

The Broadcaster & WIRELESS RETAILER Incorporating The RADIO TRADE REVIEW

No. 363. Vol. XXVII.

OCTOBER 5

**TELEVISION
WAVE - FORM
SPECIFICATIONS**

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

AERODYNE

ANNOUNCEMENT

To dealers who are looking for BIG PROFITS

READ THIS CAREFULLY

Aerodyne Radio believe in active co-operation with their dealers. They do more than manufacture the best and easiest selling range of sets on the market. They go all out to help the dealer to bigger sales and record profits. Make a note of these dealer aids—then link up with Aerodyne for a record season.

» **AERODYNE
ADVERTISING CAMPAIGN**

the biggest ever—is nation-wide. Big spaces in all National and Provincial journals—an expenditure of tens of thousands of pounds to bring customers to you.

» **AERODYNE
50/50 DEALER
ADVERTISING SERVICE—**

a local tie-up for you with the national campaign. Free window display. Write for application forms. Agency service to selected dealers.

» **AERODYNE DISPLAY
MATERIAL**

Aerodyne offer all dealers a big selection of beautifully produced window displays — showcards — price tickets — broad-sheets—folders and leaflets.

» **AERODYNE STOCKS**
are obtainable from all F.T.A. Factors.

**AERODYNE H.P.
FULL PROFIT AND
"NO RISK"
TO THE DEALER**

elb

AERODYNE

AERODYNE RADIO LTD., TOTTENHAM, LONDON, N.17

G.E.C.



MADE IN ENGLAND

Sell the H.T. Batteries that inspire confidence and bring you the business —G.E.C. Black Label—the Batteries with the big name behind them!

120 volt	100 volt	60 volt	9 volt G.B.	16½ volt G.B.
7/6	6/3	3/9	10d.	1/6
also G.E.C. "MARATHON" H.T. BATTERIES at 6/6, 120 volt size				

LOWER PRICES
than ever

BIGGER POWER
than corresponding
salammoniac batteries

20% MORE CAPACITY
THAN BEFORE

That is why more and
more people ask for

PERTRIX

**Non-Salammoniac High Tension Batteries
in Maroon cartons: a very inexpensive luxury**

120v. ULTRA POWER	NEW 10/6	12-14 m.a.
120v. DOUBLE POWER	13/6 12/3	14-16 m.a.
120v. SPECIAL POWER	15/6 15/-	16-20 m.a.
120v. TRIPLE POWER	21/- 16/-	20-25 m.a.
120v. GIANT POWER	NEW 22/6	25-35 m.a.

Made by BRITANNIA BATTERIES, LTD., UNION STREET, REDDITCH, WORCS.

**The Pertrix Standard Yellow 120-volt battery is now on sale at 7'6:
it is sweeping the 7'6 market.**

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

£1 worth of Advertising **FREE** in ^{The} **Wireless World**

TURN YOUR USED RADIO SETS INTO CASH
Make use of this special offer to the trade

A folder describing the scheme and giving detailed explanations, is being posted to wireless dealers throughout the country. If you have not yet received your copy, write to The Advertisement Manager, "THE WIRELESS WORLD," Dorset House, Stamford St., London, S.E.1.

In order to provide radio dealers with the opportunity of advertising each week a list of used sets, and of turning dead stock into real money, "The Wireless World" is establishing a special **CLASSIFIED ADVERTISEMENT SECTION FOR USED SETS** commencing on October 18th. To establish this new section "The Wireless World" offers **FREE ADVERTISING SPACE** in the Classified Advertisement columns to the total value of £1 (One pound) to every dealer who orders three further insertions at the minimum charge of 3/- (12 words) each* insertion.

The £1 worth of free advertising may be taken in one or more issues, as desired.

You get the first £1 worth of advertising free

'SPARTA' IN NAME AND **SPARTAN** in quality



TYPE F25
120 VOLT - PRICE 7/6

Service Agents throughout the Country

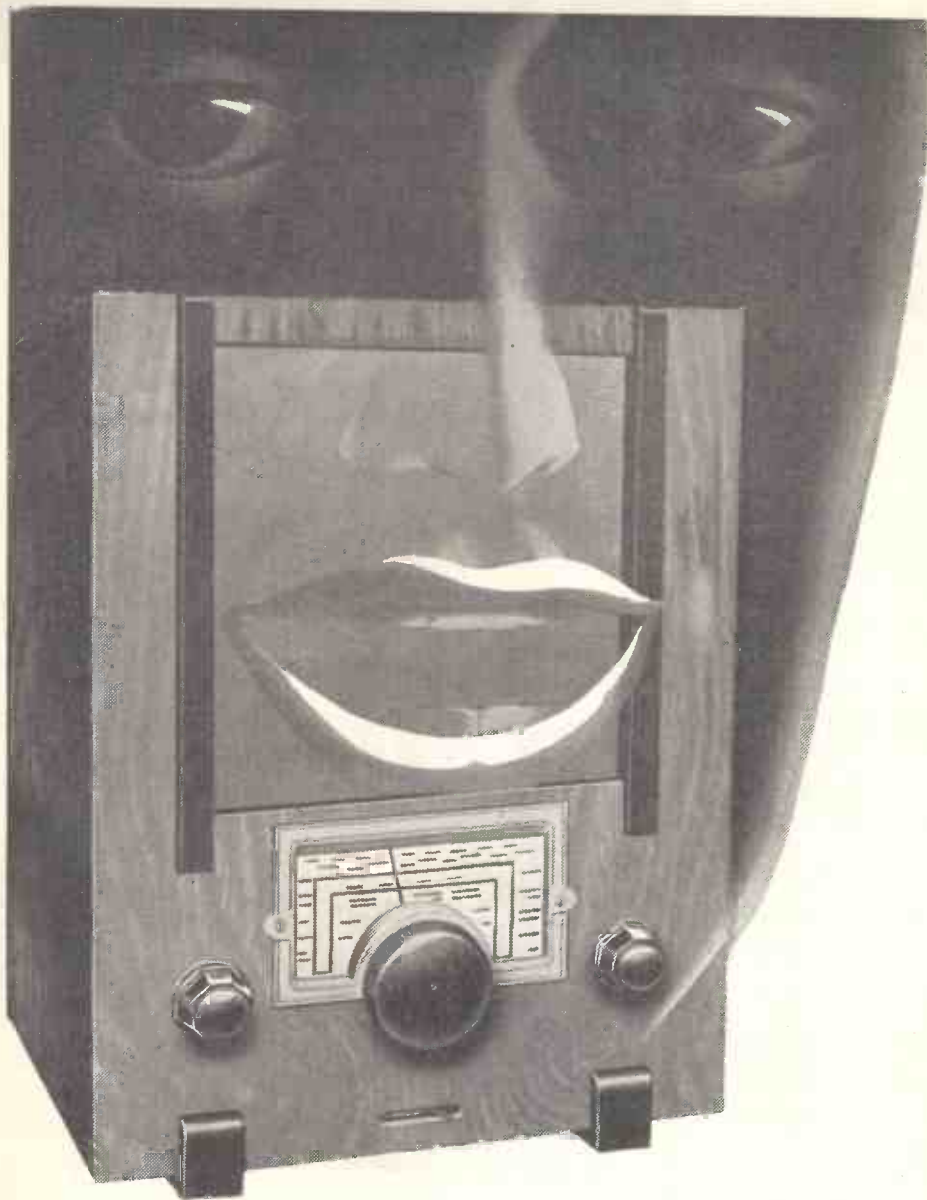
Apply for range of display material to:—

THE FULLER ACCUMULATOR CO. (1926) LTD., CHADWELL HEATH, ESSEX.

*Phone: Seven Kings 1200. *Grams: Fuller, Chadwell Heath.

FULLER

'SPARTA' H.T. BATTERIES



**look out
for this advertising**
in the National, Provincial & Radio press

- Blue Spot Battery III £6 17 6
- Blue Spot AC5 12 gns.
- Blue Spot AC/DC4 9 gns.
- Blue Spot Radiogram 21 gns.
- The "Popular" Speaker .. only 19/6
- In Cabinet with Volume Control 35/6
- The "Senior" Speaker .. only 29/6
- In Cabinet with Volume Control 49/6



Advt. of The British Blue Spot Co., Ltd., Sterling Works, Dagenham, Essex. Seven Kings 3467 (Private Branch Exchange).

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

TAS/Bs.6.



THIS BOOK WILL PROVE A SOUND INVESTMENT TO YOU

for it contains full particulars of the battery chargers which enable you to make maximum profits at minimum cost — Westinghouse Battery Chargers.

First cost as low as possible consistent with long life and adequate service . . . no renewals or upkeep . . . batteries charged at the correct rate night and day without attention.

Get a copy to-day . . . and start making extra profits right away.



BATTERY CHARGERS

COUPON

WESTINGHOUSE BRAKE & SIGNAL CO., LTD.,
82, York Road, King's Cross, London, N.1.

Please send me a free copy of your booklet, "AT THE CORRECT RATE."

Name

Address

B. 5/10/35

YOU have a service problem

FACE it! Your customers expect you to maintain their receivers in good condition.

Do this with satisfaction to your customer and with profit to yourself by employing the WESTON Selective Analyzer and the WESTON Super Oscillator. They reduce your actual repairing time from hours to minutes, and reduce the customers' period of inconvenience from days to hours.

BUY THEM FROM YOUR FACTOR

The WESTON Selective Analyzer, with ranges covering all servicing requirements.

The WESTON Super Oscillator—100 kilocycles to 22 megacycles on fundamentals. Unique in attenuation and shielding.

"Built to meet a need and not to meet a price."



OF VITAL IMPORTANCE TO ALL WHO USE MICROPHONES

TYPE	SENSITIVITY	FREQUENCY DISTORTION.	AMPLITUDE DISTORTION	BACKGROUND NOISE	IMPEDANCE
CARBON	G	G	-	-	G
CRYSTAL	"	G	G	"	"
CONDENSER	"	G	G	"	"
ELECTRO-DYNAMIC	G	G	G	G	G

THE above chart, representing the result of numerous working-condition tests, indicates at a glance the superiority of Electro-Dynamic Microphones in general, and of the Grampian Electro-Dynamic Microphone in particular. Note the low impedance factor, ensuring freedom from lead-induction, and consequent silence when a number of microphones are used.

SPECIFICATION.

Voltage output (normal speech). 0-1V on secondary of transformer.

Impedance, 14 ohms.

Frequency Response } Constant within few decibels throughout Audio Spectrum.

Size, 3 1/4" X 2 1/4".

Weight, 2 lbs. 13 ozs.

Full Details from

GRAMPIAN

REPRODUCERS, LTD., KEW GARDENS, SURREY.

It pays to sell
Quality...



*.. that is why your
customers - and you
yourself - will profit
by the sale of*

To help you sell
Full O'Power



Send for details of striking
"lighthouse" window display
(size 32½" x 23") showcards,
leaflets, cartons, etc.



THE BATTERIES THAT STAY THE PACE

SPECIAL REPLACEMENT BATTERIES ARE
AVAILABLE FOR EVERY TYPE OF SET

Advt. of SIEMENS ELECTRIC LAMPS AND SUPPLIES LIMITED
38/39 Upper Thames St., London, E.C.4.

Branches at - Belfast, Birmingham, Bristol, Cardiff, Dublin, Glasgow, Leeds, Liverpool, Manchester, Newcastle-on-Tyne, Nottingham, Sheffield, Southampton

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

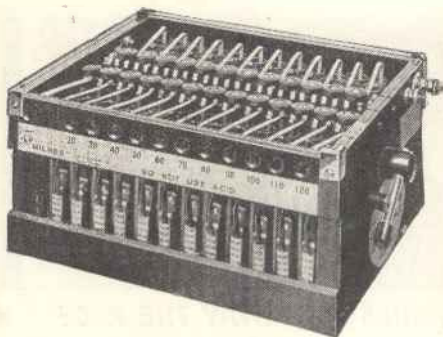
Turn back the Clocks— Turn on the Radio.

Summer-time comes to an end this week-end. Darkness falls early, leaving long evenings to be spent indoors. The family wireless set comes into its own again. During the summer months, radio has been neglected in favour of outdoor amusements, and, since the set has been in use only occasionally, the old H.T. battery has been made to serve.

Now, with the reversion to serious listening, the short comings of that partly exhausted battery are dreadfully apparent. The time is ripe for Milnes dealers to reap a rich harvest of sales. Customers will come for new H.T. batteries will be met by the offer of a demonstration of the Milnes Unit, and—well, a demonstration means a sale, nearly always. And an average profit of 25/- per sale is definitely worth while.

Those of you who are not Milnes dealers would be well advised to write now for details and terms. We sell direct to the dealer.

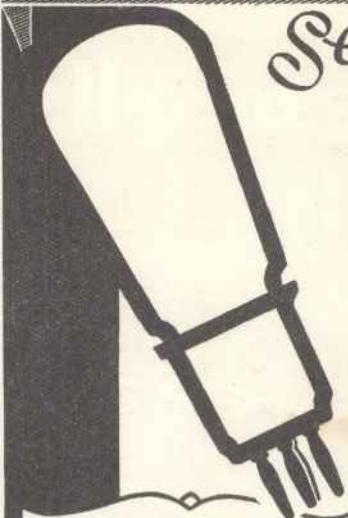
**MILNES
H.T. SUPPLY UNIT**



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

Phone: Bingley 600-1-2-3. Grams: Sixhundred Bingley.

HIGHEST PROFITS FOR YOU



Sell
362
Valves...

GUARANTEED VALVES
MADE BY A
GUARANTEED ENTIRELY BRITISH FIRM
You cannot supply **BETTER VALVES**
at **ANY PRICE.**

362 Characteristics are **MAINTAINED CHARACTERISTICS.**
362 **QUALITY** is constantly **MAINTAINED QUALITY.**
362 Retail Prices—because no valves as good can be sold for less—are **MAINTAINED PRICES.**
362 Service will clear your customers' difficulties so—**MAINTAINED CONFIDENCE.**

TYPICAL VALUE

A truly non-microphonic detector valve for use in all battery operated receivers—gives exceptionally high stage gain with perfect quality with Low Frequency transformer coupling—followed by resistance capacity coupling top note registration is brilliant and of perfect quality. Particularly suitable as **SHORT WAVE** detector.

H L 2. Price 3/6

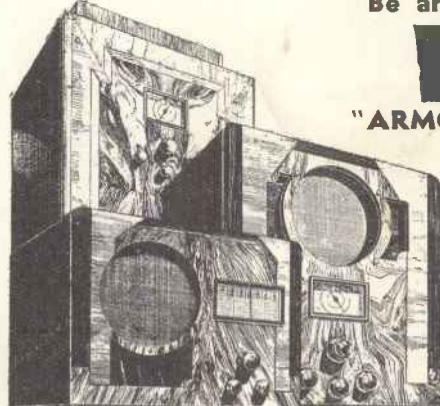
BATTERY
H.H.L. & L 3/6 ;
Power 4/-; Super
Power 4/6 ; SG &
VS 7/6 ; VP 9/-;
Pentode Type
10/- BA & BX 9/-.

A.C. MAINS
ACHL4 7/6 P255 8/-
ACF4 9/- AC84 &
ACV84 12/6 ACME &
ACHM 13/- RB41 7/6
RB48 10/- ACHL4dd
9/- ACF04 15/- P255
20/- P255 20/- P255
50/- ACME46 13/-

362 VALVES

STONEHAM WORKS
STONEHAM RD.
LONDON E.5.
PHONE. CLISSOLD 6607

Be an
R.A.P.
"ARMCHAIR TRAVEL"
AGENT



Sell "Armchair Travel" personified in R.A.P. receivers. The imaginative "Armchair Travel" advertising theme adopted by R.A.P. has captured the fancy of the listening public. It won't need much selling on your part... In fact you might really call it "Armchair Selling," for the receivers just sell themselves while you sit back and take things easy! Write NOW for full particulars.

CENTRAL EQUIPMENT LTD., 188, LONDON RD., LIVERPOOL, 3.

Carew Wilson

Postage
Saving
Coupon

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

SAVES TIME . SAVES MONEY

'GOLTONE' AERIAL EQUIPMENT

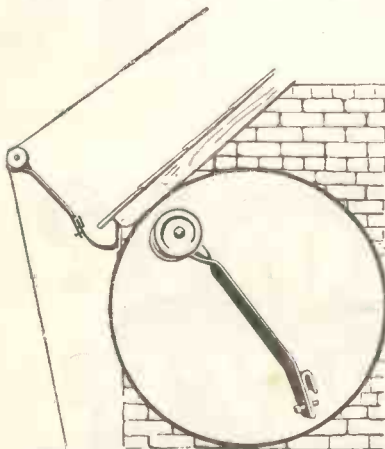
A FULL range of Aerial Insulators with Iron-Work, Aerials, Lightning Arresters, and innumerable devices in constant demand will be found in our large 1936 Radio Catalogue, sent on request.



"GOLTONE" "STATOFORMER" NOISEPROOF AERIAL SYSTEM CUTS OUT ELECTRICAL INTERFERENCE.

Licensed under A.A.K. Eng. Pats. Nos. 407872 and 413917.

Effectively shields the Aerial Down-lead from all man-made electrical disturbances without loss of signal strength, and makes radio reception a pleasure. Applicable to any horizontal aerial. One to four sets can be tapped from one aerial. Detailed pamphlet and full particulars on request. Complete Kit with Screen Lead 16/3 (Subject).



"GOLTONE" 'EASY-FIX' LEAD-IN BRACKET

Supports down-lead to clear gutters and walls without plugging. 1/3 each, subject. See catalogue for wide range.

"GOLTONE" BAKELITE LIGHTNING ARRESTERS

"MAJOR" MODEL
Practically Indestructible. Fixed in a few minutes. Provides Safety and Security to Radio Sets. Complete with Galvanised Iron Brackets, massive metal parts, and strong Bakelite Cowl. R21/476 2/6 each (Subject).

"JUNIOR" MODEL
Robust Construction but smaller than the "MAJOR" Model. R21/477 1/3 ea. (sub.).



"Popular Wireless" says: "One of the best I have come across."

STAND-OFF TYPE AERIAL INSULATOR
No. 202. Complete with 2 inch China Insulator, 10/- Dozen (Subject).

STAND-OFF TYPE AERIAL INSULATOR
No. 203. Complete with 2 inch China Insulator, 9/- Dozen (Subject).

SHACKLE INSULATORS

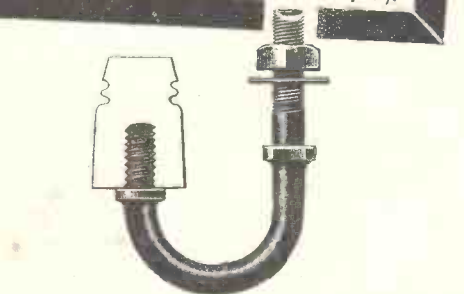
Arranged to act as junction points for Aerial Systems and Overhead Relay Cables.
Insulator only R26B/532 5/6 Doz. (Subject).
Complete with Straps, Bolts and Nuts (as illus.) 14/- Doz. (Subject).

CHIMNEY BRACKET
Suitable for supporting aerial systems to walls and chimney. R26B/543 2/- Each (Subject).

Labels: Metal Screening, Centralizing Nipple, Downlead Conductor Air Spaced, Rubber, Cellular Weave, Braided Covering, Outer.

"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 instal the "GOLTONE" METOCEL DOWN-LEAD. Full particulars on request. Repeat orders received from British and Dominion Governments. B.B.C. and leading concerns.

The "GOLTONE" catalogue offers a complete range of interference Suppression devices, including Interference Compensators, Mains H.F. Chokes, R.F. Inductors, Screened Transmission Lines, Mains Filters, Neon Sign Suppressor Chokes, etc. covered by a free Technical Service and Liberal discounts. Interference Elimination forms and descriptive folders, sent on request.



"J" PATTERN IRON BOLT
With Nut and Washer.
Bolt only R26B/538 1/3 Each (Subject).
Complete with Sinclair pattern insulator (as illus.) R26B/539 2/- Each (Subject).



"JOHN BULL'S"

Great offer to Traders



£1,000

FOR A WINDOW

DISPLAY!

- WORLD'S RECORD FIRST PRIZE
£1,000
and Gold Medal
 - SECOND PRIZE
£100
and Silver Medal
 - THIRD PRIZE
£50
and Bronze Medal
 - FIVE PRIZES OF
£5.5.0
EACH
 - FIFTY PRIZES OF
£1.1.0
EACH
 - 1,000 OTHER AWARDS
- Send this NOW!*

ONE THOUSAND POUNDS for a window display! That is the colossal prize—the largest award of its kind ever made—that you are given the opportunity of winning in the Great National Window Display Contest launched by "John Bull," pioneer of Window Display Contests. Besides this world's record First Prize there are over one thousand cash and other awards waiting to be won.

NO ENTRANCE FEE

There is no entrance fee, no irksome restrictions, absolutely nothing to pay. All you are asked to do is to select any single product advertised in "John Bull" at any time between October 1st and December 31st, 1935, and make a special display of that article in your window for not less than one week between the above dates. Then send in a photograph of your display to "John Bull," together with the Entry Label that will be sent to you with your Contest Outfit on receipt of the form below. That is all! The Contest is simplicity itself. Every competitor starts on equal terms.

WHETHER YOUR SHOP IS LARGE OR SMALL

No matter how large or small your window, you have as good an opportunity of winning that mammoth £1,000 First Prize as any other competitor. You cannot fail to benefit by entering this great National Contest. During the period of the Contest—October 1st to December 31st—the attention of millions of customers will be focussed on the shops that make "John Bull" Window Displays. Besides the opportunity to win a gigantic prize, this "John Bull" Window Display Campaign brings you the certainty of splendid publicity and extra sales. If you have not already sent an application, post the Form below NOW.

Cut Here

"JOHN BULL'S" National Window Display Contest
OCT.—DEC., 1935.

£1,000 WORLD'S RECORD FIRST PRIZE *Open to all Traders. Over 1,000 Cash & other Awards*

To THE MANAGER, "John Bull" National Window Display Contest, 68, Long Acre, London, W.C.2.

Please enter my name as a competitor in "JOHN BULL'S" National Window Display Contest and send me by return a FREE ENTRY OUTFIT containing "John Bull" Window Bills and Entry Label enabling me to compete immediately.

Name
Full Title and Address of Shop

Nature of Business Date
Post in unsealed envelope bearing 3d. stamp. B.5.10.35.

WE HAVE CAUGHT UP!

The installation of extra plant and additional staff have enabled us to catch up with the great number of orders for

THE G.U.B.10

The really Universal amplifier which operates from A.C.—D.C.—and Car Battery and has an undistorted output of

10 Watts.

We can now promise prompt delivery of all orders.

Full details from:—

TANNOY PRODUCTS THE SOUND PEOPLE

GUY R. FOUNTAIN LTD.,
CANTERBURY GROVE,
WEST NORWOOD, S.E.27.

Manchester Office:—
2, Whitworth Street West, Deansgate,
Manchester, 1.



In Stock? Of course it is!

Telegrams: All Branches "Pecanef."

**BIRMINGHAM
NOTTINGHAM
MANCHESTER**

You get Service from

Priestly & Ford

PROPRIETOR —
JOHN PRIESTLY

THE NATIONAL RADIO DISTRIBUTORS



Be Prepared!

McMICHAEL

launch the season's most compelling National Campaign

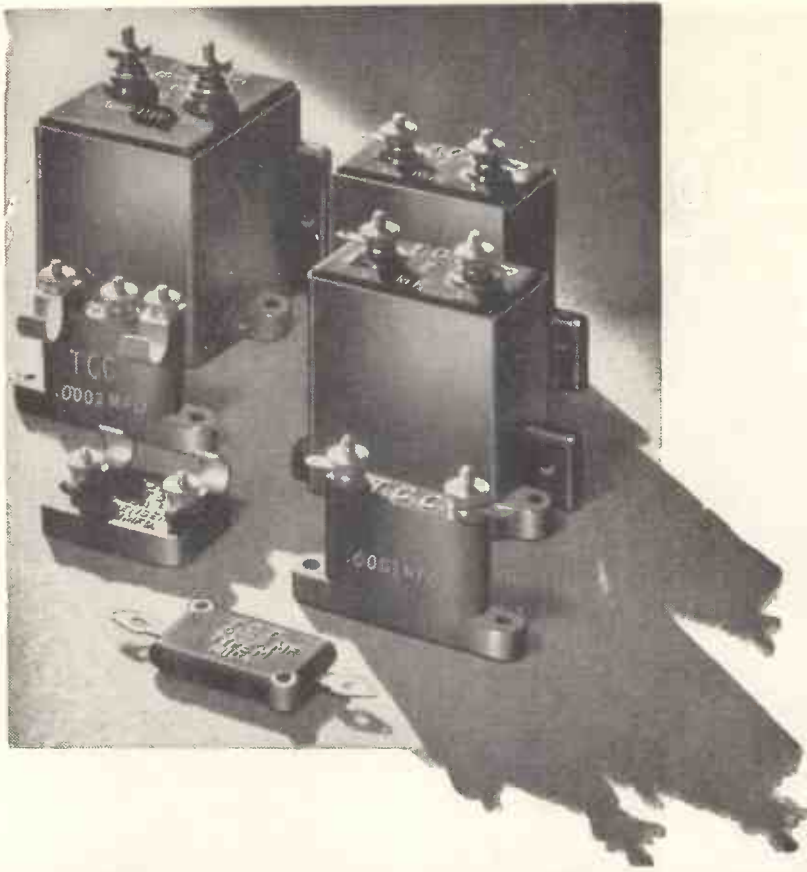
WEEK by week since Radiolympia McMichael sales have soared higher despite extremely heavy competitive advertising.

The McMichael broadside is now being launched. Large-space advertisements will appear regularly from now onwards in the Daily Mail, Daily Express, Daily Herald, Daily Telegraph, News Chronicle, Times, Daily Mirror, most provincial and technical papers, etc.; the Daily Mail Front Page is reserved for a few weeks ahead. You are strongly advised to look to your McMichael stocks now!

**CONCENTRATE
NOW ON THE
SAFE SELLING
RANGE WHICH IS
SAFEST TO SELL**

McMICHAEL RADIO

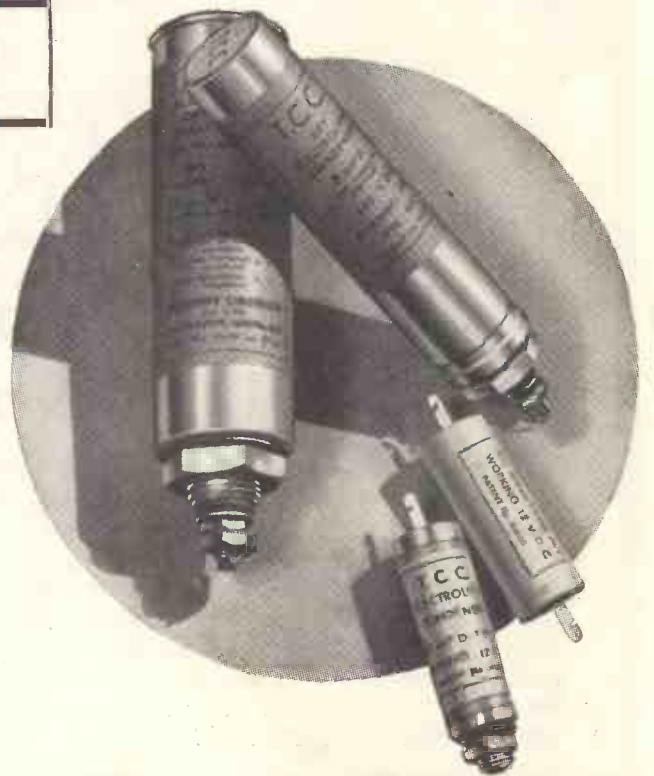
FOR McMICHAEL AGENTS ONLY



SATISFACTION

Into every T.C.C. Condenser—be it the smallest mica type, or the largest multi-capacity power pack type—has gone such experience and painstaking effort, that—whatever its duty—it has always lived “to specification”—done its work as the laboratory intended . . . Such achievement has meant, to us, great satisfaction—but more it has meant “customer satisfaction.” Leading setmakers have—since radio began—found satisfaction in T.C.C., and return again and again to profit by T.C.C.'s 28 years experience.

No better testimony exists. Whatever your need be sure of satisfaction first and last—insist on T.C.C.



T.C.C.
ALL-BRITISH
CONDENSERS

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

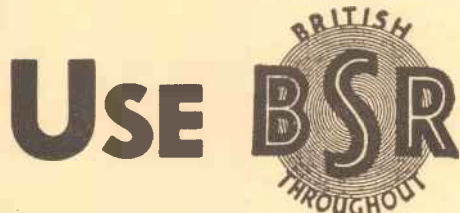
WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION “THE BROADCASTER,”

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USE BSR P.A. EQUIPMENT

for High Fidelity Reproduction

Amplifiers and P.A. Equipment
of the highest standard of performance

We design and manufacture
Mains Transformers and
Chokes for all requirements.
Write for Lists.

Reproduction comparable with the original performance, whether speech or music, is the only reproduction that completely satisfies. B.S.R. Equipment fulfils this requirement, not approximately, but absolutely.

P.A. Equipment is in increasing demand for Public Functions, Dances, and the like. In the B.S.R. range will be found the right equipment for your requirements.

Your prestige and profit are made or marred by the performance of your P.A. Equipment. Use B.S.R. and take no risks.

BIRMINGHAM SOUND REPRODUCERS, LTD.
114, CLAREMONT ST., OLD HILL, STAFFS.

'Phone: Cradley Heath 6370

'Grams: "Electronic, Old Hill."



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"HIS MASTER'S VOICE" DEALERS' GREATEST

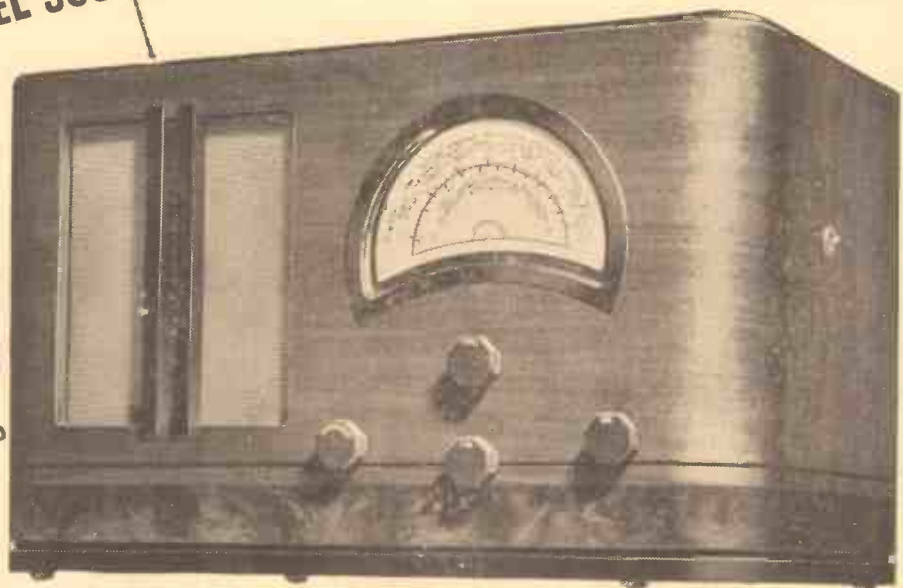
Scoop!



"POPULAR" AC. MAINS
RECEIVER IN WALNUT
CABINET - MODEL 360

9
GUINEAS

It was not just "Good News" when "His Master's Voice" announced an AC mains set in a walnut cabinet for 9 gns.—it was a regular scoop! Only Accredited "His Master's Voice" Dealers can handle this wonderful line—and are they appreciating what a lead it gives them? They wouldn't be "His Master's Voice" Dealers if they didn't know when they were on a good thing!



"HIS MASTER'S VOICE" DEALERSHIP GIVES YOU THE LEADERSHIP

"His Master's Voice," 98-103 Clerkenwell Road, London, E.C.1.

BURGOYNEINEXPENSIVE RADIO OF QUALITY
(EALING 2091)**MAINS AND
BATTERY RECEIVERS**Send for Lists and
Particulars of H.P. Terms.BURGOYNE WIRELESS (1930) LTD
GREAT WEST ROAD, BRENTFORD

The Broadcaster

& WIRELESS RETAILER

BURGOYNEINEXPENSIVE RADIO OF QUALITY
(EALING 2091)**MAINS AND
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GREAT WEST ROAD, BRENTFORD

No. 363. Vol. XXVII.

SATURDAY, OCTOBER 5

Baird Capital Scheme Proposals

Additional Issue of Shares

Details are available of the scheme of capital reorganisation proposed by the directors of Baird Television, Ltd., which Sir Harry Greer, the chairman, intimated at the recent annual meeting would be made necessary by the need of additional capital.

Present authorised and issued capital is £875,000, divided into "A" ordinary shares of 5s. each, 10 per cent. non-cumulative preferred ordinary shares of 5s. each, and deferred ordinary shares also of 5s. each.

The essence of the scheme is that all special rights and privileges at present attached to each of the three classes of shares should be surrendered, and that the shares should be consolidated into one class of ordinary shares, ranking equally in all respects. Such ordinary shares would be redistributed among the three existing classes of shareholders on an equitable basis.

Rearrangement

Holders of the 200,000 "A" ordinary shares, who are entitled to one-half of the profits distributed in any year, would receive 1,750,000 new ordinary shares, giving them the same participation rights and slightly more voting power.

In the case of the 2,100,000 10 per cent. non-cumulative preferred ordinary shares, holders would surrender 58 out of every 100 shares for redistribution to the "A" ordinary shareholders, thus having 42 new ordinary shares for every existing 100 10 per cent. non-cumulative preferred ordinary shares, or a total of 882,000 ordinary shares.

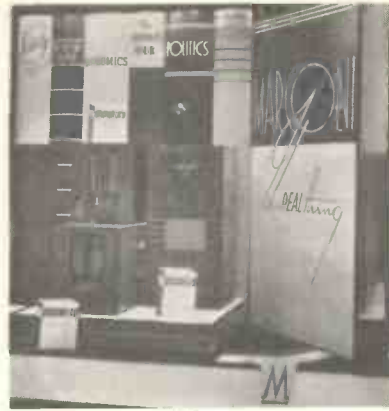
The holders of the 1,200,000 deferred ordinary shares would surrender 28 out of every 100 shares for redistribution to the "A" ordinary shareholders, thus having 72 ordinary shares for every existing 100 deferred ordinary shares, or a total of 864,000 ordinary shares.

First Opportunity

The directors are of the opinion that, provided the scheme becomes effective, there should be no difficulty in raising capital by the issue of further ordinary shares.

It is the present intention of the board, as soon as possible after the scheme becomes effective, to issue further ordinary shares on the basis of shareholders having the first opportunity to participate in that issue in proportion to their holdings as they will stand if and when the scheme is passed.

Separate meetings of the three classes of shareholders will be held on October 31 next, at Whitehall Rooms, Whitehall Place, London, S.W.1.



Giant books tie up with the home entertainment idea in this window staged by Marconiphone at its London headquarters.

W.R.A. COUNCIL REVIEWS PROPOSAL FOR REGISTER

Among the many topics discussed at the meeting of the National Council of the W.R.A. at headquarters on Wednesday, October 2, was the question of a national register of *bona-fide* dealers. A certain line of action was decided.

Mr. J. Fielding, the National Chairman, presided, and seven new members were enrolled.

The remainder of the time was devoted to

R.M.A. BANQUET DATE

THE annual banquet and ball of the Radio Manufacturers' Association is to be held on Wednesday, December 4.

The venue has been changed this year owing to the need for a larger room, and the function will be held at the Grosvenor House, Park Lane.

discussing H.-P., battery discounts, and items of domestic policy. Capt. H. A. Bain, the general secretary, agreed to continue to represent the association on the Music Industries Council and the National Organisations Standing Joint Committee. Mr. A. E. Betambeau also agreed to continue to represent the W.R.A. on the committee of the Institute of Electrical Engineers.

TELEVISION WAVE FORMS

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Big Prizes in Window Competition

Radio Support for "John Bull"

Radio manufacturers are supporting the third national window-display contest organised by *John Bull*, in which the first prize is £1,000 and a gold medal, claimed to be a record cash prize for a contest of this description.

Products that can be displayed in this contest include those of Burgoyne, Bush, Drydex and Exide, Ferranti, Philips and Vidor.

The competition is now open and runs until the end of the year. The list of goods eligible for display is stated to be increasing daily.

In addition to the first prize there is a second of £100 and a silver medal, a third of £50 and a bronze medal, five prizes of five guineas each, fifty of one guinea each, and a thousand other awards.

Should the winner of any of the cash prizes be a registered reader of *John Bull* he will receive a cash bonus of 5 per cent. of his prize.

The contest is open to all retailers, whether they have large or small shops, and all have an equal chance of winning a prize.

Chance for All

Each entry will be judged from the display point of view only, and elaborate and costly "trimmings" will win no special favour.

Retailers are asked to display for not less than one week any product advertised in *John Bull* between now and December 31. They can, of course, make several weekly displays if they wish during the run of the contest.

There is no entrance fee. All retailers have to do is to apply on forms provided for a free entry outfit including *John Bull* window bills and an entry label, stage their entries, and send photographs of them to the Manager of the *John Bull* National Window Display Contest at 68, Long Acre, London, W.C.2.

Entry labels must be fixed to the backs of the photographs, while the special circular window bill included in the entry outfit must figure in the display.

Public interest is being aroused by organisation of a slogan contest, in which there is a cash prize of £100.

Forms on which the public can enter this contest are supplied free to retailers, and to secure them the public must apply to a retailer.

The Edison Swan Electric Co., Ltd., has decided that supplies of its radio components will only be available to dealers approved by the B.V.A. This means that B.T.H. pickups, speakers, phones and similar apparatus will only be available to retailers handling Mazda valves.

Television Wave-Form Announcements

Details of the radiated wave-forms of the television systems to be employed in the Marconi-E.M.I. and Baird transmissions, when the high-definition television broadcasts commence, were released for publication on October 1.

THE BAIRD SYSTEM

THE drawing on this page gives complete details of the waveform for picture modulation and synchronising impulses. From this it will be seen that, using the arbitrary aerial current units of zero to 100, the total modulation for synchronising (Black) extends between the tolerance limits of zero to 5 and 37.5 to 42.5, while the picture modulation (black to white) extends between 37.5 to 42.5 and 100.

It will be noted that the high-frequency synchronising impulse is rectangular in shape and is maintained for 8 per cent. of the total time taken in tracing the line, and occurs between the line traversals. The low-frequency synchronising impulse, which is also rectangular in shape, is maintained during the time that 12 lines are traced, and occurs between the frame traversals. These traversals, as seen by an observer looking at the received image from the front, scan from left to right (line) and from top to bottom (frame).

The diagram also shows that, in addition to the above 8 per cent. of the line traversal time occupied by the high-frequency synchronising impulse, a further 2 per cent. is

masked off to form a black edging. Similarly, an additional 8 lines are masked off in the case of the low-frequency synchronising impulse for the same purpose.

The total number of lines in the complete picture is 240, scanned sequentially and horizontally at 25 picture traversals per second and 25 complete frames per second. The line frequency is thus 6,000 impulses per second and the frame frequency 25 impulses per second. The dimensions of the picture have the ratio of 4 horizontal to 3 vertical.

Amplitude modulation is employed, which results in light intensity modulation in the observed picture, the transmitter carrier increasing towards the white. The line synchronising signals and the frame synchronising signals are in the sense opposite to increasing picture modulation. The maximum frequency band involved in the transmission is 2 megacycles and the average component of light in the picture is transmitted, a black in the picture being transmitted as black and a white transmitted as white, in accordance with the modulation percentages referred to above.

The Marconi-E.M.I. Transmission

THE Marconi-E.M.I. television system transmits 25 complete pictures per second of each of 405 total lines. These lines are interlaced so that the frame and flicker frequency is 50 per second. The transmitter will radiate signals with sidebands extending to about 2 megacycles either side of the carrier frequency. Good pictures can be received utilising only a fraction of the radiated band, but naturally the quality of the received picture will depend upon the degree to which the receiver makes use of the transmitted band width. The transmitted wave-form is shown on Figure 1 on page 17.

(1) *Line Frequency.*—10,125 lines per second, scanned from left to right when looking at the received picture.

(2) *Frame Frequency.*—50 frames per second, scanned from top to bottom of the received picture.

(3) *Type of Scanning.*—The scanning is interlaced. Two frames, each of 202.5 lines, are interlaced to give a total of 405 lines with a complete picture speed of 25 per second. The line component and the frame component of scanning are regularly recurrent, the interlace being derived from the fractional relationship between line and frame frequencies. An explanation of the method of interlacing is given at the end of this specification.

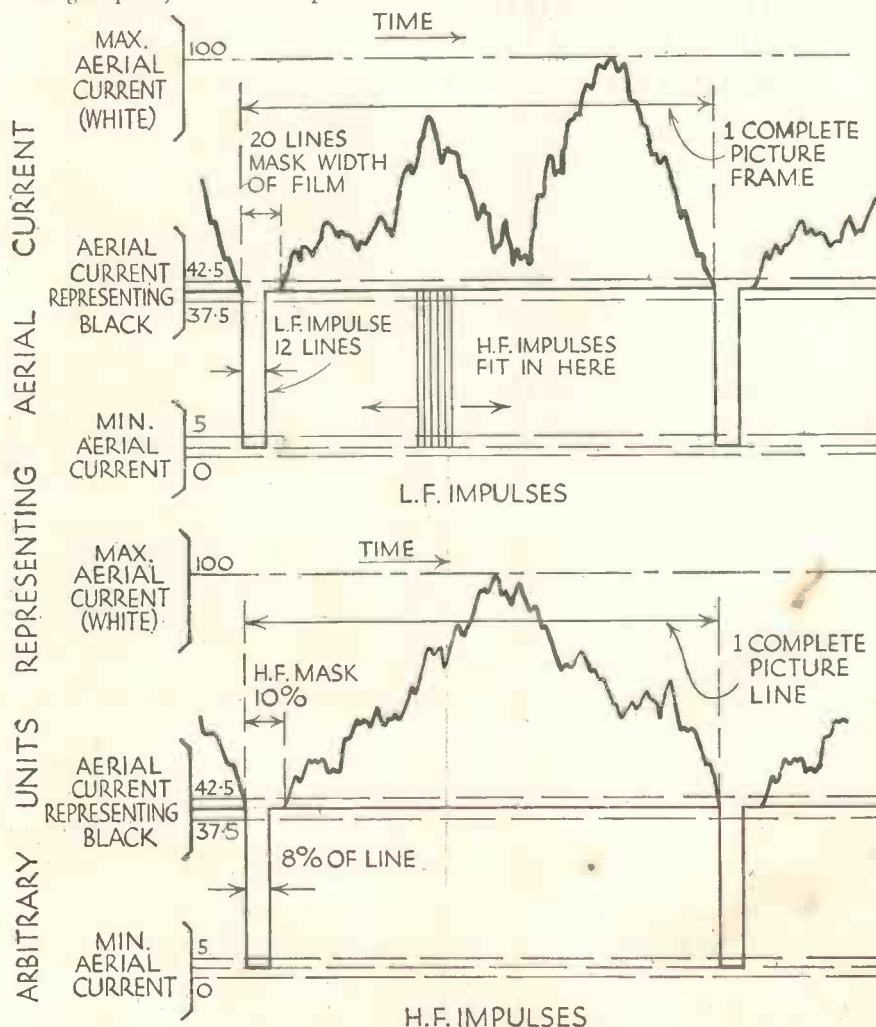
(4) *Interval Between Lines.*—There will be intervals between the vision signals of successive lines, which intervals provide time for the transmission of a line synchronising signal and also provide time for the return of the cathode ray beam to the beginning of the next line. The minimum interval between the vision signal of successive lines will be 15 per cent. of the total line period (1/10125 sec.), the first 10 per cent. of this interval between lines being occupied by the line synchronising signal and the remaining 5 per cent. by a signal corresponding to "black" in intensity. The remaining 85 per cent. of the total line period is available for transmitting vision signals.

(5) *Interval Between Frames.*—There will be intervals between the vision signals of successive frames. The minimum interval between frames will be 10 lines, leaving a maximum of 192.5 active lines per frame, or 385 active lines per complete picture.

(6) *Picture Ratio.*—The picture ratio will be 5:4, that is to say, the distance scanned during the active 85 per cent. of the total line period will be 5/4 times the distance scanned during the 192.5 active lines of the frame.

(7) *D.C. Modulation.*—The picture brightness component (or the D.C. modulation component) is transmitted as an amplitude modulation so that a definite carrier value is associated with a definite brightness. This has been called "D.C. working," and results in there being no fixed value of average carrier, since

(Continued on page 18.)



This diagram shows picture modulation and synchronising impulses of the Baird system.

WHAT THE TELEVISION NEWS MEANS TO THE TRADE

Broadcaster Reviews the Specifications

FROM the first, the Television Committee fully realised that one of the difficulties which had to be faced in deciding upon the system to be used for transmitting the programmes was the fact that the choice necessarily determined to a large extent the type of apparatus to be used for reception.

As they were anxious to guard against the setting-up of a monopolistic position in favour of any one company as against another, the Committee carefully explored the possibility of forming a patent pool, from which both the B.B.C. and the manufacturers should be able to select, upon reasonable terms, whatever improvements were available to facilitate the progress of the new art. Unfortunately, the creation of a patent pool proved impracticable for the time being, though the Committee expressed the hope that the sooner such a step could be taken, the better it would be both for the Radio Industry and the public at large.

Meanwhile, in recommending that the Baird and Marconi-E.M.I. should be given equal opportunities on the transmitting side, the Committee laid down certain conditions, of which the two most interesting at the present juncture are :-

(1) Each company undertakes to grant a licence to any responsible manufacturer to use its existing patents, or any subsequently secured, for the manufacture of television receiving sets in this country, on payment of royalty, the terms of such licence to be agreed between the company and the R.M.A., or in default of agreement to be settled by arbitration.

(2) Each company's system of transmission should be capable of reception by the same type of receiver, without requiring complicated or expensive adjustment.

The information now published is presumably intended as a reply to the Committee's request that the Industry should be supplied with data necessary to enable them to design receivers capable of handling the transmitted signals. They are apparently given the choice of exercising their own unaided ingenuity on the problem, or alternatively of taking out licences under patents already

held by the two transmitting companies concerned.

The first alternative is no doubt offered as a sop to the Television Committee's express desire to avoid the setting-up of any monopolistic position. Each company says, in effect,

here is what we are going to transmit. If anyone thinks they can design a receiver to handle it, without making use of our patents, let them get on with it. Otherwise they can apply to us, and we will tell them exactly how to proceed—in return for a royalty.

The information given is limited to the "wave-form" of the signals fed by the transmitter into the ether. It will be seen that both systems use an amplitude-modulated carrier, with line and frame synchronising-signals superimposed in the "black" direction of the datum line.

There are slight differences in the percentage of the total carrier modulation available for the picture and synchronising signals respectively, and more serious differences between the picture-ratio and the fractions of the effective line and frame traversals which are occupied by the respective synchronising signals. But, on the face of it, both appear to conform to the Committee's requirement that the same receiver shall be capable of handling both types of programme. Precisely how this is to be done is, however, rather obviously left "in the air."

The outstanding feature of difference lies, of course, in the adoption by the Marconi-E.M.I. Company of the method of "interlaced" scanning as distinct from the straight-sequence system favoured by the Baird Company.

This, in turn, involves a change in the frequency of the line-scanning control, or saw-toothed oscillator, from 405 lines per picture for the Marconi-E.M.I. transmissions to 240 lines per picture when the Baird Company take charge.

Also, there are consequential changes in the frame frequency and in the relation between line and frame. As previously stated,

all this may fall within the grasp of the skilled designer—provided he has been trained in the right school and has sufficient imagination. Otherwise he will find little of material help in the information now offered to him.

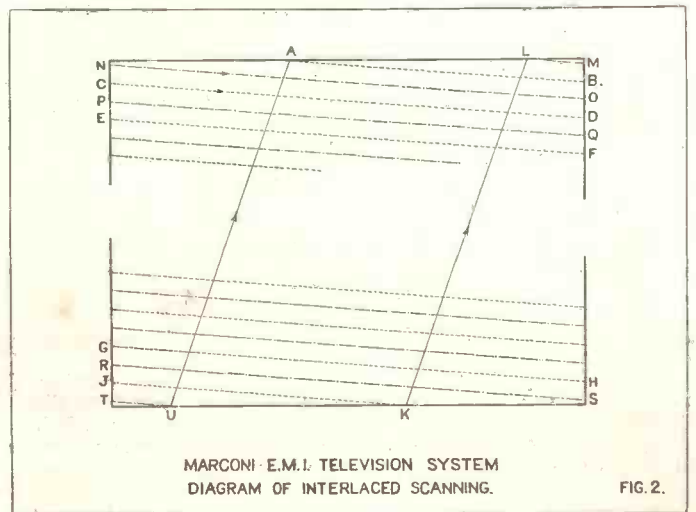
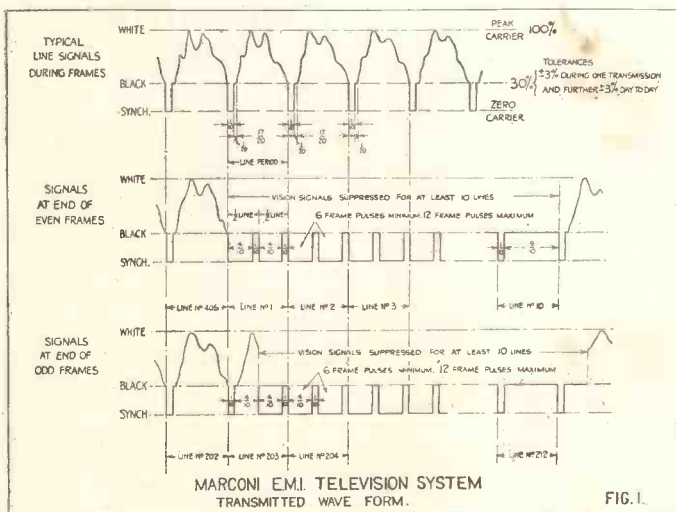
The system of interlaced scanning calls for a few words of explanation. As will perhaps be apparent from the description given by the Marconi-E.M.I. Company, each picture is thrown twice in rapid succession on to the viewing screen, the interval between each successive presentation being so short that the eye is unable to detect any "gap," but effectively merges the two into one. The main advantage of interlacing is that it reduces "flicker" without increasing the total side-band spread of the signals in the ether.

The Marconi-E.M.I. claim to reproduce each picture fifty times a second. In terms this is perfectly true, but it must not be forgotten that the first picture will begin to fall off in brilliance before the second picture can be laced into it, so that it hardly represents a full 100 per cent. advance in brilliance, as compared, say, with a straight-sequence picture repeated twenty-five times a second.

Again, each of the two interlaced pictures contains a total of only 202½ line-traversals, as compared with 240 lines per picture in the Baird transmission. The definition of each of the Marconi-E.M.I. half-pictures must therefore be slightly less than the complete picture of their rivals, though this is, of course, offset by the fact that the two half-pictures are projected on to the viewing-screen in the same time as the single Baird picture.

Any attempt to comment on the relative advantages of the two systems must, however, be subject to the merits of the particular type of transmitting apparatus which is to be used to feed the signals into the ether.

It will be observed that each company is dumb on this point, as on many others. In particular, we are left in suspense as to whether we are to have the advantage either of the Iconoscope tube, or the Farnsworth electron-multiplier.



Marconi—E.M.I. Specification

(Continued from page 16.)

the average carrier varies with picture brightness. The radio frequency transmitter output is specified in what follows as a percentage of the peak output. This percentage is in terms of current (or voltage) and not in terms of power.

(8) *Vision Modulation.*—The vision is applied in such a direction that an increase in carrier represents an increase in picture brightness. Vision signals occupy values between 30 per cent. and 100 per cent. of peak carrier. The amount by which the transmitted carrier exceeds 30 per cent. represents the brightness of the point being scanned.

(9) *Synchronising Modulation.*—Signals below 30 per cent. of peak carrier represent synchronising signals. All synchronising signals are rectangular in shape and extend downwards from 30 per cent. peak carrier to effective zero carrier.

(10) *Line Synchronising Signals.*—The line synchronising signals are of one-tenth of a line duration, and are followed by a minimum of one-twentieth of a line of black (30 per cent. peak) signal.

(11) *Frame Synchronising Signals.*—The frame synchronising signals comprise a train of two pulses per line, each occupying four-tenths of a line and having one-tenth of a line interval of black (30 per cent. peak) signal between them. At the end of even frames, the first frame pulse starts coincident with what would have been a line signal. At the end of odd frames the first frame pulse starts half a line after the preceding line signal. At least six frame signals will be transmitted at the end of each frame, but the number may be increased to any number up to 12 pulses (6 lines). During the remainder of the intervals between frames, normal line synchronising signals will be transmitted with black (30 per cent. peak) signals during the remaining nine-tenths of the line.

It will be noted that throughout the interval between frames (as during the whole transmission), the carrier falls from 30 per cent. to zero regularly at line frequency, and in phase with the beginning of the normal line synchronising pulses.

(12) *Variations in Transmitted Waveform.*—The 15 per cent. interval between vision signals of successive lines and the 10 lines interval between successive frames are minimum intervals used at the transmitter. During the initial development of the transmitter, certain transmissions may have longer intervals between lines and between frames, which lengthened intervals correspond to the transmission of a black border round the picture.

The 30 per cent. carrier is the "black level" below which no vision signals exist and above which no synchronising signals extend. The mean black level of any transmission will be 30 per cent. \pm 30 per cent. of peak carrier. The black level during any one transmission will not vary by more than 30 per cent. of peak carrier from the mean value of that transmission.

The residual carrier during the transmission of a synchronising pulse will be less than 5 per cent. of the peak carrier.

The line frequency and the frame frequency will be locked to the 50-cycle supply mains, and therefore will be subject to the frequency variations of the mains.

Explanation of Method of Interlacing

The method of interlacing is demonstrated on Figure 2, page 17, which represents the top and bottom portions on the scanned area



Dealers who link up with N.R.S. in their service scheme are now being issued with this sign (see page 36).

with the distance between the lines very much enlarged. The lines show the track of the scanning spot which moves under the influence of a regular downward motion (frame scan) with quick return and a regular left to right motion (line scan) with very quick return (not shown on drawing).

The combination of these motions produce the slightly sloping scanning lines. Starting at A, not necessarily at the beginning of a line, the spot completes the line A B, returns to the left and traverses line C D, then E F and so on down the "dotted" lines on the drawing. At the bottom of the frame the spot travels along line G H and then starts at J and travels to K. At this point the return stroke of the frame motion begins and returns the spot to L at the top of the frame.

A complete frame scan has now been made since leaving A, so that 202½ lines have been completed, and the point L is half a line away from A.

The downward frame motion now starts again, causing the spot to travel along L M completing a single line motion J K L M. The spot then returns to the left and traces out line N O, which due to L being half a line ahead of A, will lie between lines A B and C D. Similarly the next line P Q will lie half way between C D and E F.

The spot now traces down the chain dotted lines to R S and finally traces out T U, at which latter point the frame return causes the spot to rise again to the top. When the spot reaches the top it will have completed 2 frames, since leaving A, and, as two frames occupy the time of exactly 405 complete lines, the spot will return exactly to A, after which the cycle begins again.

From the foregoing, it will be seen that the complete picture is scanned in two frames, but as each frame contains an integer number of lines, plus a half, the two frames will interlace. The system does not require the short return times shown for the line and frame scans, nor need the lines begin in the positions shown. Provided the line and frame traversals are regularly recurrent and have the correct frequency ratio (two frames=odd number of lines), an interlaced picture will be obtained.

EIRCO WINDOW DISPLAYS

Special window displays are available to retailers from Eirco (W.), Ltd., of 29, Wellington-place, Belfast. Retailers are asked to give some indication of the type of display they require, and to give the firm a week's notice.

Telex—the Real Thing

Marconiphone Instal Teleprinters

Minutes, and only one or two of them, are now needed for the Marconiphone Co., Ltd., to transmit orders from the firm's headquarters in Tottenham Court Road, London, W.1, to the factories at Hayes, while telegraphed orders are delivered by wire.

This big speed-up has been accomplished by the installation of a teleprinter service between Radio House and the factory, and between the Central Telegraph Office and Radio House as well.

The previous method of communication between Radio House and Hayes was by telephone, followed by a written confirmation, and when it is considered that often two or three telephone calls had to be made before the person concerned was available, the advantage of the Teleprinter installation is obvious.

It has several important applications, not the least being absolute infallibility. A person receiving an order in Radio House will now immediately convey it to the Teleprinter operator by whom it will be transmitted to Hayes. The typewritten copy will be sent back immediately with the original note attached as confirmation that the message has been sent, and an identical typewritten copy is automatically made on the Teleprinter at Hayes. All possibility of misunderstanding is avoided and further confirmation is unnecessary.

Priority for You

The Teleprinter will take priority over all other calls on the private lines between Radio House and Hayes.

On the direct telegram side there is also a big saving of time. Under the old system a telegram for Marconiphone would first reach the Central Telegraph Office in London. From there it would be relayed to the nearest sub-office, and finally delivered by a telegraph boy.

Immediately a telegram is received at the Central Telegraph Office under the new system it is put over the Teleprinter line and the apparatus at Radio House, operated by currents over the 'phone wires, prints the telegram.

In connection with this Teleprinter service, it is important to note that in future the telegraphic address of Marconiphone at Radio House has been changed from "Marconifon Rath" to "Marconifon Telex."

I.R.E. EXAM. SYLLABUS

A syllabus of examinations is now available from the Institution of Radio Engineers, of 39, Victoria Street, Westminster, London, S.W.1.

The examination for associate membership (A.M.I.R.E. degree) covers physics (one 2-hour paper), mathematics (2-hour paper) and radio engineering (3-hour paper). F.Inst.R.E. examinations cover electrical technology, radio engineer, radio receiver practice, short-wave transmission and reception, television and transmission.

There is also a 3-hour examination on radio service and maintenance for an I.R.E. certificate.

The first examination held by the Institution has concluded at Manchester. Further examinations are to be held in London and elsewhere.

Copies of the syllabus, complete with entrance fees, are available from the above address.

THIS YEAR OF GOLF ENDS HAPPILY FOR ALL



High-spots of Tuesday's visit to West Herts: E. J. W. Stanley receives from Kirby-Johnson the spoon for the highest junior score put in that day; Entertainer Lynton Harris does his stuff!—"Listen I want to tell you something!"; Paul Huhne, L. Welham, J. H. Williams, and C. Pinkham offer up a silent prayer for their next drives; and the skippers take wine together—T. W. Forse (Emigs) and H. Howitt (Rigs).

R.I.G.S. Winds Up Season

FINAL MEETING AND A.G.M. AT WEST HERTS

Nearly fifty members of the Radio Industry Golfing Society and some guests attended the last competition of the season held at West Herts on Tuesday, and the annual general meeting and dinner which followed in the evening.

The morning competitions were medal rounds, senior and junior, for the Trade Press challenge cups and replicas. In the senior division, Mr. S. H. Tetlow was successful with 81 - 11 = 70 net, with Mr. E. R. Harveyson (83 - 7 = 76) receiving a tankard presented by Mr. Frankie Jones.

Mr. Harveyson won on the first nine holes after tying with Messrs. S. Tootill and S. Grey.

In the junior division, Mr. L. Welham was the winner with 93 - 17 = 76 net, and Mr. W. C. Hands, the runner-up, received a tankard, presented by Mr. A. V. Wood, for his score of 92 - 15 = 77 net.

Afternoon Competition

In the afternoon the competition was greensome against bogey and half combined handicap for the challenge cups presented by the Radio Component Manufacturers' Federation, and replicas presented by the R.C.M.F. chairman, Mr. A. F. Bulgin.

There was a tie for first place with two scores of two up on bogey, the decision going to Messrs. W. T. Forse and R. G. Mulvey, while Messrs. S. Tootill and C. A. Hiscock received tankards presented by Messrs. A. Landau and J. Gray.

The aggregate challenge cups which are awarded by the Society at the end of each year for the three best medal rounds, senior and junior, were also awarded during the evening. The senior aggregate cup and replica presented by Mr. W. W. Burnham was won by Mr. E. R. Harveyson with a net 219, and the junior, presented by Mr. J. H. Williams, by Mr. R. M. Waddington with a net 246.

These cups are awarded for the best aggregate scores returned by competitors who have not during the season won a "singles" competition.

At the annual general meeting, Lt.-Col. J. T. C. Moore-Brabazon, M.C., M.P., was re-elected president, Messrs. J. H. Williams and H. Howitt elected vice-presidents, together with a committee of Messrs. Gordon Baynton, H. Boon, Ernest Brown, Harry

Bryan, S. Grey, H. Howitt, E. M. Lee, F. H. McCrea, S. R. Mullard, J. G. G. Noble, Col. G. D. Ozanne, F. H. Robinson, E. E. Rosen, Gray Sinclair, and J. H. Williams.

The accounts, which were presented, showed that the Society ended the year with a small favourable balance.

E. M. I. G. S.

FINISH FOR 1935 AT STOKE POGES LAST SATURDAY

The final meeting of the Electric and Musical Industries Golfing Society was held at Stoke Poges on Saturday, September 28.

Mr. W. T. Forse, captain of the E.M.I.G.S., took the chair and was supported by Mr. Alfred Clark, president of the Society.

It was most unfortunate that Mr. Clark was unable to present the prizes in person, owing to an operation which has been performed on his throat, temporarily depriving him of his voice.

His recovery, though steady, is tedious, and it will be some time before Mr. Clark will be able to speak normally.

The prizes were distributed by Sir Arthur Roberts, guest of honour, who was at one time associated with the Columbia Graphophone Company.

The winners of the season's prizes were: Mr. J. P. Wall, the Mittell Cup; Mr. C. Syrett, the Sterling Bowl; Mr. H. Knowlton, the Ashford Cup; Mr. R. Moody, the Forse Cup; Mr. W. A. Forse, the President's putter.

ULSTER GOLFERS PLAY FOR STATUETTE

PRESENTED BY CHAIRMAN

The concluding meeting of the Ulster Radio Traders' Golfing Society was held on the course of the Belvoir Park Club, Belfast, on Wednesday, September 25, when twenty players competed for prizes presented by the chairman of the Society, Mr. Robert Scott.

The first prize, a silver statuette of a golfer at the completion of his swing, was won by Mr. J. C. Holland, of J. C. Holland and Co. The second prize-winner was Mr. W. R. Montgomery, of the G.E.C. radio department, while the hidden hole prize went to Mr. J. C. Davey, of A.C. Cossor and Co., Ltd. The statuette is to be an annual trophy. The second and hidden hole prizes consisted of boxes of golf balls.

NEWCASTLE'S NEW CHAIRMAN

HARRY BRADLEY ELECTED BY SOCIAL CLUB

At a committee meeting of the Newcastle and District Radio Trade Social Club on Thursday, September 26, much regret was expressed at the resignation of the chairman, Mr. J. Watson. Although the committee wished to ask Mr. Watson to reconsider his decision, it was pointed out by Mr. Harry Bradley, the vice-chairman, that Mr. Watson has assured him he was unable to give his full support because of other activities.

Mr. Harry Bradley, who was elected chairman, hoped the committee would be as happy under his chairmanship as it had been under the guidance of Mr. Watson.

The business of the evening was to consider the coming winter season programme. It was agreed to hold three small dances and one carnival dance. Two small ones before Christmas, the dates being fixed for November 13 and December 18. These will be held at the Oxford Galleries, Newcastle. The next committee meeting will take place on October 17.

First Lunch Meeting

The first monthly lunch meeting of the Club is to be held at the County Hotel, Newcastle, on Wednesday, October 9, at 1.30 p.m. Mr. W. Horsfall, the president of the Club, is to be in the chair, while Mr. J. Smith, B.Sc., who is the sectional engineer in charge of the Newcastle G.P.O. area, is to give a talk on interference.

This is the first of a series of six monthly lunches at which there are to be addresses on a variety of subjects. The second lunch is to be held on about November 6, when there will be a talk on either aviation or the workings of the B.B.C.

Arrangements have also been made for a coach trip to Blackpool on Sunday, October 20. This is a privately arranged trip and applications for tickets should be made to Mr. Guitard at the Wireless Shop, Pink Lane, Newcastle-on-Tyne, not later than October 12.

McMICHAEL PUBLICITY

With the beginning of next week McMichael Radio, Ltd., is to launch its autumn publicity push. Throughout the campaign will push entertainment by radio more than the sets.

The period, and more particularly the opening date, has been the subject of careful deliberation by McMichael executives, and it was decided that the first week in October, which also coincides with the end of Summer Time, would mark the real beginning of the large-scale buying season.

Exide Agent Gives Dealers' Dinner

Success of Bristol Function

About two hundred people assembled at the Grand Hotel, Bristol, on Friday, September 27, on the occasion of a dealers' dinner organised by F. O. Coward, Ltd., the Bristol Exide service agents. This was the first time a dinner of this description has been held in the city, and it proved a big success.

Mr. F. O. Coward presided, and included among the guests were Messrs. H. B. Schofield, Exide sales manager, H. Boon, Exide advertising manager, A. C. Stewart, Drydex sales manager, Grinnell S. Harvey, Exide service manager, Manchester, A. C. McWhirter, Cardiff service agent, H. L. Hill, late Bristol manager, F. Atkinson, the new Bristol manager, Major Dunscombe, F. B. Teale, and other well-known members of the industry in the city.

Mr. F. O. Coward expressed his pleasure at seeing so representative a gathering of traders, many of whom present had been doing business with the firm during the whole 11 years it had been established. He was also glad to welcome the representatives of both the local and the trade Press, and he thanked them for the support which they were always ready to give to the Trade.

Mr. Coward's welcome was amplified by his co-director, Mr. S. D. H. Brown.

Spirit of Harmony

The spirit animating Bristol retailers which enabled them to get together to work in harmony was referred to by Mr. Schofield. He thought that was a very fine spirit. He congratulated Mr. Coward and Mr. Brown on their gathering. In these two gentlemen Exide had service agents who were second to none.

Referring to the change in the management of the Bristol depot he said they were sorry to lose Mr. Hill, who had done great things and made many friends in the West. He would have a good successor in Mr. Atkinson, and he was sure the Bristol depot would go ahead as it had always done.

Following the dinner there was a musical entertainment, and two films were screened for the enjoyment of the company.

ROMFORD N.R.E.A. TO HOLD DANCE

CENTRAL RALLY IN LONDON

A dance is included among fixtures arranged by N.R.E.A. branches. This is being held by the Romford branch at the Unity Hall, Romford, on October 24. Tickets are obtainable from Mr. H. W. King, 34, Bush Elm Road, Romford.

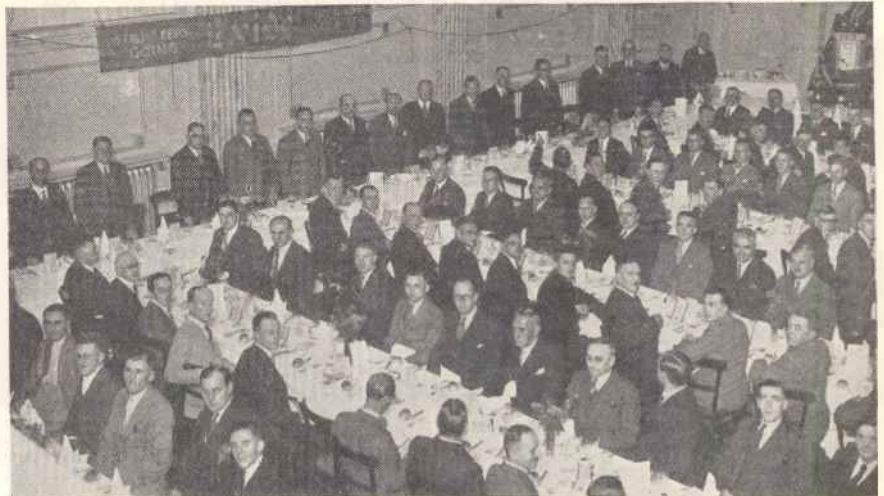
A lecture on "Sound Reproduction" will be given by Mr. P. G. A. H. Voigt at a Central Rally and Lecture, to be held on October 8 at 8.15 p.m. at the Horseshoe Hotel, Tottenham Court Road, London, W.C.2.

Other branch fixtures are:—Plymouth, group discussion on "Oscillator and Modulator Valves," at the Athenæum Institute, October 8.

S. W. London, lecture at the Spread Eagle Hotel, 71, High Street, Wandsworth, October 16, 8.15 p.m.

Manchester, lecture and demonstration of testing instruments, arranged by the Western Electrical Instrument Co., at the British School of Radio, Withy Grove, October 16, 8.15 p.m.

A. Hodges has taken over the Scientific Wireless Stores at 2, Church Gate, Leicester.



Some two hundred dealers attended a dinner given by F. O. Coward, Ltd., the Bristol Exide agents, on September 27. Messrs. H. B. Schofield, Exide Sales Manager, H. Boon, Exide Advertising Manager, and A. C. Stewart, Drydex Sales Manager, were present.

News from Everywhere

A radio department has been opened by Pampays, of 2, Holywell Hill, St. Albans.

Claybrook Radio have taken over premises at 145, Fulham Palace Road, London, W.6.

Cabin Radio Services is the name of a new concern at 308, Fairfax Drive, Westcliff-on-Sea.

T. H. Russell, of the Tram Terminus, Bedworth, near Nuneaton, has opened a branch at 2, Market Street, Bedworth.

Baker's Wireless Stores have moved to 161, High Street, Gillingham, their former Trafalgar Street and High Street premises being closed.

More than £500 worth of stock was destroyed at a fire at the Swan Street, Loughborough, premises of Curry's, Ltd., on Friday, September 27.

W. T. James, for many years a member of the staff of H. Stoodby, the West Wales retailer, has opened up on his own at Radio House, Mansel Street, Carmarthen.

L. S. Green and Co., Ltd., of 10, Station Road, Upminster, Essex, have opened a branch at Hornchurch, which is under the management of Mr. Jewitt.

ROYAL WEDDING TO BE BROADCAST

Dealers will wish to tie-up with the broadcast of the wedding of H.R.H. the Duke of Gloucester and Lady Alice Montague-Douglas-Scott, which the B.B.C. has now received permission to broadcast in its entirety.

The ceremony takes place on Wednesday, November 6, at Westminster Abbey, in the presence of Their Majesties the King and Queen.

Furse Wholesale, Ltd., of Traffic Street, Nottingham, has been added to the list of wholesaler subscribers to the Radio Wholesale Trading Agreement.

HOW TO PUBLICISE NEW PREMISES

WHOLE PAGE IN LOCAL PAPER FOR DEALER

"Enterprise!" was the first word of a full-page announcement in the *Shields Gazette* that drew attention to the new premises of Roberts (South Shields), Ltd., at Fowler Street—and enterprising the announcement certainly was.

Underneath a decorative heading was a photograph of the new shop, which has a modern front on a corner site, and below this was an editorial "write-up" giving a brief history of the firm and its accomplishments. Below this, again, was an advertisement inserted by the firm.

Flanking these features were advertisements by local contractors responsible for the design, erection and decoration of the shop, so that although the entire announcement covered a whole page, the cost to the firm was comparatively small.

EASTICK'S OFFER £10 FOR NEWS OF STOLEN SET

TAKEN FROM VAN

A reward of £10 for information concerning a stolen set is offered by J. J. Eastick and Sons, of 118, Bunhill Row, London, E.C.1.

The receiver, a Philips Model 940A, with the serial number 11446, was stolen from one of the firm's vans while outside the head offices. The reward is offered for information leading to a conviction.

J. J. Eastick and Sons state that recently one of its vans was stolen from a public garage, and was later found abandoned with two receivers missing from its contents. The police recovered the sets and subsequently a man was sentenced to six months' imprisonment. Another man charged with receiving the goods was dismissed.

R. C. FISHLOCK JOINS BENN'S

Mr. R. C. Fishlock has joined the Benn Radio and Electrical Stores, of Lower Hill, Morton Road, Rugby, the business now being under the direction of Mr. Fishlock in partnership with Mrs. V. J. Charlton.

The firm's service department would appreciate service sheets from set manufacturers.

LOCAL SHOWS RAISE SALES CURVES

Coventry Catches Them While Young

Coventry elementary schoolchildren are keenly interested in radio. In connection with the Home Entertainments Exhibition which is being staged at the Rover Showrooms, Warwick Row, Coventry, this week, by Messrs. A. and F. E. Hansons, Ltd., arrangements have been made with the Director of Education for parties of scholars to attend daily lectures on radio work.

Part of the exhibition has been turned into a modern radio repair shop, fitted with the latest equipment, and the questions which have been asked at the close of the lectures have revealed genuine interest on the part of the boys in the newest of the sciences. As many as fifty have attended at one time.

Other features of the exhibition which they are having specially explained to them include the interesting stand upon which are being shown the various stages of the manufacture of H.M.V. records, and the practical work of piano-repairing.

The exhibition, to which admission is free, is already proving a big attraction for Coventry people. On show are all the latest features of home entertainment equipment. Among the most outstanding are the new "streamlined" pianos with novel colour schemes.

Demonstration by Switch

On the radio side, one of the most interesting features lie in the coupling up of seven of the best-known makes of sets in a manner which allows of instantaneous comparison.

These sets comprise models of the 12 to 14 guineas class produced by Ekco, Philco, M.M.V., Philips, Pye, Bush, and Marconi. Anyone can, by the simple operation of a pointer, turn on whichever of the sets he desires to hear, and compare it with the other well-known products without having to carry the tone in his mind longer than the time taken to move the indicator. Elsewhere, a saloon car is installed with one of the latest car radio equipments.



Home Entertainment is the appeal of the Coventry Exhibition which has had a successful run this week in the Rover Showroom. All new season's lines in both radio and music were well to the fore.

Radiovox P.A. Gear for Exhibition at Leeds

To meet increased demands of retailers, Radiovox Wireless Services, Ltd., of 16, Portland Crescent, Leeds, 1, has organised a complete P.A. service to cover Yorkshire.

This company, which specialises in the manufacture of P.A. equipment, has now been appointed sole distributor of Octacros records of Yorkshire and Durham.

The firm's hire department is supplying the complete P.A. equipment for the Leeds Brighter Homes Exhibition organised by Provincial Exhibitions Ltd., which is to be held from October 8 to 16.

On its own stand, Radiovox will display the main amplifier, a rack type unit, and in conjunction with the Whiteley Radio Co., Ltd., is exhibiting a full range of W.B. speakers. The stand will also carry a selection of Octacros records, specimens from the range of Blue Light microphones, and the latest Radiovox P.A. gear. Radiovox apparatus includes two new gramophone needles.

Retailers Rally at Kettering Event

"Brighter and better than ever" was the description given to this year's radio exhibition at the Central Hall, Kettering, which was organised by the local Radio and Physical Society. This event, the third organised by the society, ran for three days, concluding on Saturday, September 28.

At the opening ceremony, Mr. C. W. Clarke, J.P., C.C., who was the first president of Kettering's first radio society, mentioned that there were more than 1,000 receiving licences in Kettering, which was a greater percentage of the population than existed in any other town in the country. That, he said, was due to a considerable extent to the activities of the society.

Many local dealers took stands at the show, and among them were:—Battery Services (Kettering), Ltd., of Wood Street; Brampton's, of 39, Princes Street; Charles Lawson's "Radio Hospital," of 137, Wellington Street; Curry's, Ltd., of 41-43, High Street; Cyril Fairey, of 81, Montague Street; H. A. Gray, of 12, Albion Road; G. N. Glover, of 53, Montague Street; Hedley Miller, of Dalkeith Place; Palmer's Music Stores, of Dalkeith Place; T. W. Stanion, of 64, Melton Street; Paul Taylor, of Radio House, Rockingham Road; Gerald S. White, of Pollard Street, and H. York and Sons, of 97, Montagu Street.

Battery Services, Ltd., showed a range of Orpheus receivers built by them, while the Kettering Radio and Physical Society had a stand of its own.

Among special attractions there were free cinema shows, recording by visitors, and X-ray and television demonstrations. The television exhibit was arranged by Mr. J. H. Reynier, assisted by Mr. Vaughan Jones.

ATTRACTIONS STAGED FOR EDINBURGH

"CAFE COLETTE"

The sixth Scottish National Radio Exhibition, which embraces the whole of the radio and musical trades, will be opened in the Waverley Market, Edinburgh, on Wednesday, October 9. Bailie Raithby, senior magistrate of Edinburgh, will preside, and the exhibition will be declared open by Mr. Robert B. Donaldson, president of the Scottish Radio Retailers' Association.

This year the organiser, Mr. T. Percy Bentley, has embodied many new features, amongst which is the special engagement of the Café Colette Orchestra.

An outstanding feature will be the stand and exhibits of the B.B.C., which will include an exterior scale model of the Droitwich Transmitter, and another one showing the interior, over which will be a key explaining the various sections of the apparatus. There will also be a map, based on the Post Office licence figures, to show the percentage of licences to population, by counties. Another map shows the position of studios and transmitters, and the way in which they are inter-connected by telephone lines, while there is also to be a programme chart.

There will also be a G.P.O. exhibit dealing with interference and illustrating many phases of Post Office work.

The amplifying equipment for the exhibition has been provided by the Edison Swan Electric Co., Ltd.

The Corporation of Edinburgh is again granting a civic reception to the exhibitors, and the Castle will be floodlit.

BIG BRISTOL ATTENDANCE FIGURES

The total paid attendance figures for the Bristol radio exhibition was 17,416.

The show, which closed Saturday, September 28, after running for a week, was a marked success, and the variety show provided a big draw.

On the closing night Mr. W. G. Silcocks, the chairman of the Exhibition, made presentations to each of the artists. There followed another pleasing ceremony when the exhibitors presented Mr. Silcocks with a fountain pen as a memento of the Show and a slight token of their appreciation of his services.

During the run of the exhibition the Mayor of Bristol paid four visits and the Sheriff three.

An exhibition of new season's Ekco receivers was given by J. Claypole and Son, of Peterborough, in the Elwes Hall in that town from Thursday to Saturday, September 26 to 28.

Ward's Radio staged a comprehensive show at Cateswell House, Stratford Road, Hall Green, Birmingham.

Torquay had a miniature Radiolympia in the C.A.W.G. Hall during the week ending

Saturday, September 28. It was organised by Mr. F. H. Johnstone, the Torquay manager of Devon Electric General Services.

A system of plugs was used to allow any set to be demonstrated at the exhibition staged by Hill, Carter's, Ltd., at their North Shields premises. Mr. Reaveley, manager of the firm's radio department, was in charge.

At the tenth annual exhibition of the Preston Chamber of Trade in the local Public Halls, recently, Richard Marsden and Son, of 115, Church Street, Preston, displayed a big selection of new receivers.

Leading retailers in York held their annual Radio Exhibition in the Assembly Rooms. Among the exhibitors were John Gray and Sons, Alec House and Son, and Noyes and Son.

A complete range of new season's models has been on show for a week at a local Radiolympia held at the Park Hall, London Road, Southend-on-Sea. It was organised by Mr. G. Macfarlane, of Super Service Supplies, 573, London Road, Westcliff-on-Sea.

The Broadcaster & WIRELESS RETAILER

General Offices:

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Editor: JOHN MAY.

Advertisement Manager: F. S. BARRETT.

Associated Publications:

Electrical Trading. Hotel & Catering Management. The Service Engineer. The Broadcaster Radio and Gramophone Trade Annual.

90 DAYS WITHOUT THE OPTION

REPORTS from the dealer meetings in various parts of the country this week show that retailers are lining up on the question of terms at which radio sets can be bought or sold through hire-purchase.

Catch-penny offers of extravagant hire-periods and H.-P. sales on cash terms are being reported to the manufacturers wherever they occur. With such a weight of evidence and so many dealers behind it, the manufacturing side of the Industry will have to take action.

It is a matter on which the W.R.A. Council is asking for a ruling, and it has every member and many non-members behind it.

As we announced earlier this year, there has been a big move towards the standardisation of hire-purchase terms in radio through the set manufacturers. There were a number of other similar moves towards standardisation of trading at the same time—all of them things that the retailer welcomed. But it is useless to make wise laws unless steps are taken to enforce them.

The guarantee period being made a uniform ninety-days for leading brands of receivers and all B.V.A. valves was, perhaps, the most welcome of the regulations. Now it is one which is most in need of enforcement.

In a number of districts there are isolated dealers who are offering twelve months' free service. In other words, a standardisation which has been adopted to benefit the whole trade is being twisted by these few for their own advantage.

If this extra nine months of free service involves the dealers concerned in extra cost—and it is reasonable to assume that on the average it will do so—then the public is being offered an inducement of financial value in order to make them buy.

Who will say that this is not tantamount to price-cutting?

This is another matter for joint action by dealers. They are the only people who will lose if a year of free service becomes more general—especially as the makers only back them for three months. They are the people, then, who must see that something is done about it.

Order of Wooden Two

TWO unusual presentations were made during the R.I.G.S. annual dinner at West Herts Golf Club on Tuesday. They occasioned a good deal of good-humoured merriment at the expense of the recipients.

Mr. J. D. Carpenter presented to Col. T. W. Vigers a huge wooden ladle decorated with silk ribbon in the Society's colours. An inscription on it ran: "Presented by J. D. Carpenter for the highest senior score, West Herts, October 1, 1935."

Mr. E. J. W. Stanley is the holder of a similar treasure presented by Mr. H. L. Kirby Johnson for the highest junior score.

I heard it rumoured that both gentlemen intend to use the trophies as evidence to the Committee that their handicaps should be raised.

* * *

News of another presentation of a different kind was also made known at the West Herts dinner.

Editor John May was presented with a son on Saturday last, September 28.

During the course of an evening of merriment and song, the youngster received the blessing of R.I.G.S. in appropriate fashion.

Wedding and Diamond Ditto

The principal, staff and works employees of the Whiteley Electrical Radio Co., Ltd., of Mansfield, made a gift of a case of cutlery and an electric clock to Mr. George Tranter, of the W.B. tool-room staff, on the occasion of his marriage to Miss Louie Banner, a former employee of the firm. Mr. Tranter served his apprenticeship with Whiteleys.

* * *

Congratulations to Mr. A. G. Arnold, founder of A. G. Arnold and Co., Ltd., radio dealers of Newport, Mon., who celebrated his diamond wedding last Sunday.

Mr. Arnold, who is one of the best-known business men in Monmouthshire, is a native of Sherborne, Dorset, but has lived in Newport since 1865.

Mr. and Mrs. Arnold have four children—three sons and a daughter.

The best wishes of the Trade will go out to both.

* * *

Mr. F. G. Phillips, a former assistant secretary of the Cardiff W.R.A., has been appointed manager of the radio department of David Morgan, Ltd., Cardiff. Best of luck, F.G.P.

Brother of Mr. C. H. Phillips, secretary and former chairman of the Cardiff W.R.A., he is a well-known personality in Welsh radio trade circles.

He is also well known "on the air," for he is one of Wales' best-known amateur actors, and broadcasts frequently.

As an "aside" on the note he sends me about it, my Cardiff man adds the comment: "This is one of the plums of radio management in Wales."

* * *

My idea of a really good practical joke is where a lot of people are taken in but no harm is done.

It's a weak definition, that. But luckily I have an example to illustrate it.

On the morning when the Louis-Baer fight came through, those present at the Manchester Show were amazed to hear what



Samuel Kaufman, "Broadcaster" correspondent in New York, catches them all when they go to the States. Here he is with our own Henry Hall at a reception given by the Columbia Broadcasting System in Henry's honour.

purported to be a relay from America of Joe Louis broadcasting how he won the fight.

The next morning there was a similar broadcast by Max Baer relating how he lost the fight.

These broadcasts took place during the period when the B.B.C. amplifying equipment was being tested by records and announcements through the speakers on the stands. This period was described as "The Exhibitors' Hour."

So complete was the illusion that everyone wondered how two such good American broadcasts had been arranged.

It was not until some hours later that it leaked out the practical joker was Terry O'Neill, Ferranti's Yorkshire representative. He "made" his own atmospherics by rubbing two match-boxes together near the mike!

Gala Time—a Splash Story

The beginning of October is gala time in radio—swimming gala time.

The Newcastle and District Radio Trade Social Club had a most successful evening when they wound up the swimming season at the Northumberland Street City Baths, I'm told.

Besides the regular programme, there were some very humorous surprise items.

At one stage Captain Fabian blew his whistle to bring everyone to attention; going to the far end of the baths, he reprimanded a swimmer for smoking. The offender was unrepentant, and Fabian called in a policeman.

The bobby was actually Mr. J. Roddy, and when the Captain threw both the policeman and the offender in the water the roof literally "came off."

All the events were most enthusiastically supported. The "Diving for Hidden Treasure," especially, created lots of fun.

* * *

From another source I hear that Mr. W. Craig, who is Tungram's Newcastle man, was also "in the swim."

At the Newcastle baths Mr. Craig appeared dressed as a small boy, complete with toy

Spoon for Rigsters

boat, which was carefully trailed after him in the water.

But before he could do his stuff he was effectively hove into the deep end, and on clambering out was immediately thrown in again.

This appears to have gone on for quite a considerable time. Eventually Craig apparently came to the conclusion that his best place was in the water.

Although only an indifferent swimmer (at least, so I was told), he felt much safer afloat than ashore!

* * *

A wet but enjoyable evening was experienced by employees of Ever Ready when their annual gala was held at the Clissold Road swimming-baths, Stoke Newington, on Friday, September 27.

Among those present were Mr. Magnus Goodfellow, the Ever Ready president, and Mr. A. H. Sheppard, the vice-president.

At the conclusion of the gala the prizes were presented by Miss M. Goodfellow.

Hellesens won the men's invitation relay from Lissen, who were second, and Pye were third. In a similar event for ladies, Pye had a "swim-over"—or whatever the proper term is for an aquatic walk-over.

* * *

Members of the Philco Sports Club started their dance season with a swing on Saturday, September 28, when the first dance of the season crowded the Park Hotel, Hanwell, to



STAFF NEWS

Mr. F. G. Phillips, who has been appointed manager of the radio department of David Morgan, Ltd., of Cardiff. See *The Speaker's* paragraph opposite.

Aerodyne have increased their sales personnel in the Midlands and the North, three new representatives being under the control of Mr. G. E. Ling, Aerodyne's Northern sales supervisor. They are:—

G. E. Crowther, of 41, Byron Street, Bradford, who has been appointed as Yorkshire representative;

A. J. Gray, of 22, Westbourne Range, Hyde Road, Manchester, who takes East Lancs and Cheshire; and

T. S. E. Parry, of Oaklands, Ross Avenue, Phillips Park Road, Whitefield, Manchester, who is operating in Liverpool and North Wales.

N. E. Cooper has been appointed by Britannia Batteries, Ltd., as Lancashire Area Manager.



Commenting on the W.R.A. Nine-Point Plan last week, a dealer expressed the opinion that there was a surplus of dealers who were no use to the industry.

capacity. Club Secretary W. Johnson was warmly congratulated on the success of the evening, I hear.

* * *

During the summer months, Leeds Luncheon Club members were rash enough to allow a camera enthusiast to take moving pictures of incidents at the various golf tournaments held by the club.

Now they are to see themselves as others see them. Mr. R. Taylor, of G.E.C., Leeds, the enthusiast in question, took 250 ft. of his colleagues' efforts, and is to have the satisfaction of screening the film at a hot-pot supper and smoker to be held at the Guildford Hotel, Leeds, on October 16.

Unprejudiced members of the executive who attended a pre-view say, with a chuckle, that the evening will be a merry one.

There is, my Leeds man tells me, a particularly gruesome picture of one poor fellow over-shooting a yard putt by about half the width of the green!

* * *

There has been some feeling, I am told, among the rank and file of the Notts Lunch Club regarding an alleged lack of social activity.

At the annual meeting on October 9, a proposal will probably be made for a social committee, with its own secretary.

At this meeting there is to be a debate on "Salesmanship." My friend George Taylor, Whiteley Electrical sales manager, is to open the discussion from the S.M.'s angle, and Mr. G. D. Royds, managing director of E. Walter George, Ltd., from the advertising consultants' point of view.

After that the fight is no longer a private one and any gentleman may join in.

* * *

You see on opposite page a picture of Henry Hall chatting with Sam Kaufman during a reception organised by the Columbia broadcasting system in New York.

It is the first time Sam Kaufman's portrait has appeared in our pages, but the stories which, as our New York correspondent, he sends us are familiar to every reader.

Sam is an indefatigable journalist, and is always one of the very first persons to welcome any member of the Industry who visits the States.

Many a man who was interviewed by BROADCASTER practically as his ship left our

shores has been "fair taken aback" by being greeted on behalf of BROADCASTER as the ship touches the American quayside.

Oh, Listen to the Band!

Looks as if I shall have to star a special Garry Allighan corner in these columns.

Last week I told you he had turned to film-writing. (Can't let H. G. Wells have it all his own way, can we?)

"Man o' the Mike" is the title of his scenario.

Now I hear from this journalist-editor-publicist-critic as follows:—

"I have been invited to conduct the Arsenal band when they play at the Arsenal-Derby match next Saturday (i.e., to-day) when a gate of more than 60,000 is expected."

The next thing we shall hear is that the R.M.A. have agreed to transfer their publicist to the Arsenal forward line for a huge sum.

Shoot, Garry, Shoot!

* * *

The Music Trades' Benevolent Society is pressing for increased support for its stamp scheme inaugurated three years ago. It has asked me to raise my voice in the special drive that is being made to secure added interest in the scheme.

It is, of course, a means of raising money for old people in the industry who are in urgent need of help. People are asked to obtain books of stamps and to sell them at 3d. each to friends and business acquaintances. The entire proceeds of the sales go to the fund.

Supplies of stamp books can be had from the secretary at 64, Gresham Street, London, E.C.2.

* * *

An Ashton-under-Lyne dealer was testing and adjusting a radio set which he had fitted into a car for a customer.

The car was in the roadway, and just as he switched on two women were passing. A man's voice came through the speaker. The women looked in the car and saw the dealer apparently intent on his job. As they walked on, one said, "Listen to you mon. He's talkin' to hissel'."

The Speaker.

COMMERCIAL NEWS

The following companies are, unless cause is shown to the contrary, to be struck off the register and dissolved at the end of three months from September 27:—

Bevan's Radio Supplies, Ltd.; Campbell Short Wave Wireless, Ltd.; Central Radio Agencies, Ltd.; H. and C. Wireless, Ltd.; Invicta Radio, Ltd.; Kenton Radio and Cycle Co., Ltd.; Page Car Radio, Ltd.; Radio Maintenance, Ltd.; Radio Mutual, Ltd.; Radio Recordgram, Ltd.; Radio Supplies and Service Co. (Bristol), Ltd.; Wholesale Radio Supplies, Ltd.

Similarly with the following companies, the three months to date from October 1:—

Decee-Acee, Ltd.; Golden Voice Radio, Ltd.; "K" Television Demonstrations, Ltd.; Swan Radio, Ltd.

Receiving Order

Sidney Donald Charles Orchard (trading as Empire Radio), 43, Malmesbury Road, Shirley, Southampton, and lately carrying on business at that address. Petition filed August 2; order dated September 25; on creditor's petition.

Receiving Order and Adjudication

Richard Lovell Dunston Mathews, residing and carrying on business at 24, Kingsway Road, Burnham-on-Sea, Somerset. Petition filed and orders dated September 27; on debtor's petition.

First Meeting and Public Examination

David MacNeillage Nicholson, residing and carrying on business at 146, Town Street, Bramley, Leeds, as The Star Service Co. First meeting October 8, 11 a.m., at the Official Receiver's office, 24, Bond Street, Leeds, 1; public examination October 29, 10.30 a.m., at the County Court House, Albion Place, Leeds, 1.

Bertram Albert Ernest Hinkins, residing and carrying on business at 322, Torquay Road, Paignton, Devon. First meeting October 4, 3 p.m., and public examination October 24, 2.30 p.m., both at County Court offices, Old Town Hall, Torquay.

Intended Dividends

Maurice Cohen, residing at 2, Priestfield Road, Ellesmere Port, lately carrying on business as Lightning Radio at 15a, Bebington Road, New Ferry, both Cheshire. Proofs by October 16 to J. Alcorn, Government Buildings, Victoria Street, Liverpool.

Walter Arthur Peabody, Grouwen, Hudson Street, Loughborough, Leics., and carrying on business at 24 and 25, High Street, Loughborough. Proofs by October 16 to E. Barlow, 1, Berridge Street, Leicester.

Cecil Worden, residing at 5, St. Alban's Road, lately residing and carrying on business at 89, Duckworth Street, both Darwen, Lancs. Proofs by October 12 to A. H. Ward, District Bank Chambers, Blackburn.

Application for Discharge

Marcus Fisher, residing at 48, Cranbourne Gardens, London, N.W.11, and Joseph Fisher, residing at 22, Finchley Avenue, London, N.3, carrying on business at 9, Fitzroy Square, London, W.1, as Marcus Fisher and Co. and The Paramount Gramophone Co. To be heard October 23, 11 a.m., at Bankruptcy Buildings, Carey Street, London, W.C.2.

Order Made on Application for Discharge

George Bond, 159, Leeds Road, Nelson, and 318, Leeds Road, Nelson, Lancs.—The application for discharge was heard at the County Court House, Bankhouse Street, Burnley, on September 26. The discharge was granted subject to eighteen months' suspension.

Mortgages and Charges

Radio Hire Service, Ltd., 21, Gildredge Road, Eastbourne.—Mortgage dated September 10, to secure £292 10s. charged on agreements for the hiring of Philco and Pye wireless apparatus. Holders: Sussex Finance Corporation, Ltd., 85, South Street, Eastbourne.

Dudley Radio Relay Service, Ltd., Union Street, Dudley, Wores.—Debenture, dated September 9, to secure £500, charged on the company's undertaking and property, present and future, including uncalled capital. Holder: S. McDonald, Beaufort, Achinton, Fort William.

Henry Anson, Ltd.—Debenture, dated September 19, to secure £2,580, charged on the company's assets, present and future, including uncalled capital. Holders: Mrs. C. Anson, 95, Knightsbridge, S.W., and D. Faleke, The Orchard, Little Bookham, Surrey.

Home Radio (Lowestoft), Ltd.—Mortgage for £556 14s. 8d., dated August 28, 1931, charged on land with house known as "Hillcrest," etc., in Burton Street, Lowestoft (being property acquired by the

Where Radio is Made



A built-up area of over 270,000 square feet is covered by the Moston, Manchester, factory of Ferranti, Ltd., which is entirely given over to the manufacture of radio.

company on September 8, 1934). Registered September 19, 1935, pursuant to Sections 81 and 85 of the Companies Act, 1929. Mortgagees: Trustees of the Ipswich and Suffolk Permanent Benefit Building Society.

London Piano and Radio, Ltd., 243, Oxford Street, London, W.1.—Issues on December 22, 1934, of £500, on August 24, 1935, of £200, and on September 21, 1935, of £500 debentures, parts of a series already registered. (Particulars of issues filed September 21, 1935.)

Trojan (Radioelectric), Ltd., 13, St. Ann Street, Manchester.—Mortgage on properties in Manchester, yearly rent charges, etc., dated September 19, 1935, to secure £1,550 and any further advances. Holders: Manchester and Salford Permanent Benefit Building Society, 32, Oxford Road, Manchester.

Portland Radio Co., Ltd., 222, Great Portland Street, London, W.1.—Debenture, dated September 19, to secure £500, charged on the company's undertaking and property, present and future, including uncalled capital. Holder: H. Everett, 116, Court Lane, London, S.E.

Giang, Ltd., Crown Yard, Cricklewood, London, N.W.—Debenture, charged on the company's undertaking and property, present and future, including uncalled capital, dated September 17, to secure all moneys due or to become due from the company to Barclays Bank, Ltd.

Increase of Capital

V. G. Manufacturing Co., Ltd., 4, South Place, London, E.C.2.—The nominal capital has been increased by the addition of £15,000 in £1 ordinary shares beyond the registered capital of £3,000.

Satisfaction

Brook, Hardcastle, Ltd., 14-16, Printing Office Street, Doncaster.—Satisfaction in full on July 5, 1935, of mortgage dated February 27, 1929, and registered March 2, 1922. (According to the register of mortgages, the mortgage registered March 2, 1929, originally secured £4,065 and further advances.)

Bankruptcies

Bertram Albert Ernest Hinkins, 322, Torquay Road, Paignton, Devonshire.—Debtor filed his own petition recently, and has returned a statement of affairs showing ranking liabilities of £323 17s. 7d. The assets are estimated to realise £37 16s. 5d., but are absorbed by the preferential claims, so that there is a deficiency of £283 17s. 7d. Debtor states that he did not realise his position until May 16 this year, when he received his first summons. He attributes his failure to want of free capital, poor situation of shop and rent and overhead expenses being too high in relation to the turnover.

Frederick Charles Stanley Blake (described in the receiving order as F. C. Blake (male)), 6, Berkeley Road, Tunbridge Wells, Kent, lately 19, Vale Road, Tunbridge Wells.—The public examination was held on September 25 at the Town Hall, Tunbridge Wells. The statement of affairs showed a deficiency of £242 12s. 7d. Debtor stated that in 1930 he borrowed £30 from his mother in order that he could commence business on his own account. For about six or eight months the trading proved successful, and later debtor obtained a lease of 19, Vale Road, Tunbridge Wells. His capital then consisted of about £10 in cash and stock and utensils worth about £15. Money was spent on advertising and a traveller was employed to increase the business. After unsuccessfully experimenting with television sets debtor sold the business in March, 1935. He attributed his failure to lack of capital and heavy advertising and overhead expenses. The examination was adjourned.

Arthur Henry Jeffree, 138, Portland Road, South Norwood, Surrey.—The first meeting of creditors was held on October 2 at 29, Russell Square,

London, W.C., when the statement of affairs showed gross liabilities of £256 4s. 11d., of which £203 13s. 3d. was expected to rank for dividend, with net assets of £23 19s. 2d., or a deficiency of £179 14s. 1d. In October, 1931, debtor purchased for £450 the business of a cycle and gramophone dealer at the above address. He had no capital and agreed with the vendor to satisfy the purchase price by weekly instalments of £4 10s. During the first year the business was fairly successful, but subsequently his turnover declined and the profits were insufficient to meet his accounts and the instalments on the purchase price. With the aid of borrowed money the debtor completed the purchase price in April, 1935, but in consequence of an execution being levied in August last, he filed his petition.

He attributed his failure to the profits being insufficient to meet overhead charges and the payments of £4 10s. per week to the vendor of the business. The case being a summary one was left in the hands of the Official Receiver as trustee.

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.

Belton Battery Service, 21, Belton Road, Leytonstone, London, E.11 (Beatrice Annie Kechner, of the above address). September 16.

J. Cameron, 323, Roundhay Road, Leeds (Alice Cameron, of the above address). September 12.

Cheshire and North Wales Co., 156, Foregate Street, Chester (Edmund Wrench Keyes, Renehurst, Barrell Well Hill, Chester). September 10.

Dominion Radio, 740, Forest Road, Walthamstow, London, E.17 (Alfred Clive Dobelli, 56, Forest Glade, Highams Park, London, E.4). September 9.

Express Radio and Cycles, 16, Frederick Street, Rotherham (Ewart Roy Gannicolt, "Corrie Lynn," Munsborough Lane, Gracesborough, Rotherham). September 9.

Goodall, Pianos and Radio, 400, Garratt Lane, Earsfield, London, S.W.18 (Henry Robert Charles Goodall, 93, Ravensley Road, Balham; John Bentley Pearce, 17, Swanage Road, Wandsworth; Frederick William Vigar, 74, Gosberton Road, Balham). September 3.

Hendon Road Battery Service, 73, Hendon Road, Sunderland (John George Conley and Thomas Davison Conley, both 5, Whitehouse Crescent, and Robert Conley, 10, Audley Gardens, all Sunderland). September 14.

Lewhay Radio, 34, Shaftesbury Road, Oldfield Park, Bath (Leslie Hyton Lewis, "Granville," Tynning Road, Combe Down, and Ernest Donald Hayes, 44, Avondale Road, Lower Weston, both Bath). September 16.

Merry Hill Radio Co., Merry Hill, Quarry Bank, Staffs (Winstone Homes, Birch Coppice, Quarry Bank, and Thomas Henry Bloomer, 15, New Estate, Coppice Lane, Quarry Bank). September 10.

North Lincolnshire Radio Rentals, 15, George Street, Barton-on-Humber (Harold Hunter Pinchbeck, of the above address). August 30.

Radio Warehouses Southern, 314, Walworth Road, London, S.E.17 (Mark Wiseman, 1, Nag's Head Parade, Holloway). September 12.

St. Ann's Radio Service, 132a, St. Ann's Road, London, N.15 (Ronald Douglas Plant, 22, Lynnmouth Road, London, N.22). September 12.

Standard Cycle and Radio Co., 244, Hyde Road, Manchester, 12 (Harold Wilson, Marshall, of the above address). September 11.

Ferranti, Ltd.

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.

Armstrong, G. S., 59, High Street, Hanley, Stoke, Staffs. (Dartford.) £10 8s. 5d. July 12.

Avent, A. R., trading as **Joy's Radio Salon**, 172, Old Christchurch Road, Bournemouth, Hants. (Croydon.) £11 17s. 6d. August 13.

Bartlett, G., Abersychan, Monmouth. (Dartford.) £24 8s. 10d. July 12.

Basford Cycle and Radio Co., 28a, Wycliffe Street, New Basford, Notts. (Dartford.) £14 14s. 10d. July 12.

Brown, H., 63, Upper Street, Islington. (Clerkenwell.) £16 2s. 1d. August 28.

Cecil Cycle and Radio Stores (a firm), 29a, Christleton Road, Chester. (Liverpool.) £14 12s. 3d. September 5.

Cook, Charles, Stanstead Lodge, Stanstead, Nr. Wrotham, Kent. (Westminster.) £20 15s. 2d. September 4.

Curtis, Harold R., 58, Pembury Road, Tonbridge, Kent. (Salford.) £27 13s. 10d. August 29.

Euston Furniture Co., Ltd., 719, High Street, Tottenham, Middlesex. (Dartford.) £24 17s. 2d. July 24.

Greenwich Battery Service (a firm), 18, Blackheath Road, London, S.E.3. (Dartford.) £10 18s. 7d. September 5.

Hawkins, H., 171a, King Street, Fenton, Staffs. (Bloombsbury.) £29 4s. 11d. August 29.

Lavington, G., 30, Station Approach, Hayes, Kent. (West London (Brompton).) £11 10s. 7d. September 5.

Letts, Arthur M. R., 9, West Parade, Lincoln. (Bolton.) £15 0s. 1d. August 28.

Pearson, J., 203, Wheatley Lane, Doncaster, Yorks. (Doncaster.) £10 15s. 3d. August 21.

Pearl and Moore (a firm), 168, Strand, London, W.C.2. (Dartford.) £14 11s. 8d. September 5.

P.W. Radio Service (a firm), 47, Barking Road, Canning Town, Essex. (Bromley, Kent.) £10 1s. 5d. August 22.

Radio Accessory Co., 80a, Ablewell Street, Will-sall, Stafford. (Salford.) £21 11s. 9d. September 2.

Rosser, A. E., 124, Broadway, Treforest, Glam. (Pontypridd, Ystradfordwg and Porth.) £16 12s. 5d. August 20.

Round, R. E., 123, Great Colmore Street, Birmingham. (Kingston-upon-Hull.) £10 14s. 9d. August 31.

Sprinz, Howard, trading as **Howards**, Eversley Buildings, Nelson Road, Westward Hol, Devon. (Clerkenwell.) £14 7s. 2d. August 21.

Star Mill Garage (sued as a firm), Watling Street, Gillingham, Kent. (Clerkenwell.) £15 11s. 4d. August 26.

Thorpe, Edgar, 27, Davygate, York. (Oldham.) £37 0s. 1d. September 5.

Ward, G. L., trading as **Ward's Wireless Service and Repair Depot**, Wharf Street, Cardiff, Glam. (Edmonton.) £20 0s. 7d. August 21.

Western Electrical and Radio Services (sued as a firm), 41, Upper Marylebone Street, London, W.1. (Bloombsbury.) £36 17s. 10d. August 29.

Westwood Gramophone and Radio Stores (a firm), 477, Middleton Road, Chadderton, Oldham, Lancs. (Bromley, Kent.) £16. June 27.

RADIOVISOR PARENT REPORT

New Capital Arrangements

The report of Radiovisor Parent, Ltd., for the year to the end of March last, states that arrangements for the introduction of new capital were finally completed on July 9, 1934.

As a result of negotiations with the liquidator of Radiovisor Foreign and Colonial, Ltd., the foreign patents and trade marks owned by that company have been assigned to the parent company.

The accounts have been charged against revenue expenses incurred in connection with the purchase of foreign patents and trade marks and the closing down of the Letchworth premises, and this, coupled with the fact that sales of the Lighting Control Unit have been affected by the introduction of an improved unit, largely accounts for the loss of £7,205 shown on trading.

Including depreciation, etc., the total debit is brought up to £7,402 for the year.

DUTCH PHILIPS' TURNOVER INCREASE

Mainly Due to Radio Sales

That the sales of Philips valves and receivers had contributed largely to an increase of approximately 10 per cent. in the firm's turnover is a point made in the report of the Philips Incandescent Lamp Co., of Holland.

The report, which is for the year to May 1, 1935, shows profits of £1,278,783, compared with £1,337,993 for the period from January 1, 1933, to April 30, 1935.

It is also stated that the company had not only maintained its sales in many countries, but had found it possible to increase its share in various markets.

Full attention was being given to the development of television, and a high definition transmitter was about to be erected. It was felt, however, that there was little chance of existing sound receivers being superseded in the near future.

Higginson and Co., the British fiscal agents of Philips' Incandescent Lamp Holding Company, announce that the board of directors will propose to the annual general meeting of shareholders a dividend for the financial year to April 30, 1935, of 11 per cent. on the ordinary shares and of 7 per cent. on the participating preference shares. The same rates of dividend will be proposed for the operating company, Philips Incandescent Lamp Company. Dividend distribution now announced is the same as paid for the preceding year, when it was increased from 6 per cent.

Radio Central Exchanges Profits Up

The profits of Radio Central Exchanges, Ltd., for the year to the end of May last amounted to £1,929, which with the amount brought forward makes a total of £2,755, which the directors recommend should be carried forward.

The previous report covered a period of nine months, and showed a profit of £1,638.

In the current report it was stated that a more substantial portion of the subsidiaries' profits should be available to the present company during the present year.

The annual meeting is to be held on October 17 at 2.30 p.m. at Suffolk House, London, E.C.4

Joseph Lucas Dividend

Joseph Lucas, Ltd., is again paying a final dividend of 10 per cent. on the £1,960,600 of issued ordinary share capital. With the interim payment, the total distribution for the year to August 31 last is brought up to 12½ per cent., the same as in the preceding 12 months.

J. and F. Stone Meeting

A satisfactory position was outlined by Mr. J. C. Gardner when presiding at the second annual meeting of J. and F. Stone Lighting and Radio, Ltd., on Thursday, September 24.

The accounts submitted covered the first completed year of the company's activities. Comparison with the previous accounts was not possible as they only covered a period of six months.

Turnover, however, of those shops which had been open in July, 1933, showed an increase, while the remaining shops opened during the last year had, on the whole, come up to expectations, and gross profits had been at a satisfactory rate.

Of a total of 49 shops open on June 30 last, 28 were in London and 21 in the provinces going as far north as Leeds. Other premises have been taken as opportunity arose.

With regard to the radio trade generally, Mr. Gardner said that there was no doubt of its continued expansion.

NEW COMPANIES REGISTERED

Allendale Service Co., Ltd.—Private co. Capital £100. Manufacturers and repairers of and dealers in wireless apparatus and accessories, etc. Directors: Reginald S. Ollington, M.I.M.T. (permanent), and Bryan H. Twigg. Registered office: 278, Balham High Road, London, S.W.

Electrical and Radio Installation Co. (Surrey) Ltd.—Private co. Capital £1,000. To acquire the business carried on by S. E. Weeden, at 5, Caldbeck Parade, Worcester Park, and at 5, Stoneleigh Parade, Stoneleigh Park Road, Ewell, Surrey, and to carry on the business of electrical, radio and television engineers, etc. Directors: Sydney E. Weeden and Ida Burling. Registered office: 5, Caldbeck Parade, Worcester Park, Surrey.

Read and Co. (Radio), Ltd.—Private co. Capital £200. To enter into an agreement dated September 1, 1935, and made between Charles S. Read and Charles L. Read of the one part, and Wm. R. J. Lewis of the other part, for the purpose of acquiring the business now carried on as "Read and Co.," and to carry on the business of manufacturers and repairers of and dealers in electrical and mechanical apparatus and accessories, wireless and radio sets, etc. Directors: Mrs. Florence G. Lewis, Rev. John Lewis and Cyril J. Lewis. Registered office: 121, Cheapside, London, E.C.

Provincial Piano Actions, Ltd.—Private co. Capital £100. Manufacturers and repairers of and dealers in piano actions, pianofortes, harmoniums, organs, player-pianos, gramophones and musical instruments of all kinds and parts thereof, etc. Subscribers: Arthur E. Healey and Claude W. P. Hughes (directors of Herrburger Brooks, Ltd.). Registered office: 31, Lyme Street, Camden Town, London, N.W.1.

Superior Electrode Manufacturing Co., Ltd.—

Private co. Nominal capital £100. Manufacturers of and dealers in electrodes and leading-in wires of all descriptions, electric lamps, electrical and wireless apparatus, etc. Subscribers (each with one share): John Ismay and Thos. S. Cornwell. John Ismay signs as director.

Taylor and Backhouse, Ltd.—Private co. Capital £1,000. Manufacturers of and dealers in electric vehicles, motor-cars and lorries, steam engines, wagons and locomotives, wireless apparatus, garage keepers, etc. Directors: Percy W. Taylor and Edward C. S. Backhouse (both permanent governing directors so long as they each hold 50 ordinary shares). Registered office: Burley House, 6-11, Theobald's Road, London, W.C.1.

Television Publicity (London), Ltd.—Private co. Capital £100. Television and radio publicity agents and experts, general advertising contractors, advertising and publicity consultants and specialists, etc. Directors: Helena M. Munday and Arthur G. German. Registered office: 55/56, Chancery Lane, London, W.C.2.

Terrell Industrial Corporation, Ltd.—Private co. Capital £100. Manufacturers and repairers of and dealers in electrical and wireless apparatus and equipment, etc. First directors: Robert Terrell, 24, Queen's Avenue, Muswell Hill, London, N.10 (director of Reflexon, Ltd.); Alan E. Jeffs, 79, Altmere Avenue, East Ham, E., and Clementine Terrell, 24, Queen's Avenue, Muswell Hill.

Wynmore Radio, Ltd.—Private co. Capital £100. Manufacturers, importers, exporters and repairers of and wholesale and retail dealers in radio and wireless transmitting and receiving sets, gramophones, etc. First directors: Cyril Barker and Evelyn Perrett. Registered office: 187, Central Drive, Blackpool.



BRANCH REPORTS

BLACKBURN Meeting Postponed

MEMBERS of the newly formed Blackburn W.R.A. were a little perplexed at the notification that the October meeting on Tuesday had been postponed. "Pressure of business" was advanced in some quarters as the cause.

Mr. Weardon (secretary) told THE BROADCASTER that there would be a full explanation of the postponement at the next meeting, together with a report of the proceedings of the North-Western Area Conference in Manchester, which he attended, along with Mr. G. Barrett (Audley Range).

BRIGHTON Favours H.-P. Standard

THE opinion that H.-P. terms should be fixed according to a definite standard was expressed at the monthly meeting of the Brighton and District branch of the W.R.A. held at the King's Club, Fourth Avenue, Hove, on Tuesday, October 1. The National chairman, Mr. J. Fielding, presided.

Mr. A. J. S. Russell drew attention to the practice of certain dealers who offer sets on H.-P. with no deposit. He thought that the matter should be looked into and some action taken.

Mr. Fielding said that special consideration was being given by the National Council to the whole question of H.-P. and he hoped to obtain a definite ruling on this particular point.

In a letter from the Chamber of Commerce, to which the branch is affiliated, members were warned against the practice of certain periodicals which promise dealers a free write-up with photographs of their businesses and then charge them heavily for the cost of blocks. Complaints had been received, it was stated, from traders, who, having signed a form agreeing to pay the cost of blocks, found themselves faced with bills for £2 or £3.

After a discussion on the question of renewing the sale of branch batteries, it was decided to purchase a bulk supply of cheap batteries if a reasonable quotation could be obtained.

The question of holding a second annual dinner and dance was raised by Mr. Russell, the hon. secretary of the Social Committee, and a unanimous vote in favour of holding such a function was carried.

Arrangements were left to the Social Committee, and it is probable that the event will take place some time during November. Special thanks were accorded the Social Committee, who were responsible for the recent successful visit to Broadcasting House.

E. ANGLIA Develops Two-Part Guarantee

THE two-part guarantee scheme devised by Mr. C. W. Willmott, the chairman of the East Anglian branch of the W.R.A., was again discussed by the branch when it met at the Sports Social Club, Pottergate Street, Norwich, on Wednesday, September 25. It will be recalled that at a previous meeting the branch decided to adopt the plan.

In reintroducing the subject, Mr. Willmott gave additional details which, he contended, would make the two-part guarantee even more effective. Uniformity of radio guarantees in the area would be ensured if an agreement memorandum was agreed to by all retailers in the district. This memorandum would not only cover the two-part guarantee for general adoption, but would

entitle retailers to display a large card describing the scheme in detail in their showrooms.

A plan for monthly advertising in the local newspapers was also to be inaugurated. Retailers would be expected to contribute to the cost of advertisements, which would include all their names and addresses.

After considerable discussion, the chairman's additional scheme was agreed to, although it was resolved that no signature should be appended to the plan before further action was taken in bringing it to the notice of headquarters. National action was the aim.

Mr. Willmott said that he had approached most of the manufacturers on the subject of guarantees. He had also advocated the adoption of a "universal" guarantee at area and council meetings for the last five years, but it was still impossible to get unanimity of opinion throughout the W.R.A.

Matters were improving, however, and at the moment there were few manufacturers outside the agreement that their associates had made for a 90-day guarantee.

It was reported that one Norwich trader who had insisted upon continuing with the

12 months' free service plan had made certain concessions. It was decided to endeavour to induce him to conform with the 90-day scheme.

Mr. Willmott told the meeting that he had received a personal letter from a Dewsbury agent on the subject of guarantees. The Chairman had replied recommending the Dewsbury dealer to round-up all other traders in his district, and plan a campaign similar to that which was being carried out in Norwich.

Meeting closed with a vote of appreciation to the chairman for the time expended in trying to solve the problem of guarantees.

E. LONDON Arranging a Social

A DECISION not to handle such apparatus was made by members of the Essex and East London W.R.A. at their meeting on Tuesday, when Mr. A. C. Hall revealed that a firm was offering obsolete television sets at 84s. each. He described them as being old mechanical scanning 30-line sets which would be useless to the purchasers.

One individual came to him and wanted to know if he could supply them. He explained that even if he could, he would not.

The Chairman, Mr. L. Wilde, approved of his action and suggested that all members should take the same line if inquiries regarding these sets were received.

A discussion about local relay services led to an agreement that they should approach a local council about the matter.

Mr. Singer put forward a new point of view concerning these when he said that in some places, especially the West Country, dealers actually welcomed relay services, for they made customers "radio minded," and brought business to the dealer.

It was suggested that a social function should be held and this was agreed, a sub-committee being appointed to arrange the details. It was also agreed that a party of members should visit Broadcasting House on Thursday, October 31.

The meeting ended with a discussion upon the dealer's liability in hire-purchase cases. Mr. Singer pointed out figures over a period of years regarding his own business, showing that 90 per cent. of defaulters would not pay, not because they had not got the money, but because they claimed that the set was defective. With that plea, defendants frequently gained their case at a county court.

SUNDERLAND Fights Price Cutting H.P.

"THE W.R.A. is a stronger organisation than it has ever been before," said Mr. R. Wharton Drewery, the chairman of the Sunderland and District branch of the W.R.A., at its monthly meeting on Tuesday, October 1. Mr. Drewery was reviewing the work of headquarters, the N.E. Area Council and the branch itself.

Mr. Drewery, who was not present at a recent meeting when the branch re-elected him chairman, heartily thanked the members for their renewal of confidence.

The hon. secretary, Mr. Geo. Michelson, reported that dealers who were charging no interest on cash prices on retail goods sent out under H.-P. agreements were receiving the attention of manufacturers. There seemed to be no doubt, he added, that manufacturers, like retailers, looked upon this practice as a type of price-cutting, and from what he had learned the manufacturers had already taken action in the town.

A new "sales-getting" idea was stated to have appeared in the area, this taking the form of a promise to replace all defective valves in new receivers for a period of 12 months. In view of manufacturers only giving three months' guarantee on their goods, members expressed the opinion that the practice would soon cease once manufacturers were enlightened as to the facts.

Attention was called to the financial position of the branch, which was carrying a debt. At once the hon. treasurer was handed two donations of a guinea each, and given promises of other donations.

Coming Events

Next Fortnight

(October 5-19.)

- B.R.C.M.A. Annual Dinner**, Monday, October 14, 7.30 for 7.45 p.m., Piccadilly Hotel, London.
- Bristol N.R.E.A.**, Tuesday, October 8, "Crown and Dove, Horsefair.
- Cambridge W.R.A.**, Monday, October 14, 8 p.m., Allins Garage, Bridge Street.
- Cambridge W.R.A. Exhibition**, October 7-12, Central Hall, Market Passage.
- E. Midlands Area Council W.R.A.**, Tuesday, October 8, 3.30 p.m., Pheasant Hotel, Consongate, Worksop.
- Leeds Lunch Club**, hot-pot supper and smoker, Wednesday, October 16, Guildford Hotel.
- Manchester Lunch Club**, Monday, October 7, 12.45 p.m., Grand Hotel. Speaker: Mr. E. M. Lee, of Belling-Lee.
- Newcastle Social Club**, lunch, Wednesday, October 9, County Hotel, Newcastle-on-Tyne.
- Newcastle Social Club**, dances, Wednesday, November 13 and Wednesday, December 13, Oxford Galleries, Newcastle-on-Tyne.
- Newcastle W.R.A.**, Tuesday, October 8, 8.30 p.m., Haymarket Clubrooms.
- North London R.T.A.**, Monday, October 7, 8.30 p.m., Delhi Hall, 489, Holloway Road, London, N.7.
- Notts Lunch Club**, Wednesday, October 9, 12.30 for 1 p.m., Black Boy Hotel.
- Notts W.R.A.**, supper, Tuesday, October 8, 8 p.m. (business at 8.45), Albert Hotel.
- Scottish National Radio Exhibition**, October 9 to 19, Edinburgh.
- Sheffield Lunch Club**, Wednesday, October 16, 1 p.m., Grand Hotel.
- West Herts R.R.A.**, Tuesday, October 8, 8.15 p.m., Carlton Tearooms, Queen's Road, Watford. Lecture on Television at 9 p.m.

Future Dates

- Brighton W.R.A.**, Tuesday, November 5, 8 p.m., King's Club, King's Gardens, Hove.
- British Industries Fair**, all sections, February 17-28, 1936. Venues: Olympia and White City, London; Engineering and Hardware Section at Castle Bromwich, Birmingham.
- Edinburgh Radio Trade Dance**, Wednesday, December 4, Plaza Dance Hall.
- Essex and E. London W.R.A.**, Tuesday, November 5, 8.30 p.m., 500, High Street North, Manor Park, London, E.
- Lancs Radio Education Committee**, Tuesday, October 22, 2.30 p.m., Manchester College of Technology.
- N.W. Area Council W.R.A.**, Tuesday, October 22, venue to be announced.
- Sheffield Lunch Club Dinner-Dance**, Wednesday, October 23, 8 p.m., Grand Hotel.
- Sunderland W.R.A.**, Tuesday, November 5, 8.30 p.m., Empress Hotel, Union Street.
- W.R.A. National Council**, Wednesday, November 6, 2.15 p.m., First Avenue House, High Holborn, London, W.C.1.

THE MOST EXTENSIVE RANGE OF MICA CONDENSERS — EVER OFFERED TO THE RADIO TRADE!



No other Mica Condensers can claim so proud a record of consistent dependable service as those which bear the name Dubilier. Additions to the already extensive range of Dubilier Mica Condensers are of special interest to designers and all interested in high fidelity amplification.

Be sure that you always use Dubilier — the 100% British Mica Condensers — they are a guarantee of trouble-free reception to the listener and a minimum of servicing to the manufacturer.

LATEST ADDITIONS TO TYPE B770

1000v. D.C. working. 2000v. D.C. test.

Type B770	Capacity uF	Price
"	'0001 to '001	7/- each
"	'001 to '004	8/- "
"	'004 to '008	9/- "
"	'008 to '01	10/- "

Type 665.
Capacities '0001 to '0005
Prices from 6d. each.

Type 670.
Capacities '00005 to '01
Prices from 1/- each.

Types 610 & 620.
Capacities '0001 to '01
Prices from 1/3 each.

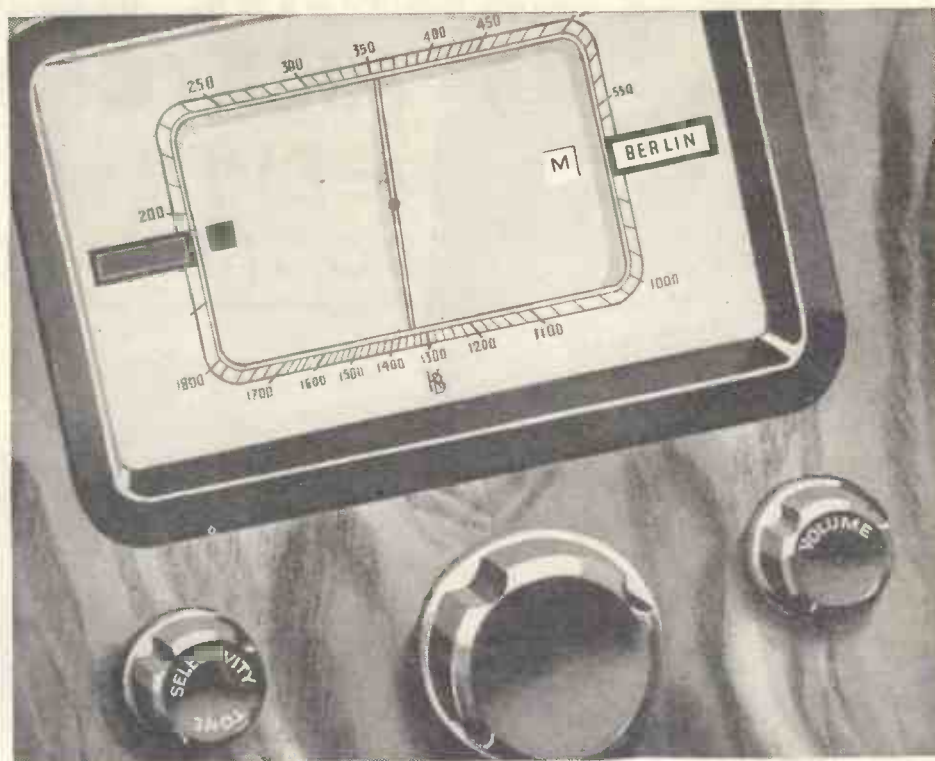
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DUBILIER

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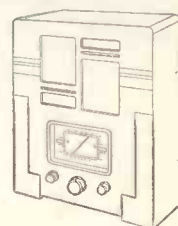
'FOTOTUNE' DIAL makes the good first impression

First impressions have a lasting effect. The dial of a set is the first detail anyone notices and the commonsense simplicity, the accuracy and the certainty of the KB "Fototune" Dial makes a good first impression that keeps your customer in the right frame of mind while you are explaining the other valuable KB features such as variable selectivity. The result, with only a moderate effort on your part, is a sale.

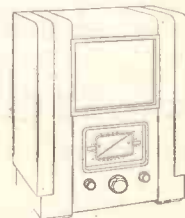
How the KB 'FOTOTUNE' works. The name of the station received is projected large and clear on to one of two translucent screens on the dial — one for the 'medium' and one for the 'long' waves. To select a station the tuning knob is turned until the name appears on the screen or until the pointer indicates its wavelength. To change from one wave-range to the other it is only necessary to depress and turn the tuning knob.

Send for full particulars to:

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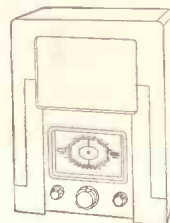


KB 426 (A.C./D.C.) and KB 427 (A.C.)
Superhet 12 guineas or 5/3 weekly.



KB 428, A.C. Superhet. 14
guineas or 6/- weekly.

The above sets have KB Variable
Selectivity.



KB 429 Battery Receiver. 8½ guineas
or 3/9 weekly.

Other KB receivers from £5.17.6. All
are available on weekly or monthly
instalments.

Brand New

Columbia Spotlight Tuning Four

Spotlight tuning and attractive cabinet work are leading features of the Columbia Spotlight Four A.C. mains TRF table receiver, the latest addition to the range marketed by the Columbia Graphophone Co., Ltd., of 98-108, Clerkenwell Road, London, E.C.1. This receiver, Model 359, makes the fifth model in the Columbia "Tone" range.

Spotlight tuning is the name given to the tuning indicator, which consists of a light spot intersected by a hair line which moves over a large full-vision scale, which is of half-moon shape.

Circuit.—Four-valve, including rectifier. TRF arrangement covering the 200-550 and 1,000-2,000-metre wavebands. There is a special aerial coupling system giving level sensitivity on all wavelengths. Marconi valves are used.

Controls.—Four on the front of the cabinet, these being tuning, volume, sensitivity and wave-change, the tuning scale being calibrated in station names and wavelengths. The on/off switch is situated on the right-hand side of the cabinet.

Speaker.—Energised M.C.
Mains Supplies.—200-250 volts, 50-100 cycles.
Cabinet.—Horizontal type in richly grained figured walnut set above a band of Thuya wood and on a black base. **Measurements:** 16½ in. wide, 10 7-16 in. high and 9 in. deep.

Price.—9 gns.—H.P. Terms: 19s. 6d. deposit and 12 monthly payments of 16s.

Full supplies of leaflets with space for over-printing, stereos and press notices for use in local newspapers, posters, showcards and price tickets are among the sales material available.

Milnes Cabinet for Units

For users of Milnes H.T. units who find it impossible to accommodate the unit in the battery compartment of their sets, a combined cabinet and set stand has been marketed by the Milnes Radio Co., Ltd., of Victoria Works, Bingley, Yorks.

Made in straight-grain walnut with a cross-grained surround and having small feet, the cabinet stands 25 in. high, 20½ in. wide and 13 in. deep.

At the top is a pull-down flap revealing a shelf for periodicals, and below this are double doors which disclose shelves for a Milnes unit and L.T. cells. It is intended that the receiver should be placed on the top of the cabinet.

The cabinet is priced at £3 10s., H.P. terms being 7s. 3d. deposit and 12 monthly payments of 6s. 3d.

Philips Speakers

Supplies are now available of the range of extension speakers announced recently by Philips Industrial, of 145, Charing Cross Road, London, W.C.2.

It will be recalled that the range consists of the 4518, continued from last year at 42s., and two new models with no-loss volume controls, the Junior 4516 at 37s. 6d. and the Senior 4519 at 45s. All are cabinet models with P.M. chassis.

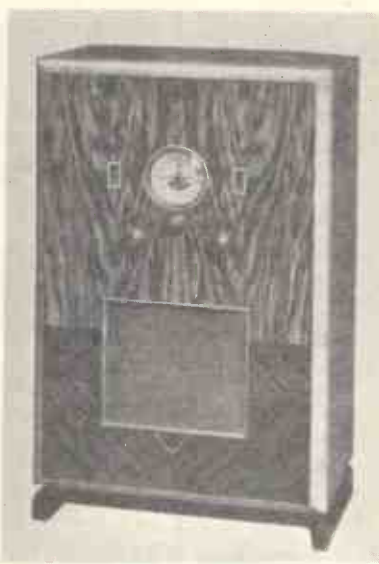
Music Releases

As a result of consistent demands for the Gracie Fields' song "Anna from Anacapresi," featured in her film "Look up and Laugh," this number has now been published by Lawrence Wright, of 19, Denmark Street, W.C. The writers of the well-known hit, "My Kid's a Crooner," have collaborated to produce a different kind of number in "I'll B.B.C-ing You To-night," which also comes from Lawrence Wright, as does Horatio Nicholls' latest number, "There's a Red, Red Cottage," which possesses a tuneful melody that should command a good sale.

The same firm has released two numbers from America, "What Harlem is to Me" and "Dream Shadows." A new rumba is "When Baby Plays the Rumba."

In preparing for the increased demands of the autumn, Chappell and Co., Ltd., of 50, New Bond Street, London, W., have published a large selection of numbers, including many that are already well known. "Dance Memories" is selected and arranged by Herman Finck and published as a piano solo at 2s. 6d. Orchestral and military band arrangements are also available. This selection includes many famous old tunes, such as the County Girl waltz, the B'ne Danube, the Lancers Quadrille, and the Cake Walk of Ragtime fame.

From the world of the cinema and theatre, Chappell's present many numbers, some of which



A five-valve, eight-stage all-wave mains superhet chassis is fitted in this new Alba lowboy, Model 890. The A.C. model retails at 20 gns., and the A.C./D.C. at 21 gns.

are already popular. There is the pianoforte selection from "Roberta," published in an attractive cover at 2s. 6d., and the song "Yesterday" from the same film. Then there is "Reckless," from the film of the same name with a cover picture of the star, Jean Harlow, published at 1s., and the numbers from the stage show "Please, Teacher." Soon to be heard more widely are "Valparaiso" and "Lovey Dovey," both from the film "Dance Band," while Nothing Lives Longer than Love" should gain wide popularity.

For "straight" singers there are two good songs in "I Love You More Each Passing Day" and "The Valley Where Wishes Come True."

Already achieving a large measure of success is the number "East of the Sun," from Campbell, Connolly, of 11, Denmark Street, London, W.C. Harry Woods, writer of the famous "Side by Side," has produced another song of the same style for this firm in "Just as Long as the World goes 'Round and Around," and "Twenty Miles From Nowhere" is a prairie number. For a comedy number there is "My Very Good Friend—The Milkman."

Alba Release Lowboy All-wave Set

Supplies are now available of the Alba lowboy all-wave receiver, advance models of which were shown at the Manchester Exhibition by A. J. Balcombe, Ltd., of 52-8, Tabernacle Street, London, E.C.

Listed as model 890, the instrument utilises the same chassis as that of the other all-wave instruments, a five-valve eight-stage mains superhet circuit being employed.

The lowboy cabinet is in walnut and macassar and has the circular dial that is featured in the Alba all-wave series.

Two models are available of the 890, an A.C. version at 20 gns. and an A.C.-D.C. version at 21 gns.

Sunray Receiver

The model 100 receiver manufactured by Sunbeam Wireless Service, of 10, The Pavement, Clapham, London, S.W.4, which was described in last week's issue, is known as a Sunray receiver and not Sunbeam, as stated. The model 100 is similar in design to the model 99; owing to a printer's error it was said to be "similar to model 100."

PHILIPS RAILWAY P.A.

Following railway practice in this country, the Great Southern Railway, in the Irish Free State, has purchased Philips' P.A. equipment for two important stations to speed up crowd control. The equipment comprises an amplifier giving an undistorted output of 20 watts, four directional horn type speakers, and a type 4148 microphone.

Two cinema theatres for the exhibition of news reels, shorts, etc., are to be built in Glasgow within the next six months, and they are to be equipped for television.

MUSIC COPYRIGHT INFRINGEMENTS

M.P.A. ANNUAL MEETING DISCUSSES PROBLEM

The annual meeting of the Music Publishers' Association, Ltd., was held at the premises of the Performing Right Society, on September 19, with Mr. Robert S. Elkin in the chair.

He called the attention of members to the continued growth of interference with copyright owing to new forms of mechanical recording, notably the making of private records and of the making of programmes for commercial broadcasting from foreign stations. These affected music publishers to a great extent, and it would have to be seriously considered how the cost of control could be met.

Mr. Elkin went on to refer to the excellent work done by the Music Industries Council on which the Association was represented. The topic of professional discounts was also introduced by him, when he expressed the hope that something would be done in the coming year towards getting an agreement between publishers and trade on this difficult question. In his view, the signing of such an agreement was very desirable, and he was at present using his best efforts to secure unanimity, at any rate among the educational houses, on this point.

Conditions in Canada

Mr. Elkin was re-elected as Chairman, and the committee were also re-elected.

The extensive infringement of copyright in Canada was discussed, and a full list of infringing numbers was being prepared.

This list would be circulated to the various Customs and Postal authorities in Canada, who would then be in a position to stop illegal importations. It was also suggested that a company should be registered in Canada under the title of "British Music Publishers Association (Canada), Ltd.," which would be direct evidence that British publishers were determined to protect their copyrights.

Through this company warning notices could be sent to American publishers, brokers and collectors as to their intention of seizing and returning to the United States such infringing copies as were found.

After considerable discussion it agreed that this matter should be referred back to the committee for further consideration.

B.T.S. MAGAZINE FOR SHORT WAVE FANS

CIRCUITS AND KITS

Short-wave enthusiasts are exclusively catered for in *The Short-Wave Constructor*, a new magazine for the public to be published by British Television Supplies, Ltd., of Bush House, London, W.C.2. The first issue will be available in about a week.

Three sets using B.T.S. components will be described; those dealing with the "Telepak Eight" are the first published details of the 5-10 metre, 2.5-megacycle response chassis shown by B.T.S. at Olympia.

Other sets described are the "Oceanic Three" band-spread receiver, and the "International Two." Kits for all of the sets are available from B.T.S.

In addition, the magazine will contain general interest articles. It is to be generously illustrated.

The magazine is to be sold at 3d., and dealers may obtain copies at 1½d. each, or 1d. each over 100 copies.

Southcombe and Willcocks have opened a radio and electrical business at 3, Saltash Street, Plymouth.

Letter Bag

MR. FIELDING ANSWERED

AFTER reading Mr. Fielding's letter I feel it my duty to point out to him the fact that I am far from withholding my membership from the W.R.A. On the contrary, up to a couple of years ago I was a member of that body.

I am not a grouser; at present I give about two days per week to a certain movement which is definitely bettering the general feeling in the Trade.

In closing, may I offer him two suggestions? Why not lower the subscription and thereby raise the membership?

And, secondly, would Mr. Fielding publish the names of all manufacturers who recognise the W.R.A. and their wishes at present? After all, as the manufacturer is the one who starts things, it's just as well to know what support the Trade is getting when it expresses a wish or asks for support.

In conclusion, I take off my hat to Mr. Fielding; I know that he has worked hard for the W.R.A., but, it seems to me, not with the results that should have been achieved long ago. Probably this could be attributed to the human element of self-satisfaction which is so prominent among radio retailers all over the country, and which makes it extremely difficult for one to be pleased with the results of one's work in trying to organise them.

OLD SOLDIER

Kingswood, Bristol.

Factory Nursemaids

REGARDING the letters "Dud" on the "Line" and "Production Methods," as an ex-retailer, ex-service manager and present workers inspector, I can say that the "dud" on the line is often the best set later. A small electrical or mechanical defect is better found at the end of the line than some later time when it cannot be as effectively "cured."

The high percentage of rejects from the line does not indicate unreliability but, on the contrary, the manufacturers' earnest endeavour to give the Trade reliability with a complicated machine which is mass-produced to satisfy the popular need.

With regard to the "toy-like" resistances, apart from mechanical breakages, the rejects are under 2 per cent.

I agree with Production Engineer that "mechanics" are promoted. They become nursemaids to the belt seeing that its ever-open mouth is fed at regular intervals with all that is necessary, and ensuring that the operators work with efficiency and speed.

From the first mechanical inspection through the characteristic test, balance test, music test, and so on to the final O.K. and despatch the sets are handled by skilled artisans under the supervision of engineers. If it were not so the manufacturers would soon have difficulty in finding a market for sets that always ceased to function after leaving the factory.

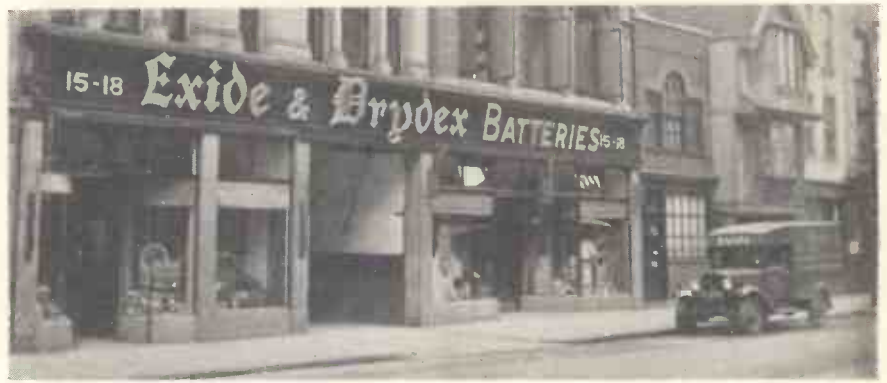
RADIOTRICIAN.

Those Resistors

DURING this last month, out of the various sets that have been through our Service Department we have had occasion to replace over 30 resistors.

In each case there was no fault whatsoever in the set, except that the resistor—in some cases two—had absolutely broken down, thus causing the set to be either inefficient or not to work at all

R. M. DAWES.



Alterations to the addition to the Exide Bristol depot are now complete and the new portion is now in full use in connection with the work of the depot. The address is now 15-18, Broadmead, Bristol.

Partridge, Wilson
London Office
Extends

The scope of the London office of Partridge, Wilson and Co., Ltd., at 167, Shaftesbury Avenue, W.C.2, is being extended to cover all the firm's products, while at the same time Mr. G. F. Bedford, B.Sc., has been appointed the firm's London manager.

Until recently, Mr. Bedford was connected with the rectifier section of Philips Industrial.

He took up his new duties on Tuesday, October 1, and is in direct control of all activities at the Partridge, Wilson London office.

In the past, these offices only handled matters relating to Wilson electric vehicles, but there has been inaugurated a new section to deal with Davenset battery-chargers and mains components. It is under the direction of Mr. K. Hartridge.

A full complement of spares will be stocked at Shaftesbury Avenue, together with demonstration models of the electric vehicles and battery-chargers.

AERODYNE CAMPAIGN

NATIONAL PRESS ADVERTISEMENTS:
HELP FOR DEALERS

Aerodyne Radio, Ltd., has planned a most extensive publicity campaign for the autumn and it is stated to be bigger than any ever attempted by the firm.

Big advertising spaces are being taken in the leading national and provincial newspapers, while in addition Aerodyne proposes to pay half the cost of a retailer's local advertising tying up with the push.

In the near future a big selection of new sales-aid material is to be available to retailers.

In connection with their advertisement on the front cover of this week's issue, Aerodyne Radio, Ltd., wish to remind dealers of the 5 per cent H.P. accommodation fee, mention of which was omitted from the announcement.

PHILCO SERVICE ORGAN

Initial procedure which should be adopted for servicing superheterodynes which are out of adjustment is fully defined by Philco in the October issue of their technical outline issued to members of the Radio Manufacturers' Service. Further instructions on this aspect of service are to be given in future issues.

NEW YORK RADIO
SHOWTUNING NOVELTIES AND
CABINETS FEATURED

New York, September 19.

The National Electrical and Radio Exposition, sponsored by the Electrical Association of New York, Inc., opened yesterday for an 11-day run at Grand Central Palace, New York. The exhibition is less "showy" than the radio shows of past years at Madison Square Garden, but this is largely due to the business depression—and particularly the slump in the American radio industry. Nevertheless, the exhibitors have managed to make it an interesting display of their latest wares.

The main floor and the mezzanine are crowded with exhibits. Although the radio side predominates, there is quite a representative display of home electric appliances.

Metal Valves

Metal valves are shown by many radio exhibitors, especially General Electric. Philco, however, remains faithful to glass valves exclusively—the lone prominent manufacturer to do so. Much care has been put into cabinet design and additional tuning novelties have been introduced, the RCA Victor "Magic Eye" feature attracting considerable attention.

Not all the displays are commercial, there being a "Hall of Science" devoted to the contributions radio principles have made to other industries. An electronic organ also draws considerable attention. Two glass-enclosed broadcasting studios permit visitors to see many of their favourite radio stars in action at the microphone.

ANSON AND HOPWOOD OPEN
FACTORY

FOR CHASSIS AND CABINETS

A factory has been opened by Anson and Hopwood, Ltd., of 11, Berkeley Square, London, W.1, for the manufacture of components, radio and amplifier chassis, and cabinets for use in Autotrope auto-changing radiograms and amplifiers.

It will be recalled from last week's issue that the manufacture of the automatic record-changer itself is now in the hands of Henry Anson, Ltd., with whom Anson and Hopwood, Ltd., are in close co-operation.

Sales will continue to be in the hands of Anson and Hopwood, Ltd., who have the sole selling rights for Autotrope mechanism.

You're on the **RIGHT LINE** with the **Mullard M.B.3A**

A 3-valve all-pentode battery receiver at a competitive price. A first class line for every radio dealer big or small. Absolutely reliable and a pleasure to demonstrate.

PRICE : £8 . 8 . 0

(Complete with ALL batteries.) Or 15/6 deposit and 11 monthly payments of 15/6.



THE SIGN OF MASTER RADIO

Other Mullard Master Radio receivers are :-

M.U.35.

A sensitive All-Mains super-heterodyne receiver employing 6 Mullard Master Valves. Designed for A.C. Mains, but can also be used on D.C.

PRICE £12 . 12 . 0

or 23/6 deposit and 11 monthly payments of 23/6.

M.B.4.

A 4-valve battery receiver designed to give the quality and volume usually only associated with mains receivers.

PRICE £9 . 12 . 6

(complete with ALL batteries) or 17/9 deposit and 11 monthly payments of 17/9.

M.B.3.

An efficient and economical quality 3-pentode battery receiver similar to the M.B.3 A but in a horizontal cabinet of different design employing three Mullard Master Pentodes.

PRICE £8 . 8 . 0

(complete with ALL batteries) or 15/6 deposit and 11 monthly payments of 15/6.

Mullard

MASTER • RADIO

There is a Mullard Master Valve for every radio receiver

THE MULLARD WIRELESS SERVICE CO., LTD., MULLARD HOUSE, 111, CHARING CROSS ROAD, LONDON, W.C.2.

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

Arks
D

AUGUST LICENCE FIGURES UP 27,908

County and Town.	Aug. 31, 1935.	In. (+) or de. (-).	County and Town.	Aug. 31, 1935.	In. (+) or de. (-).	County and Town.	Aug. 31, 1935.	In. (+) or de. (-).	County and Town.	Aug. 31, 1935.	In. (+) or de. (-).
SUMMARY											
BRITISH ISLES .. 7,140,656		+ 87,908									
London ..	985,831	+ 1,549									
English Counties ..	5,245,795	+ 20,108									
Wales ..	257,472	+ 797									
Scotland ..	579,925	+ 5,068									
Northern Ireland ..	72,133	+ 391									
ENGLAND											
LONDON .. 985,831		+ 1,549									
Battersea ..	104,796	+ 368									
Eastern ..	197,149	+ 167									
Eastern Central ..	6,981	+ 8									
Northern ..	166,182	+ 311									
North Western ..	100,808	+ 329									
Paddington ..	107,801	+ 419									
South Eastern ..	194,120	+ 417									
South Western ..	86,087	+ 230									
Western ..	11,107	+ 382									
Western Central ..	8,920	+ 24									
REDFORDSHIRE											
Bedford ..	15,556	+ 62									
Leighton-Buzzard ..	3,419	+ 17									
Luton ..	21,684	+ 60									
BERKSHIRE											
Abingdon ..	60,885	+ 197									
Ascot ..	7,003	+ 37									
Maidenhead ..	2,392	+ 11									
Newbury ..	7,734	+ 41									
Reading ..	20,399	+ 67									
Windsor ..	4,547	+ 22									
Wokingham ..	4,654	+ 2									
BUCKINGHAM-SHIRE											
Amerham ..	49,183	+ 2									
Aylesbury ..	6,263	+ 6									
Bletchley ..	8,061	+ 10									
High Wycombe ..	11,685	+ 49									
Slough ..	10,432	+ 17									
Slough ..	12,742	+ 80									
CAMBRIDGESHIRE											
Cambridge ..	44,901	+ 106									
Ely ..	27,329	+ 40									
Wisbech ..	5,087	+ 27									
Wisbech ..	12,485	+ 41									
CHANNEL ISLANDS											
Guernsey ..	15,024	+ 179									
Jersey ..	8,770	+ 99									
Jersey ..	8,254	+ 80									
CHESTER											
Altrincham ..	110,938	+ 336									
Chester ..	12,584	+ 63									
Chester ..	19,496	+ 101									
Crewe ..	15,180	+ 88									
Hyde ..	5,435	+ 15									
Macclesfield ..	10,102	+ 21									
Northwich ..	10,632	+ 45									
Stockport ..	37,409	+ 3									
CORNWALL											
Bodmin ..	42,856	+ 121									
Bude ..	3,819	+ 25									
Falmouth ..	1,867	+ 10									
Falmouth ..	4,291	+ 8									
Helston ..	1,927	+ 19									
Lanivet ..	2,908	+ 13									
Liakard ..	2,555	+ 12									
Newquay ..	2,925	+ 15									
Penzance ..	7,371	+ 35									
Redruth ..	4,834	+ 20									
St. Austell ..	5,642	+ 22									
Truro ..	5,917	+ 29									
CUMBERLAND											
Carlisle ..	32,567	+ 172									
Carlisle ..	13,568	+ 62									
Penrith ..	6,156	+ 35									
Whitehaven ..	5,794	+ 31									
Workington ..	7,049	+ 44									
DERBYSHIRE											
Ashbourne ..	83,387	+ 341									
Buxton ..	1,768	+ 14									
Chesterfield ..	6,783	+ 17									
Derby ..	21,058	+ 67									
Derby ..	48,830	+ 226									
Matlock ..	4,978	+ 23									
DEVONSHIRE											
Axminster ..	132,951	+ 617									
Barnstaple ..	3,196	+ 23									
Bideford ..	6,873	+ 27									
Credon ..	4,392	+ 15									
Exeter ..	1,821	+ 4									
Exeter ..	21,208	+ 129									
Exmouth ..	6,905	+ 26									
Hiracombe ..	2,221	+ 8									
Kingabridge ..	2,083	+ 3									
Newton Abbot ..	9,679	+ 36									
Okehampton ..	2,885	+ 25									
Plymouth ..	48,096	+ 254									
Tavistock ..	2,042	+ 12									
Tiverton ..	2,866	+ 13									
Torquay ..	18,190	+ 79									
Totnes ..	2,645	+ 20									
DORSETSHIRE											
Blandford ..	27,392	+ 165									
Bridport ..	3,347	+ 14									
Dorchester ..	2,986	+ 18									
Dorchester ..	4,269	+ 30									
Shaftesbury ..	2,507	+ 8									
Sherborne ..	2,963	+ 16									
Weymouth ..	7,768	+ 48									
Wimborne ..	3,582	+ 31									
DURHAM											
Bishop Auckland ..	112,324	+ 413									
Darlington ..	10,457	+ 95									
Durham ..	18,907	+ 83									
South Shields ..	20,498	+ 37									
Sunderland ..	19,574	+ 85									
West Hartlepool ..	14,068	+ 71									
ESSEX											
Braintree ..	210,826	+ 929									
Brentwood ..	4,305	+ 68									
Brentwood ..	9,522	+ 98									
Chelmsford ..	18,757	+ 141									
Clacton-on-Sea ..	6,529	+ 46									
Colchester ..	17,522	+ 46									
Grays ..	10,686	+ 14									
Halstead ..	2,552	+ 5									
Harwich ..	4,021	+ 60									
Ilford ..	4,021	+ 60									
Ilford ..	37,637	+ 150									
Romford ..	48,263	+ 101									
GLoucester-shire											
Saffron Walden ..	2,241	+ 5									
Southend-on-Sea ..	39,455	+ 263									
Woodford Green ..	8,637	+ 33									
GLoucester-shire											
SHIRE ..	140,730	+ 681									
Barnet ..	91,391	+ 414									
Cheltenham ..	13,170	+ 144									
Cirencester ..	3,840	+ 20									
Gloucester ..	21,294	+ 66									
Lydney ..	3,042	+ 38									
Stroud ..	7,993	+ 38									
Hampshire											
Alton ..	204,855	+ 956									
Alderhot ..	11,135	+ 71									
Alton ..	2,389	+ 6									
Andover ..	4,359	+ 28									
Basingstoke ..	7,214	+ 24									
Bournemouth ..	42,470	+ 167									
Cove ..	2,938	+ 11									
Fareham ..	3,978	+ 24									
Havant ..	3,741	+ 14									
Lyminster ..	5,418	+ 17									
Newport (I.O.W.) ..	4,464	+ 31									
Petersfield ..	4,232	+ 15									
Portsmouth ..	53,715	+ 283									
Ryde ..	7,137	+ 53									
Southampton ..	41,706	+ 155									
Venmore ..	1,793	+ 7									
Winchester ..	8,166	+ 50									
HERFORDSHIRE											

NINE-POINT PLAN VIEWS WANTED

THE BROADCASTER invites dealers' views on the W.R.A. Nine-Point Plan which was reviewed recently in the news columns. Here are the opinions of two leading retailers. What do you think about it?

I VENTURE to offer some notes on the individual "points" of the W.R.A. Nine-Point Plan and a few general observations on the probable outcome.

Point 1.—The W.R.A. emphatically disclaims any intention of acting in restraint of trade, but the fact that it puts forward a definite maximum number of dealers (whether or no that number is sufficient) negatives the disclaimer.

Points 2 and 3.—Taken together, these are very obviously in restraint of trade and liberty in that, unless the dealer gets his name on an arbitrary list and also subscribes a sum of money each year to a private association, he may not engage in the radio trade. As long as the scheme contains these conditions, it has not the slightest chance of success, as any excluded dealer could probably obtain an injunction without difficulty.

Point 4.—Although it is a fact that the

W.R.A. subscription is still too low, it is doubtful whether the present proposal will commend itself to members as being the most suitable method of raising funds.

Point 7.—It is difficult to see how a national committee can deal with this point (bearing in mind the fixed maximum numbers) without bringing in local advice and prejudices. Anyone with experience of trade association work generally will agree on this point and recognise its danger to the whole scheme.

Point 9.—Although this states that the certificate is not to be a legal document, it is difficult to see what else it could be, in that a breach of its conditions will apparently be a breach of a signed agreement (*vide* Point 2). This same Point goes on to say that the certificate would be an "official registration" with an "official" number, and renewable like a car licence. (Will radio "trafficking" cops be appointed?)

The W.R.A.'s notes appended to the Points call for little comment. Notes 2 and 4 are merely quixotically amusing. Note 3 is so naive as almost to defy comment.

On the scheme generally Mr. F. H. Robinson, of THE BROADCASTER, has already dealt

accurately and exhaustively with the financial side in his notes of September 14. He appears, however, to have passed over somewhat lightly the point that the scheme aims at "building up the W.R.A." This, surely, is the underlying motive of the whole idea, and as such it is scarcely likely to commend itself to those dealers, wholesalers and manufacturers who uphold the liberty of the individual.

One does not altogether understand how Mr. Robinson doubts whether "participation in the scheme automatically means membership of the W.R.A." A study of Points 2 and 4 leaves little doubt as to the intention (seeing that the dealer must subscribe to the W.R.A.), though I understand that this point will be dropped if it meets with much opposition.

What is to become of the dealer who conscientiously objects, not particularly to the W.R.A., but to trade associations generally? Is he to choose between shutting up shop and subscribing to a body with which he has no sympathy and to which he does not belong?

On the manufacturers' side, it is probable that several would cease to be members of S.M.A. if the scheme was put into force. They would then be free to supply their goods to any dealers they considered genuine, and would thus accentuate one of the greatest difficulties, and a growing one, facing the Industry to-day, namely, the number of firms, manufacturers and dealers who are dealing in "outside" or non-association goods (members of the W.R.A. are most conspicuous among these). Any proposals which tend to increase this evil must be inimical to the association spirit which the originators of the Points apparently desire to foster—nay, to make compulsory.

To sum up, the W.R.A., as so often in the past, once more shows how little experience in the working of trade associations is behind those who frame its policy, or, if they have that experience, how they have failed to apply its lessons. As THE BROADCASTER rightly says, the scheme is worthy of the closest attention, but before it can hope for support it will require drastic overhaul and revision in many of its most vulnerable and, apparently, hurriedly conceived proposals.

AN OBSERVER.

THE Nine-Point Plan does not bar any dealer—however small he may be. The main object, as I view it, is to produce a Register and to ensure for the dealer a status which the prominence of the Industry warrants.

As far as the advertising pool is concerned one recognises its limitations compared with the vast sums spent by manufacturers. But the fund would form a very useful nucleus for collective advertising without overlapping or encroaching upon the publicity of individual manufacturers.

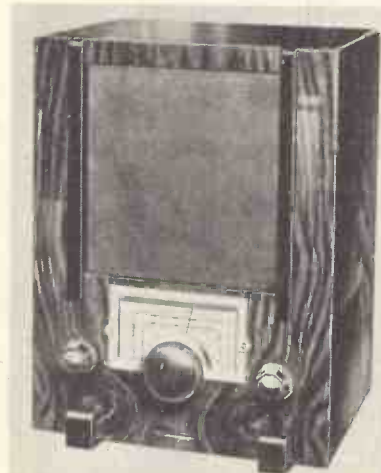
Much more practical and financial support from the retail trade is imperative if we are to demonstrate to the manufacturers that we do desire and are worthy of a stable and equitable basis of operation and that we are willing to make material sacrifices to warrant this security.

Should these efforts fail it is to be feared that nothing on earth will prevent an orgy of price-cutting beside which past "trade murders" will pale into insignificance.

Dealers, we are offered a "Charter of Incorporation." Why not seize the opportunity now? It may not come our way again.

L. WILDE,
The Ajax Co.

Ilford.



Good results were obtained on test with the Blue-Spot straight three battery set, listed at £6 17s. 6d., working on a medium-sized aerial.

Blue Spot Battery III Receiver

Dimensions	15½ in. x 11 in. x 8½ in.
Wavelength Range	200-550, 1,000-1,900 metres
Loading, L.T.65 amp.
" H.T.	7 m.a. at 120 volts
Price	£6 17s. 6d. (exclusive of batteries)

THE range of receivers introduced by the British Blue Spot Co., Ltd., of Sterling Works, Dagenham, Essex, includes an expensive straight 3-valve battery model.

The set is built into a small rectangular cabinet finished in walnut. The design is modern, most of the front being occupied by the speaker opening, below which is the tuning dial. This is engraved in black and red in wavelengths and the names of the most important stations.

A large tuning knob imparts a slow motion drive to the condenser, and there are two further knobs for volume and reaction respectively. The wavechange switch is rather unusual and takes the form of a small



strip of bakelite sheet, which projects through a slot in the front of the cabinet and operates a high grade rotary switch. There is also a small snap switch at the side of the cabinet for master control.

The set itself is built on a small chassis on the top of which are a double-gang condenser, two tuning coils and the three valves, which are arranged in line at the back. Sockets provide for an extension speaker and, of course, an aerial and earth. Battery connections are made by flying leads.

The speaker is a Blue Spot permanent-magnet model mounted on a small sub-baffle.

The circuit used is straightforward and utilises a tuned circuit preceding a VP2 H.F. amplifier, a PM1HL reactive detector, and a PM22A pentode.

The set is simply built and the finish is satisfactory. The controls work nicely and the calibration is accurate. The chassis itself appears to be soundly constructed.

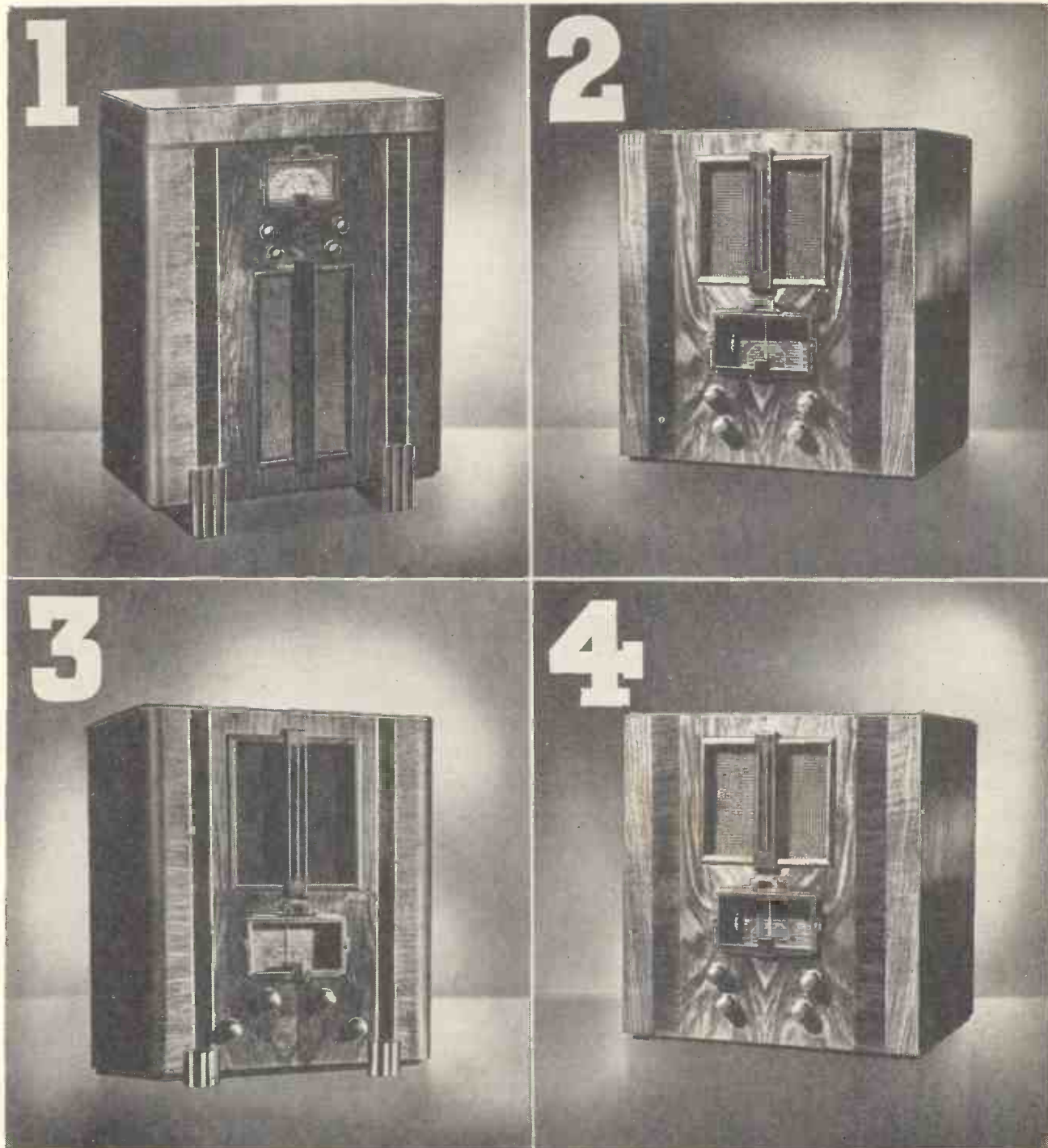
The best performance is obtained with a medium-sized aerial. If the set is used with an outside aerial of any appreciable length the local stations tend to spread considerably and it is therefore necessary to reduce this effect by bringing down the series aerial condenser setting. This, of course, tends to lower the gain, but by suitable handling and critical reaction it is possible to receive a useful number of stations between the local transmissions.

On the long waves Droitwich spreads rather appreciably in the swamp area, and again it is necessary to make use of the series aerial condenser and use reaction in order to obtain adequate separation.

Overall gain is representative and the set can be relied upon to give programme strength from a useful number of stations.

Reproduction is pleasing and is representative of a small battery output pentode. The valve is not over-corrected and the general balance is good, both on speech and music.

The New Unit-Planned Radio



DISTRIBUTED FOR THE EVER READY COMPANY (GREAT BRITAIN) LIMITED, BY—

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

— is produced
by the most highly
developed production system
known to modern industry

1. MODEL 5004., A.C. SUPERHET CONSOLE

Octode frequency changer. Screened Pentode I.F. amplifier. Separate double-diode valve as distortionless signal rectifier and generator of automatic volume control voltage. Pentode output valve. 7 tuned circuits. Sensitivity control. Tone control. 9" diameter Mains energised moving coil loudspeaker. External speaker and pick-up connections.

PRICE 16½ GUINEAS OR ON H.P. TERMS.

2. MODEL 5006., A.C. MAINS SUPERHET

Octode frequency changer. Screened pentode I.F. amplifier. Separate double-diode valve as distortionless signal rectifier and generator of automatic volume control voltage. Pentode output valve. 7 tuned circuits. Sensitivity control. Tone control. Mains energised moving coil loudspeaker. Gramophone pick-up and external speaker connections.

PRICE 12 GUINEAS OR ON H.P. TERMS.

3. MODEL 5003., DE LUXE A.C. SUPERHET

Octode frequency changer with band-pass input circuit. Screened pentode I.F. amplifier. Double-diode-triode valve as distortionless signal rectifier for fully delayed automatic volume control voltage and output stage. 7 tuned circuits. Sensitivity control. Tone control. 9" diameter non-focussing loudspeaker. External speaker and pick-up connections.

PRICE 14 GUINEAS OR ON H.P. TERMS.

4. MODEL 5007., BATTERY SUPERHET TABLE MODEL

Octode frequency changer with band-pass input circuit. Variable-mu pentode I.F. amplifier. Double-diode-triode valve as distortionless signal rectifier, generator of automatic volume control voltage and L.F. amplifier. Quiescent push-pull pentode output valve. Sensitivity control. Tone control. Moving coil loudspeaker. Gramophone pick-up connection.

PRICE 12 GUINEAS OR ON H.P. TERMS.

EVER READY
RADIO SETS
Unit Planned

EVER READY RADIO LTD FONTHILL WORKS, CLIFTON TERRACE, LONDON. N.4

SUNCO'S ARTISTIC CATALOGUE

NEW LISTS TO HELP YOUR SALES

An art production is perhaps the best way of explaining the 1936 Sunco radio catalogue produced by the Sun Electrical Co., Ltd., of 118-120, Charing Cross Road, London, W.C.2.

It is devoted mainly to receivers, many of them being given a two-page spread, the left-hand page being devoted to a clear technical description and the right-hand page to an illustration. Art paper is employed for the catalogue, which is bound in stiff paper covers.

The receivers listed are arranged in rough price order. Table models come first, and these are followed by consoles and radio-grams. Finally, there are two pages devoted to extension speakers.

With the catalogue are loose insets giving details of Sunco H.P. terms. Copies of the catalogue are available on request.

* * *

A black and green folder on matt paper describes the new British Rola speaker range and gives technical data.

* * *

New season's sales literature from McMichael Radio, Ltd., includes a series of colour leaflets, each dealing with a different set, and one covering the entire range.

* * *

The British Blue Spot Co., Ltd., has issued single and two-colour leaflets in various colours covering the whole range of Blue Spot products.

* * *

Information concerning the adhesive metal seal labels produced by the Gunn Metal Engraving Co., of Swinton House, Gray's Inn Road, London, W.C.1, is contained in a folder available from the firm. A specimen label stuck on the folder is one designed for Wm. F. Brown Radio, Ltd.

* * *

Under the title "Condensers and Resistances," Dubilier have issued a radio engineering catalogue, No. 835, which gives very complete information on these products of the company.

Drawings, dimensions, and a wealth of useful data are given. The booklet is available to manufacturers, designers and service engineers.

* * *

Ideas to save retailers' time are incorporated in the 1935-6 radio catalogue issued by Dulcetto-Polyphon, Ltd., of 2 and 3, Newman Street, Oxford Street, London, W.1.

A list of receivers included is given on an early page, the arrangement being in order of price. Inside the back cover is a pocket to hold leaflets on models and alterations which will be issued from time to time.

A new trade code has been adopted.

* * *

A new list of "Estrella" and other makes of piano-accordions has been issued by Thompson, Diamond and Butcher, of 34, Farringdon Road, London, E.C. The "Estrella" instruments are divided into standard and professional models, with one miniature instrument classified as a ladies' model.

There are twenty standard models, ranging in price from four guineas to £20, the professional models showing an increase on this latter figure. These are stated to have several exclusive features. De luxe "Paolo Soprani" instruments are also shown together with a range of Hohner instruments.



Radio and musical instruments were shown at the dealer's exhibition held by John E. Dalls & Sons, Ltd., in the Holborn Restaurant, to celebrate the firm's diamond jubilee. Leading instrumentalists gave demonstrations.

TELEVISION METHODS EXPLAINED IN DETAIL

"Popular Television," by H. J. Barton Chapple, Wh.Sch., B.Sc., A.C.G.I., D.I.C., A.M.I.E.E., provides a comprehensive and particularly lucid description of the principles and up-to-date practice of the art.

In his preface Mr. Chapple says: "No one can gainsay that television has come to stay; the only debatable point at the moment concerns its rate of development. This book is an honest endeavour to set out clearly the facts as they are known at the present day, explaining in an easily assimilable fashion the principles involved in the various processes."

The book deals with practically every aspect of its subject, and while not "technical" it is not elementary. Retailers who wish to know the present state of television and how it is likely to concern their businesses in the future should find the book valuable.

NORTHERN POLYTECHNIC DIPLOMAS

EXAMINATION RESULTS

These Northern Polytechnic students have gained radio service diplomas presented by the Music Industries Council following their entry in the examination judged by Mr. J. Field, president of the W.R.A., and Mr. A. E. Betambeau, also of the W.R.A.; Mr. C. E. Barker (with distinction in both theory and practice), Mr. C. G. Phillips, and Mr. L. G. Gunning (with distinctions in practice), and J. A. Gilbody, with passes in both sections.

Ninety per cent. marks out of a possible 100 are needed to gain a distinction, and 70 per cent. for a pass.

OLDHAM CUT OUT SHOWCARD

A home setting linking up with the slogan, "Listen with Confidence," is a feature of a new cut-out showcard produced by the publicity department of Oldham and Son, Ltd., at Annan Street, Denton, Manchester. The picture of a couple on a sofa is placed behind the rim of a clockface, while an Oldham accumulator is shown emphasising its big selling points, the capacity clock and two years' insured life.

Tenders for transmitting gear, television apparatus and components, are required by the Egyptian ministry of education. Full details of the requirements are available from the Department of Overseas Trade, 35, Old Queen Street, London, S.W.1.

Upton's Link with Customers

Family Appeal in House Organ

To form a personal link between the firm and its customers, Upton's, of Middlesbrough, has published a most attractive house organ, *The Upton News*. This is in magazine form and is to be issued quarterly.

The first number contains a number of interesting articles beginning with "Whither Tees-side?" by Mr. S. A. Sadler Forster, the secretary of the Tees-side Chamber of Commerce and the Tees-side development board. Other articles deal with radio and products handled by Upton's.

There is a message of introduction by Mr. Edward Upton and Mr. Walter Upton, the partners, and a pictorial history of the firm since its foundation in 1869. There are also two competitions, one for children and one for adults, and a small amount of catalogue material.

N.R.S. SIGN

TO TIE-UP WITH FIRM'S REGISTERED DEALER SCHEME

A sign carrying the words "Authorised Radio Repair Depot," is now being issued by N.R.S., Ltd., to retailers who link up with them under their authorised dealer scheme.

The sign is a stout production in enamelled metal, and is suitable for fixing to the fascia of a shop. The lettering is in blue on yellow.

The N.R.S. authorised dealership scheme was described in *THE BROADCASTER* on August 3 and, it will be remembered, includes the servicing of sets at fixed charges and the delivery and installation of sets sold by retailers.

RADIO TRADE IN INDIA

India continues to import radio apparatus in increasing quantities. During the three months to June 30 this year the total was £33,000, compared with £21,750 for the corresponding period in 1934.

According to a survey of imports for the June quarter this year, published by the Department of Overseas Trade at 35, Old Queen Street, London, S.W.1. America is still gaining ground, their shipments being more than doubled at £19,500. Imports from the United Kingdom registered only the small advance from £9,000 to £9,750.

Musical instruments showed a small increase at £49,500.

The New 1936 Portadyne RADIO RECEIVERS

for
**INCREASED
PROFITS THIS
WINTER**

BETTER SETS ● BETTER TERMS ● FULLEST CO-OPERATION

The new 1936 "Portadyne" receivers are better than ever in quality and lower in price. Fullest co-operation is offered to dealers to help them increase sales and make more profits. The H.P. scheme is attractive, with no risk, and cashable credit notes are offered.

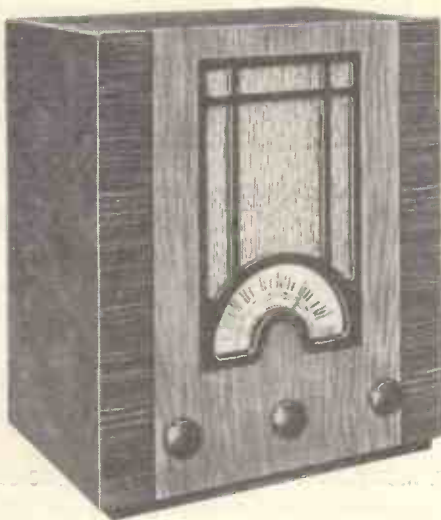
Every set is guaranteed for twelve months and they are available for distribution through *all* wholesalers. If you stock and demonstrate "Portadyne" Receivers you will sell them. You will satisfy your customers and increase your profits.

THE NEW 3-VALVE BATTERY RECEIVER MODEL B3.

SPECIFICATION—Circuit: S.G. Pentode H.F. Amplifier; Triode Detector; Pentode Output. Features: Parallel fed L.F. Transformer. High efficiency tuning coils with Litz windings and iron dust cores. No external aerial trimmer is required. Stations marked by name and wavelength on a full-vision illuminated scale. The pilot lamps can be switched off if not required—in view of the low H.T. consumption this ensures minimum running charges. A high quality permanent magnet moving coil loudspeaker is fitted, and extra loudspeaker terminals and gramophone pick-up sockets provided.

**PRICE
£6-15-0**

or on H.P. Terms. Deposit 12s. and 12 monthly payments of 12s. Exclusive of Batteries.



THE NEW 5-VALVE SUPER-HET A36 A.C. MAINS MODEL.

**PRICE
£10-19-6**

complete, or on H.P. Terms. Deposit 19s. and 12 monthly payments of 19s.

Battery version—B.36—also available at same price.

SPECIFICATION—Circuit: Octode Frequency Changer; Variable-mu H.F. Pentode I.F. Amplifier; Double-diode-triode Detector and A.V.C. Stage; High Mag. Power Pentode Output Valve; Valve Rectifier; Delayed A.V.C. 3.2 Watts undistorted output; Selectivity—9 Kc/s. average bandwidth; Image reducing bandpass Input Circuit. Features: The new "Porta" aerial makes the set instantly transportable for the reception of local stations at full volume. Modern designed cabinet in two tones of polished walnut. Full vision tuning scale marked by name and wavelength.

An extensive National Advertising Campaign will shortly be launched, which cannot fail to increase the already great demand for "Portadyne." Our co-operative local advertising scheme for dealers will also help tremendously to increase your sales. Write to-day for details of this, information about Window Displays, and for supplies of Showcards, Literature, etc. Don't delay—WRITE NOW.

REALISM IN RADIO PROFITS MEANS PORTADYNE

GORST ELECTRICAL CO. LTD. GORST ROAD, N. ACTON, LONDON. N.W.10.



**NO PRICE REDUCTIONS
FOR PIFCO INSTRUMENTS
OR PIFCO VALVE ADAPTORS**

To further popularise the sale of Pifco Rotameters and Valve Adaptors we will supply a complete set of three Adaptors costing 15/- for 7/6 with each Rotameter, less our usual discounts. This offer is being advertised extensively, inviting the public to apply to local stockists.



**PIFCO
VALVE ADAPTORS**

Each adaptor has a 5-pin base with top sockets for "plug-in" testing of 5, 7 or 9-pin valves under working conditions without alteration to set wiring. Four nickel-plated terminals complete with strapping links are fitted, to connect meter in either grid or anode circuit of valve.

Order to-day your supply of both Rotameters and Adaptors to meet the demand, from your regular Factor or direct from PIFCO, LTD., SHUDEHILL, MANCHESTER: and 150, Charing Cross Road, London, W.C.2.



ROTAMETER-DE-LUXE

(9 Ranges including valve test)

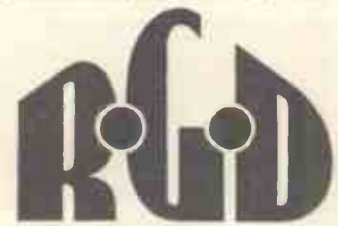
Every conceivable test, also valves, can be made with this amazing instrument (400 volts-500 ohms per volt). Finished in black bakelite, complete with leads and fitted in handsome velvet-lined case. Price 42/-.



ROTAMETER

(9 Ranges including valve test).

Eight separate dials and valve test available at the turn of a knob. Size of each dial, 1 1/2 in. by 1/2 in. Finished in black bakelite, complete with leads. Price, 29s. 6d.



**RADIO GRAMOPHONES
AND RECEIVERS**

*"The Aristocrats of
the Radio World"*



**"Frying
- pan
music" when
demonstrating?
Put an end to it!**

**BELLING-LEE
SUPPRESSION SERVICE**
Read the manual

PIFCO

ROTAMETERS and RADIOMETERS
PIFCO ON THE SPOT WILL TRACE YOUR TROUBLES LIKE A SHOT



MODEL 21M

Connor
SINCE 1875

**ELECTRIC
WASHERS**

Sell Connor washers to your male customers. After all, it is they who hold the household purse-strings.

MODEL 21M. .31 GNS. MODEL 20CP. .26 GNS. MODEL 30. .20 GNS.

Hire purchase arrangements and Discount on request.

ISMAY (RAWSON) LIMITED
STERLING WORKS, DAGENHAM, ESSEX



Branches at: SHEFFIELD, HULL, NEWCASTLE, GLASGOW, MANCHESTER, BRISTOL.

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

Classified advertisements, which must be prepaid, should reach The Advertisement Manager, "The Broadcaster and Wireless Retailer," 29 Bedford Street, London, W.C.2. not later than first post Tuesday for the following Saturday's issue.

CLASSIFIED ADVERTISEMENTS

MANUFACTURERS
Fill your Staff Requirements by means of a "small ad." under SITUATIONS VACANT or TRAVELLERS REQUIRED.

2d. PER WORD
minimum 2/-

SITUATIONS VACANT

WIRELESS Industry offers well-paid posts to qualified men. By studying at home with the T.I.G.B. you, too, can become qualified. Write to-day for "The Engineer's Guide to Success"—Free—which contains world's widest choice of Wireless and Engineering Courses—over 200—and gives full particulars of the Examination Regulations for A.M.I.E.E., A.M.I.W.T., A.Rad.A., C. & G., etc. Mention branch, post or qualification that interests you. — The Technological Institute of Great Britain, 45, Temple Bar House, London, E.C.4 (Founded 1917. 19,000 Successes.)

SITUATIONS WANTED

MANAGERSHIP, combined radio sales, buying, service, as radio departmental or branch manager. Many years practical and theoretical experience all departments in former position. Used to full control, responsibility, organisation and development. Change desired with first-class firm. Young, married, energetic, own car.—Box No. D. 575, "Broadcaster" Office, 29, Bedford Street, W.C.2. Oct. 12.

TRADE BARGAINS FOR SALE

BATTERY CHARGERS, Eliminators, Fans, secondhand, for 200 v. D.C. Particulars, write.—Dunn, Radio Dealer, Dalbeattie Oct. 12.

CASH REGISTERS, National, all kinds, total adders, ticket issuers, printers, etc., box cash tills, fully guaranteed. No reasonable offer refused. All reliable makes bought, sold, exchanged, repaired. Easy terms.—Write or call, Amalgamated Business Machines, Ltd., 78, Long Lane, Smithfield, E.C.1. Phone: National 0674. Satisfaction guaranteed. (D. Deiches, Managing Director.) Oct. 5.

PHILIP KAY, LTD., have 2,000 Radio Receivers to clear. Three-valve battery to six-valve all-wave mains sets. Prices from 10s. to £6 15s. Every receiver guaranteed perfect. Write for list.—167, City Road, E.C.1. (Clerkenwell 4520.) T. C.

Scale of Charges

SITUATIONS VACANT
2d. per word (minimum 2/-)
SITUATIONS WANTED
2d. per word (minimum 2/-)
AUCTION ANNOUNCEMENTS
15/- per inch
ALL OTHER HEADINGS
3d. per word (minimum 3/-)

Black face type or small caps. is available at an extra charge of 6d. a word. Box office addresses may be used, and are charged as six words.

SERIES DISCOUNTS
5% for 13, 10% for 26, and 15% for 52 insertions. and 2½% extra if copy is unchanged
Display Advertisement Rates on Application

All small advertisements must be prepaid and sent to

**The Advertisement Manager,
THE BROADCASTER AND
WIRELESS RETAILER,
29, Bedford Street, W.C.2**

Telephone: Temple Bar 2468.

To arrive not later than first post Tuesday for next week's issue.

TRADE BARGAINS FOR SALE

(Continued)

P.A. AMPLIFIERS; 20 watts output, £13 10s.; with microphone stage, £15 10s. 40 watts output, £23, complete with valves. Trade supplied.—Supersound, Ltd., King's Buildings, Smith Square, Westminster, S.W.1. Nov. 9.

WANTED

WANTED immediately, All-Mains Sets and Radiograms to compete in price and specification with special lines of big stores.—Box No. E. 576, "Broadcaster" Office, 29, Bedford Street, W.C.2. Oct. 5.

WANTED immediately, 1935 A.C. Mains Sets and Radiograms for cash.—Box No. F. 577, "Broadcaster" Office, 29, Bedford Street, W.C.2. Oct. 5.

WANTED, urgent, anything radio for export, etc. All clearance sets, components and all other goods purchased for cash. All business confidential.—F. J. Cartwright, Ltd., 7, Chapel Street, W.C. Holborn 4434.

YOU are reading this advt. So are thousands of other dealers. Why not put your requirement here?

VALVES

GENUINE American, in sealed cartons, from 4s. Guaranteed.—List from Holiday Hemmeringer, Dolefield, Manchester 3. Oct. 19.

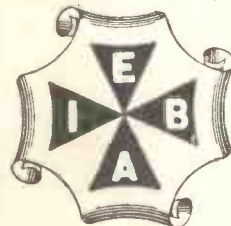
BATTERY CHARGING PLANT

BATTERY CHARGERS for A.C. and D.C. New and second-hand from 50s. Send for list.—Runbaken Products, 280, Deansgate, M/c. London: 4, Upper Marylebone Street, W.1.

CARFAX Valve and Metal Rectifiers, From £5.—British Rectifiers Company. Vernon Place, Cheltenham. Oct. 26.

COME TO THE BALL

Come and Dance to
JACK PAYNE AND HIS BAND
on Nov. 26th at Grosvenor House



Supper, Running Buffet, Cabaret and Jack Payne's "Cecilians" up to 11.40. At 11.45 JACK PAYNE AND HIS BAND.

TICKETS £1.10

from the
**Electrical Industries
Benevolent Association,
36, Kingsway, W.C.2.**

Have You Stocked **BURGOYNE** Yet?

BURGOYNE WIRELESS LTD., GREAT WEST RD., BRENTFORD, MIDDLESEX

**MAINS — BATTERY SETS
and RADIOGRAMS**
from £6 to 17 Gns.
LUXURY IN ALL BUT PRICE.
Write for full List.

WHEN REPLYING TO ADVERTISEMENTS PLEASE MENTION "THE BROADCASTER."

BULGIN for
L.F. CHOKES

Exide AND Drydex
BATTERIES

Best for Dry Batteries
WENFIELD SEAMLESS ZINC CANS
Write for Leaflet:
GOODE & CO., 30, NEWGATE STREET
LONDON, E.C.1. Tel.: City 6079

Selecta FOR
AERODYNE
Selecta Gramophone Ltd.,
81 Southwark St., London,
S.E.1 Phone: Waterloo 6571
THE QUICK SERVICE WHOLESALERS

THE ORIGINAL ALL-WAVE (15 TO 2000 METRES)
A.C./D.C. MAINS SUPER HETERODYNE RECEIVER.
1st INTERNATIONAL RADIO & TELEVISION
BROMLEY, KENT RAV. 4046
in any comparison.

AIRFLO (RD)
ELECTRICALLY · MECHANICALLY · ACOUSTICALLY
PERFECTED
RADIO INSTRUMENTS
RD. CROYDON **RADIO**

FERRANTI

REPAIRS

GRAHAM'S Repairs and Rewinding Service; 24 hours' service guaranteed.—See below.

ANY loudspeaker, L.F. transformer or pick-up, 2s.; output transformers, L.F. chokes, 3s.; postage extra. Mains transformers, moving coils quoted.—**GRAHAM'S RADIO**, 194, Tolworth Rise, Kingston By-Pass, Surrey. 'Phone: Maldon 2060.

FOR guaranteed and reliable repairs ring Museum 8893. Collected and delivered.—North London Radio Service, 84, Hampstead Road, N.W.1. Oct. 26.

LOUDSPEAKER REPAIRS, any make, in 24 hours. Cones, coils, etc.—Sinclair Speakers, Alma Grove, N.1.

MAINS TRANSFORMER SERVICE.—Repairs, rewinds or construction to specifications of any type. Trade prices, etc., on application.—Sturdy Electric Co., Dipton, Newcastle-on-Tyne. T.C.

MAINS TRANSFORMERS, chokes, etc., to specification. Repairs promptly executed. Guaranteed satisfaction. Prices on request.—Henry Peace, Ltd., Wednesbury, Staffs.

MAINS TRANSFORMERS, chokes, etc., supplied to specification. Rewinds, all types, British or foreign. Guaranteed prompt service and delivery. Competitive prices.—**LONDON TRANSFORMER PRODUCTS**, Cobbold Road, Willesden, N.W.10.

REPAIRS?—Send them all to us. Estimates free. List of American valves on application. Majestic spares.—Majestic Service Co., 4, Victoria Bridge Street, Manchester 3. 'Phone: Blackfriars 4951.

TRADE REPAIRS FOR KENT.—Quotations and full discount.—Cyclo Rado, Ltd., 3, Mill Street, Maidstone. 'Phone: 3024 Maidstone.

ULTRA
RADIO'S RICHEST VOICE
RADIO

Square Deal with
EASTICK'S

J. J. Eastick & Sons,
Elex House, 118 Bunhill Row, E.C.1

RAYTHEON

The Only 4 Pillar Radio
Tubes and Transmitting Tubes

Full particulars from:
A.R.T. LTD., 53, FARRINGTON ROAD,
LONDON, E.C.1. **HOLBORN 2053.**

ALBA RADIO OF
QUALITY
FINEST VALUE
FAIREST POLICY

EXPRESS DELIVERY

GIVE **ITONIA** A RING

● ALBA, BEETHOVEN, COSSOR, EKCO, FERRANTI, G.E.C., MARCONIPHONE, PHILIPS, R.G.D., ULTRA, Etc.

London (City 2031—8 lines). Bristol (20274-5). Portsmouth (2411-2). Leeds (30081-2). Canterbury (1040-1). Newcastle-on-Tyne (Newcastle 23381-2). Edinburgh (31094).

BRITISH MADE · PRICES MAINTAINED
HIVAC BATTERY VALVES FROM 3/9
THE SCIENTIFIC MAINS VALVES FROM 9/6
VALVE SUBJECT
PHONE: CLEARENWELL 734
HIGH VACUUM VALVE C. L.
113-117 FARRINGTON R. EC
BRITISH MADE

Nearly Perfect Amplification

(from 25 to 10,000 cycles)

FERRANTI Constructional Amplifiers for use with Electrical Pickups or Microphones. Details for building given in the Booklet R105. Trade Price 4d. post free. Retail selling price 6d., from Dept. B.

FERRANTI LTD., RADIO WORKS, MOSTON, MANCHESTER 10

REPAIRS—continued

REPAIRS to Moving Coil Speakers, Cones and Coils fitted or rewound. Fields altered. Prices quoted, including Eliminators. Loudspeakers repaired, 4s. L.F. and Speech Transformers, 4s. Post free. Trade invited. Guaranteed satisfaction. Prompt service. Estimates free.—L.S. Repair Service, 5, Balham Grove, London, S.W.12. Battersea 1321.

REPAIRS (American)

HENRY FORD RADIO. — American valves, components, spares, line-cords; leading trade repairers; send us your American and British receivers; estimates free.—56, Howland Street, Tottenham Court Road, W.1. Museum 5675. T.C.

METROPOLITAN RADIO SERVICE CO. for a comprehensive American receiver repair and parts service. All types American valves. Prompt service.—1,021, Finchley Road, London, N.W.11. Speedwell 3000.

PRINTING

ADVERTISING Calendars from 13s. 6d. 100, sample sheets free. Duplicate Books printed to order from 12 books 9s. 6d., samples.—Kilburn Press, Wallingford, Berks. Oct. 26.

BEST Cards, Memos, Billheads, 100 1s. 6d., 200 2s. 6d.; Scent Cards, 144 3s. 9d.; samples.—H. Tice's, 11, Oaklands Grove, London, W.12.

BUSINESS Cards, 100 1s. 9d., 250 3s. 6d., post free.—D. Leah, 49, Old Church Road, Bell Green, Coventry.

CATALOGUE and General Commercial Printing at competitive prices.—Estimates from Lambert, 23, Oakley Square, London, N.W.1.

MEMOS, 250 3s. 6d.; list; samples free.—Corney, 12, Westwick Gardens, London, W.14.

VIDOR DISTRIBUTION

Vidor have not yet fixed up some areas with main distribution on receivers, and invite application from Responsible Distributing houses able to handle really big business. Must be good for £5,000 credit limit.

Write in confidence to Managing Director,

**Vidor Ltd.,
West Street, Erith, Kent.**

AMPLIFIERS FOR HIRE

P.A. EQUIPMENT for hire, batteries, generators, speakers, amplifiers and repairs to same.—Easco, 18, Brixton Road, S.W.9. Reliance 1693.

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