on the grid of the detector valve provides a pick-up connection.

Selectivity of the set is good, and even with a large aerial in the swamp area we had no difficulty in separating the local transmissions and obtaining several Continental stations at very good strength between them. Sensitivity is well maintained at both ends of the waveband and appears to be particularly even.

Long wave selectivity is very good, and we obtained programme strength, with only slight side band splash, from Deutschlandsender with both Droitwich and Radio Paris at work.

Quality is very crisp, with a predominance of the middle and upper registers.

Model G.100, as the set is known, is definitely capable of giving a very good all-round performance with a reasonable battery consumption.



The Grosvenor model G.100 three-valve battery set. Ganged volume and reaction controls simplify operation.



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