

# Gazes

BUILDING & CIVIL ENGINEERING  
— CONTRACTORS —



*At the Service — for the Service  
of Architects*

W.H. GAZE & SONS LTD., 40, CONDUIT STREET, LONDON, W.1. — KINGSTON-ON-THAMES — SURBITON — WALTON — BATH

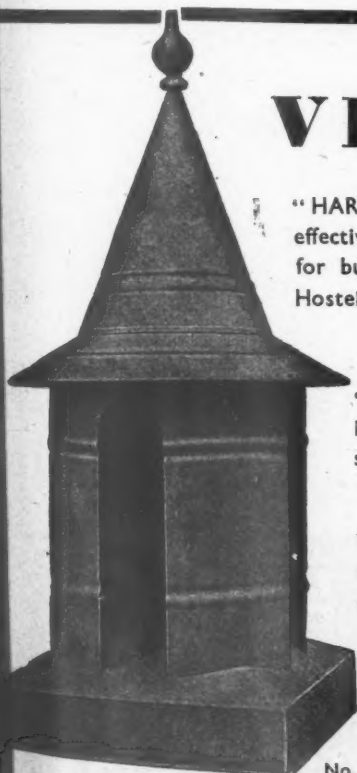
## "HARCO" VENTILATORS

"HARCO" Self-acting Ventilators ensure an effective draught-free method of ventilation for buildings of any type—Camp Hutments, Hostels, Hospitals, Schools, Workshops, etc.

"HARCO" Ventilators are made in a wide range of patterns and sizes.

MILD STEEL  
VENTILATING PIPING  
in any size, gauge or  
section.

Write for illustrated  
Catalogue K 481.



No. 102

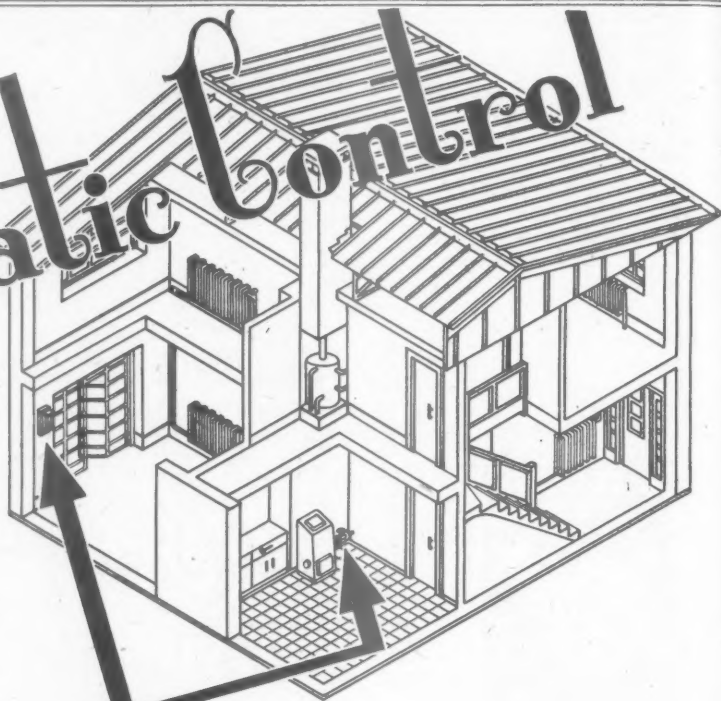


No. 104  
With round pipe  
stem.

No. 68

G. A. HARVEY & CO. (LONDON) LTD. WOOLWICH RD.  
LONDON S.E.7.

# Automatic Control



Automatically controlled heating in this small house provides complete warmth and abundant hot water for no more fuel than is used on an ordinary open fire and independent boiler.

How is this possible? Most of the heat in the coal used on an ordinary open fire goes up the chimney and is lost, and the remainder barely warms one room. If most of the heat could be saved it would be sufficient to warm five rooms.

An automatically controlled boiler will extract most of the heat in the fuel, and this heat can easily be distributed to an indirect cylinder for hot water supply and to radiators for warming the whole of the house. Automatic controls will regulate the burning of the fuel and the supply of heat to the house so that only just that amount of fuel is burnt to meet the variable demand for heat, consequently a modern small house can be warmed throughout and have abundant hot water for an average consumption of less than 2 cwt. of anthracite per week. May we send you details of our ideas on this important subject?

**THE RHEOSTATIC COMPANY LIMITED**  
**SLOUGH** ● **BUCKS**

Telephone: SLOUGH.23311/6. Telegrams: RESISTANCE.SLOUGH.

## DEVELOPMENTS in Parkerizing and Bonderizing ARE SIGNIFICANT

Pyrene Metal Surface Treatment Processes made their initial appearance in the nineteen-twenties when Parkerizing was introduced. Since then the following significant advancements have been made:—

**1931** "BONDERIZING" for Paint Anchorage.

**1935** "PYLUMINIZING" for the protection of Aluminium.

**1936** "SPRA-BONDERIZING" for Paint Anchorage by conveyORIZED and mechanically-controlled production methods.

**1937** "D" Process for "PARKERIZING" and "BONDERIZING" of Iron and Steel, also for treatment of Zinc and Cadmium surfaces or mixtures of these with ferrous metal assemblies.

**1938** "PYROGRIP" Cold cement for dressing mops and bobs used for scurfing and polishing.

**1939** "PARKERIZING" for Lubrication.

**1942** "BONDERITE" 'K' for treatment of continuous steel strip and sheet production.

IT CANNOT BE PARKERIZED OR BONDERIZED  
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## WIMPEYS AT WORK

Scientific methods in planned building construction



### PUTTING THE PLAN INTO OPERATION

At Wimpeys' office on the site, the Building Agent puts into operation the predetermined constructional plan. Day by day he keeps a close watch to ensure that progress is up to schedule, from the preliminary excavation to roofing, lighting and the final details of decoration.

The successful construction of a modern building is a considerable feat of organisation. Many trades are involved, and much 'thinking ahead' is necessary to ensure that

men, materials and plant in sufficient quantity are available on the job at the right time.

On Wimpey contracts all these factors are co-ordinated in a complete programme of production. Each day's work is compared with the programme, and any falling behind is investigated so that the cause may be promptly removed.

The staff on every major contract includes specialists in planning and quality control, who provide the Agent with information which enables him to direct production on the most efficient lines. In addition, the Agent is able to

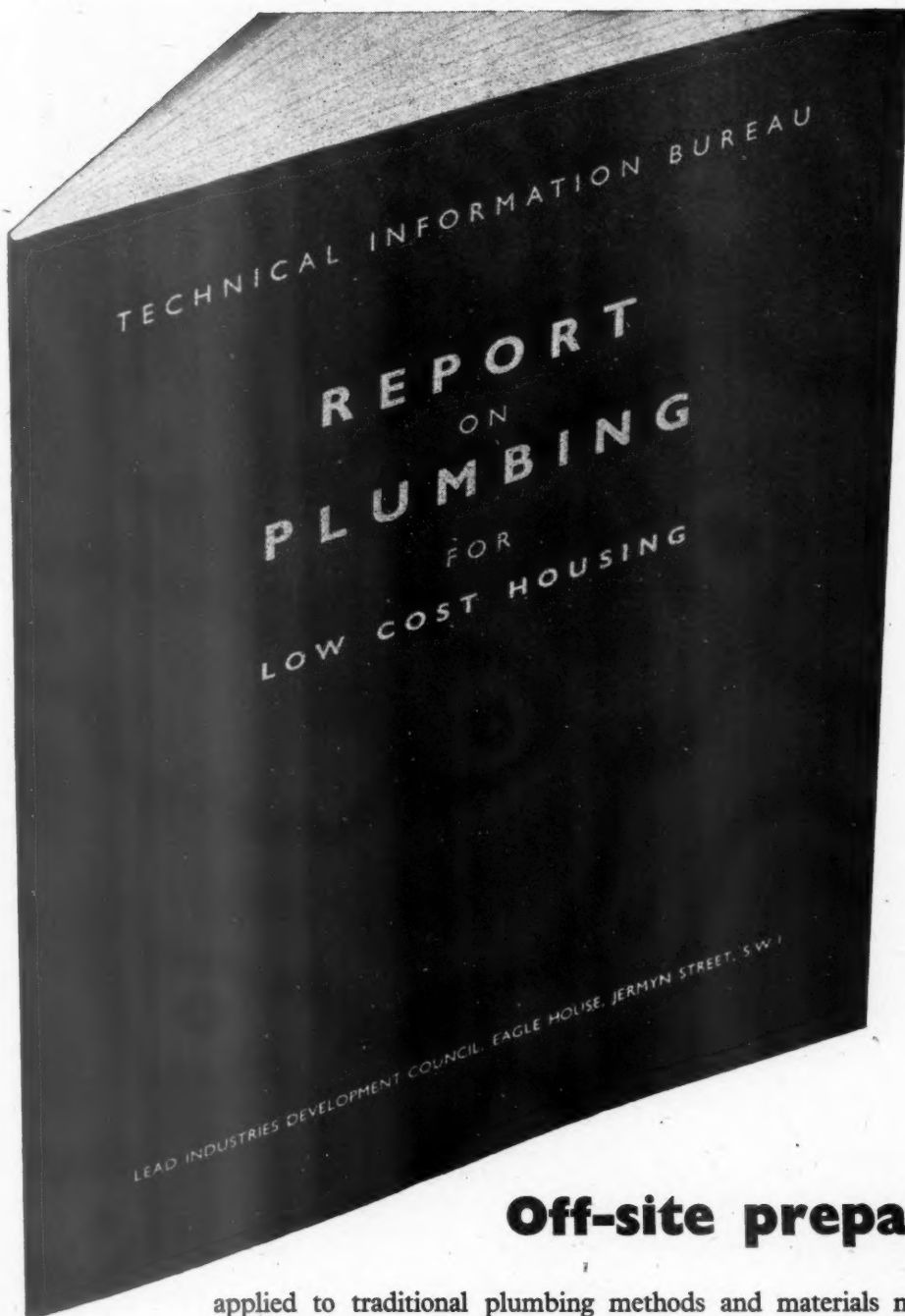
draw on the wealth of scientific knowledge which Wimpeys have acquired as pioneers of modern constructional methods.

Sixty years of steady growth have taken Wimpeys to the front rank of national building contractors.

## WIMPEY

GEORGE WIMPEY AND CO. LTD.  
BUILDING CONTRACTORS SINCE 1880  
TILEHOUSE LANE DENHAM MIDDLESEX





## Off-site preparation

applied to traditional plumbing methods and materials means increased efficiency, economy of materials, and a considerable reduction in site work hours. This and other factors making for efficient and economic plumbing systems are discussed in the report illustrated, copies of which may be had on application.



LEAD INDUSTRIES DEVELOPMENT COUNCIL

EAGLE HOUSE, JERMYN STREET, LONDON, S.W.1

B18



There is no shelter for a bridge. It must stand full square to the wind, rain and snow: to blistering tropical suns or the corroding bite of brine-laden air. For steel bridges paint is the first line of defence against the ruthless elements—but only paint of the finest quality is good enough for this purpose. That is why I.C.I. paints are so frequently specified in many parts of the world. Constant research and experiment have been applied to the production of all I.C.I. paints, whether for use on bridges or buildings. “Dulux”, “Du-Lite” and “Beldec” fulfil the most exacting demands for the protection and decoration of houses, hospitals, schools, bridges and, in fact, of the thousand and one places on which good paint is essential.

**IMPERIAL CHEMICAL INDUSTRIES LIMITED**  
**PAINTS DIVISION**      **SLOUGH, BUCKS.**

*(successors to Nobel Chemical Finishes Ltd.)*

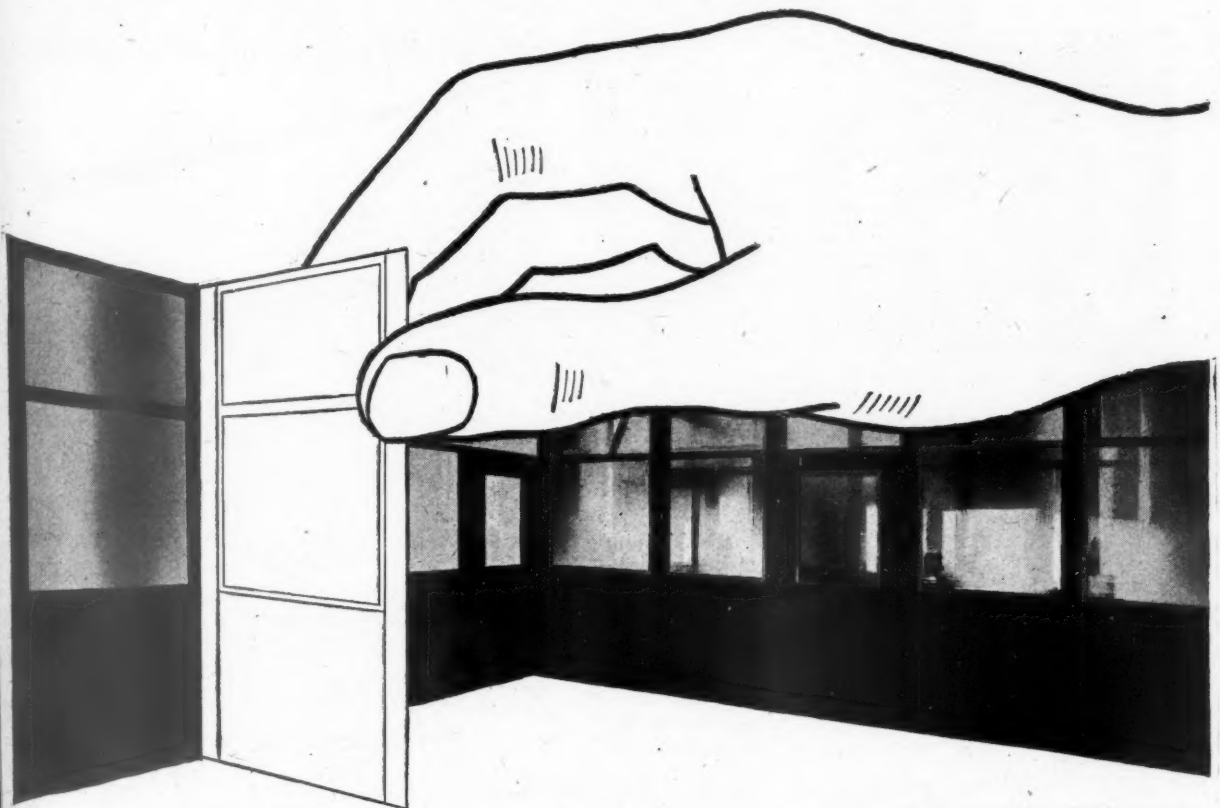
Telephone: Slough 23851





**PLAN FOR CHANGE** Plan your office so that it can be adapted to the post-war changes in your business. Sankey-Sheldon Steel Partitions are supplied in standard sections that can easily be erected, re-erected or added to, according to the accommodation required. They are strong and convey a sense of permanence and solidity. The durable finish can be cleaned like a motor car body and never needs re-decoration. A range of attractive colours is available. For adjustable, fire-resisting, vermin-proof and space-saving office accommodation—let Sankey-Sheldon help you to

## **PARTITION WITH STEEL**



**SANKEY-SHELDON**  
STEEL EQUIPMENT AND FURNITURE

Chief Office: 46 Cannon Street, London, E.C.4

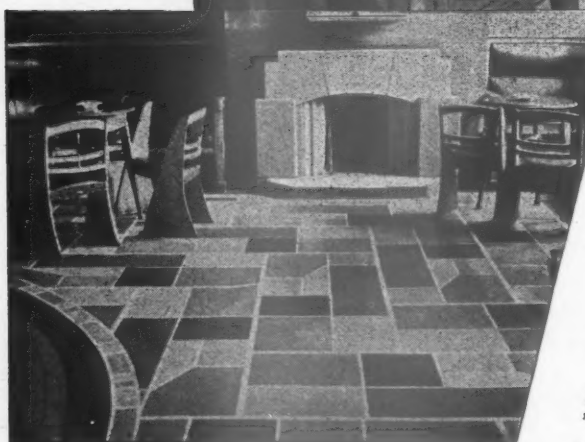
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Enquiries to Sankey-Sheldon, Dept. A-J., 46 Cannon Street, E.C.4

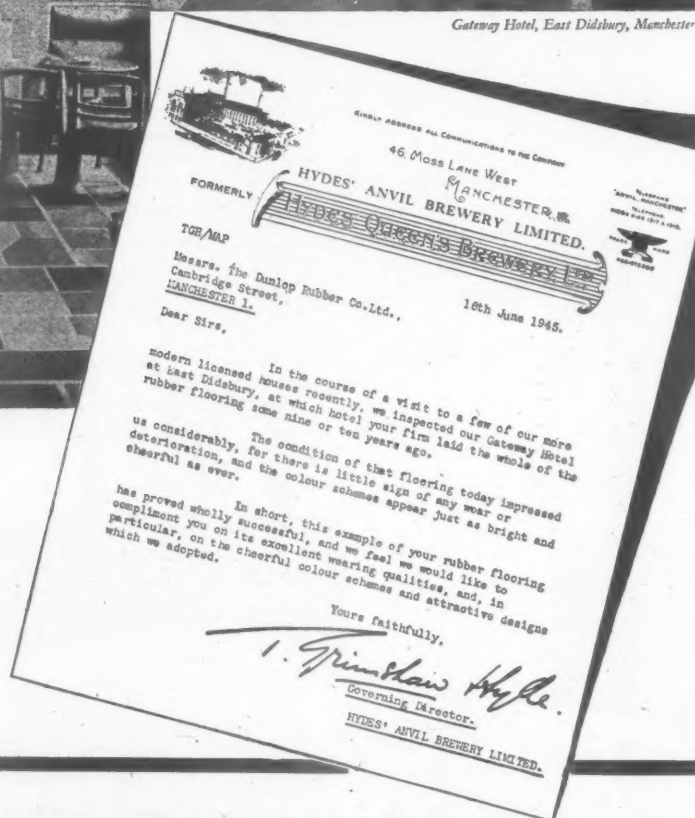
*Constant wear since 1935...*



Gateway Hotel, East Didsbury, Manchester.



**AND STILL  
IN SUPERB  
CONDITION**



**DUNLOP RUBBER FLOORS**

DUNLOP RUBBER COMPANY LIMITED • CAMBRIDGE STREET • MANCHESTER 1

45/GRG/25





## ***Windows—then and now!***

The earliest *windows* were just openings to admit the *wind* into dwellings. Then came the earliest glass windows, but they only admitted light. The dual purpose of the window—admission of air and light—was still unknown.

Evidence shows that glass windows were already used in Pompeii, but it was not until the 12th century that they became popular in England. In 1695 a window tax was imposed. As late as 1850 it yielded £1,832,684. It was abolished in 1851. At

last it was realized that the tax limited the number of windows and the entry of air and sunshine.

All the time window frames underwent great changes. Heavy cast-iron frames gave way to lighter materials until eventually a frame was evolved—the John Dale window cast in aluminium alloy—which combines lightness with strength, weather resistance with ease of cleaning, advantages which post-war builders and dwellers will be quick to appreciate.

**JOHN DALE LTD.,**  
LONDON COLNEY · HERTFORDSHIRE

Telephone: London Colney 3141

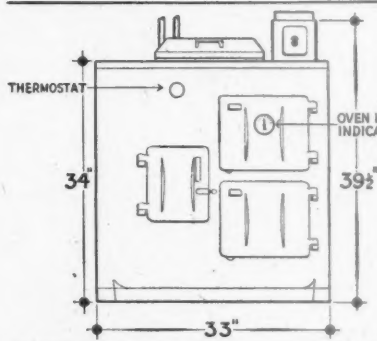


THE  
MODERN  
TECHNICIANS  
*in*  
LIGHT  
ALLOYS

## AT LAST—HEAT STORAGE COOKING for HOUSING SCHEMES

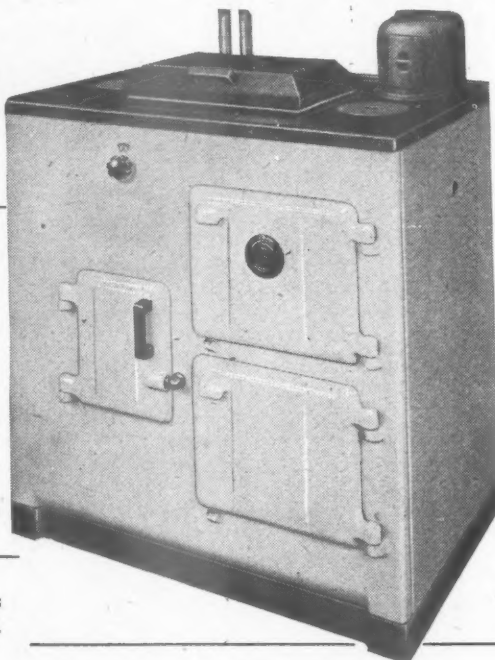
The "H.S." Cooker regulated by thermostat, answers the national need for a Heat Storage Cooker, with its efficiency and startling fuel economy, sufficiently low priced to be used in municipal housing schemes. In addition to cooking, from the one fire is provided a constant supply of hot water, thus abolishing the uneconomic system (especially in summer) of heating water from the sitting-room fire. Easy to work, providing a gentle warmth day and night, having two spacious ovens, top for roasting and lower for slow cooking, and extensive fast boiling hot-plate, the "H.S." brings the advantages of Heat Storage Cooking, FOR THE FIRST TIME, to the lower-grade-income home.

### THE "H.S." HEAT STORAGE COOKER



#### BRIEF TECHNICAL DETAILS

Each oven: 12" x 10" x 17" deep.  
 Inside diam. of flue outlet 4 1/2" suitable for 4" diam. asbestos pipe.  
 Boiler: 70/80 gall. water at 150/160° F. over 24 hours.  
 Storage Cylinder: 30/35 gall. within 15 feet of cooker and insulated.  
 Fuel: Anthracite, Coke or Phurnacite.  
 Consumption: 20 lbs. per 24 hours.  
 Weight: 588 lbs.  
 Finish: Mottled Porcelain enamel.



Full details of the "H.S." Heat Storage Cooker and "ESSE-Q" Continuous Burning Heating Stove (described below) will be gladly supplied on request.

## ESSE-Q INSET CONTINUOUS BURNING HEATING STOVE

### DESIGNED FOR HOUSING SCHEMES

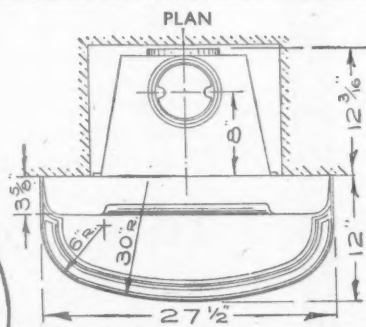
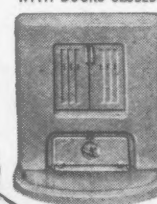
This latest ESSE Stove, open and closed fire, burning any type of solid fuel, designed to reduce smoke emission when bituminous coal is used, is specially suitable for municipal or other mass housing projects. Exterior finish is oatmeal (or other colours) mottled porcelain enamel. Fitted with tight-fitting sideways sliding fire-doors (obviating ugly appearance of inner side of fire-doors when open), the ESSE-Q is of clean, functional design, self-setting, with top flue outlet for placing in recess (see plan below). Fire-doors are closed for overnight burning and boosting.



#### BRIEF TECHNICAL DETAILS

Overall Height ... 28 1/2"  
 Fireplace Opening:  
 Height: Min. ... 27 1/8" Max. ... 28"  
 Width: Min. ... 18" Max. ... 24"  
 Depth: 12 1/2"

#### WITH DOORS CLOSED



FULL DETAILS GLADLY SUPPLIED ON REQUEST FROM

**SMITH & WELLSTOOD**

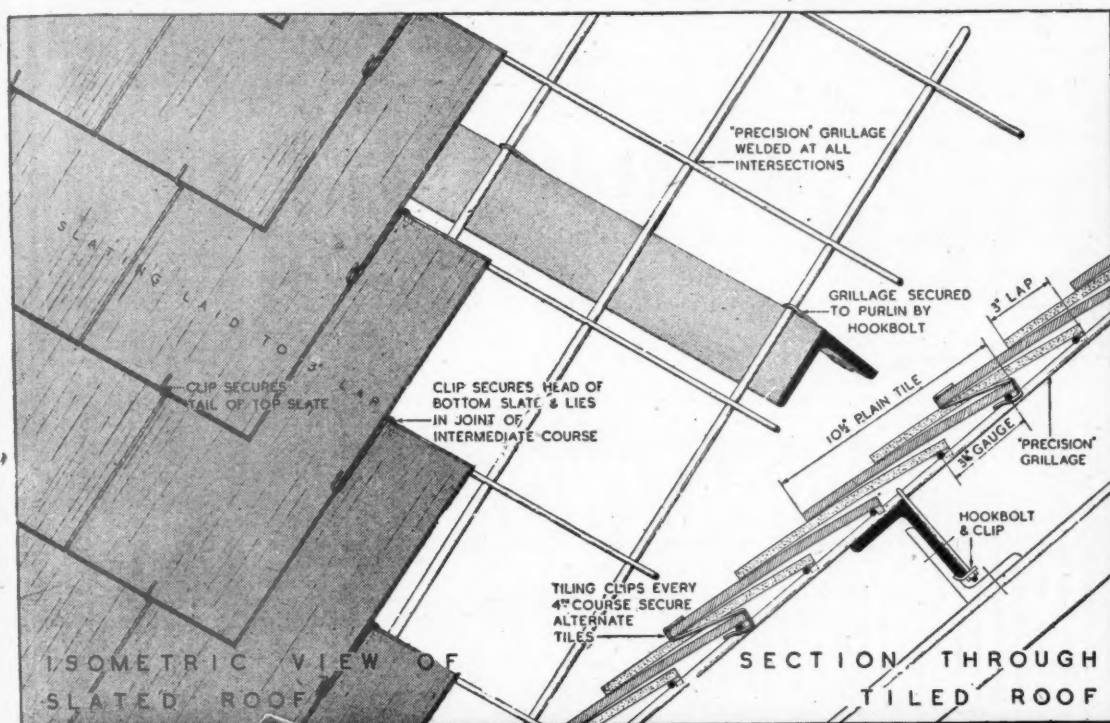
ESTABLISHED 1854

LTD

HEAD OFFICE & WORKS:

BONNYBRIDGE, SCOTLAND

# PRECISION ROOFING



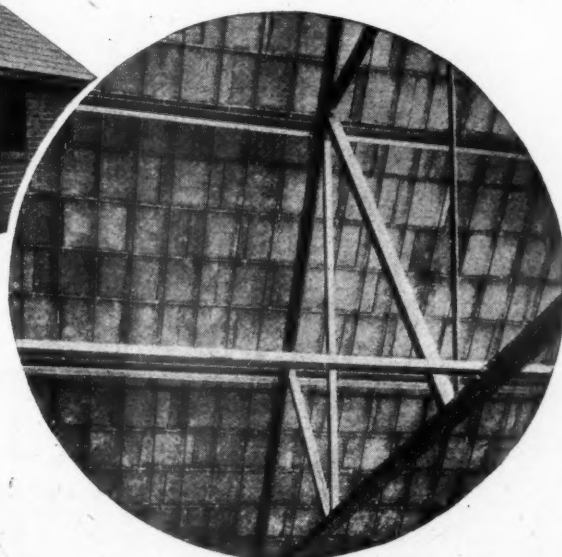
Slated Roof.

## WORKS-PRODUCED SYSTEM of ROOF CONSTRUCTION

A new and simple system of roofing which is works-produced and can be speedily erected with a minimum of skilled labour.

The system consists of a standardised steel grillage, electrically welded at all intersection points and gauged to suit the type of covering material employed. Slates or roof tiles are secured to the horizontal bars of the grillage by specially designed rustless steel clips.

Full details of Precision Roofing are contained in a booklet which will be sent on request.



Underside of Slating.



**PRECISION ROOFS LIMITED · TEMPLEBOROUGH SHEFFIELD**

\*Phone: Rotherham 1517

London Office: 10 Grosvenor Gardens, S.W.1

In association with . . . McCALL & CO. (SHEFFIELD) LTD. TEMPLEBOROUGH, SHEFFIELD

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**NEWS-REAL FENCING SERVICE**

You're busy these days. You need a really comprehensive fencing service. We provide just that service — Manufacture and Site Erection of every type of fencing.

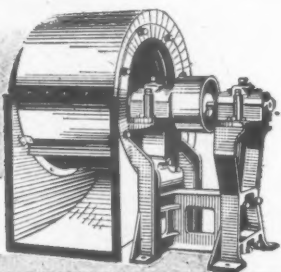
CHAIN LINK; CONCRETE POSTS; PALISADE; SQUARE MESH; CLEFT CHESTNUT; INTERWOVEN; POST & RAIL; STRAINED WIRE; CLOSE BOARDED; IRON RAILINGS; SPILE; WIRE NETTING, ETC.

**DURAFENCING LTD**


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# CYCLONE

**FANS ENSURE EFFICIENT VENTILATION**



"S.S." Slow Speed Multivane Fan of exceptionally low power consumption and quiet running.



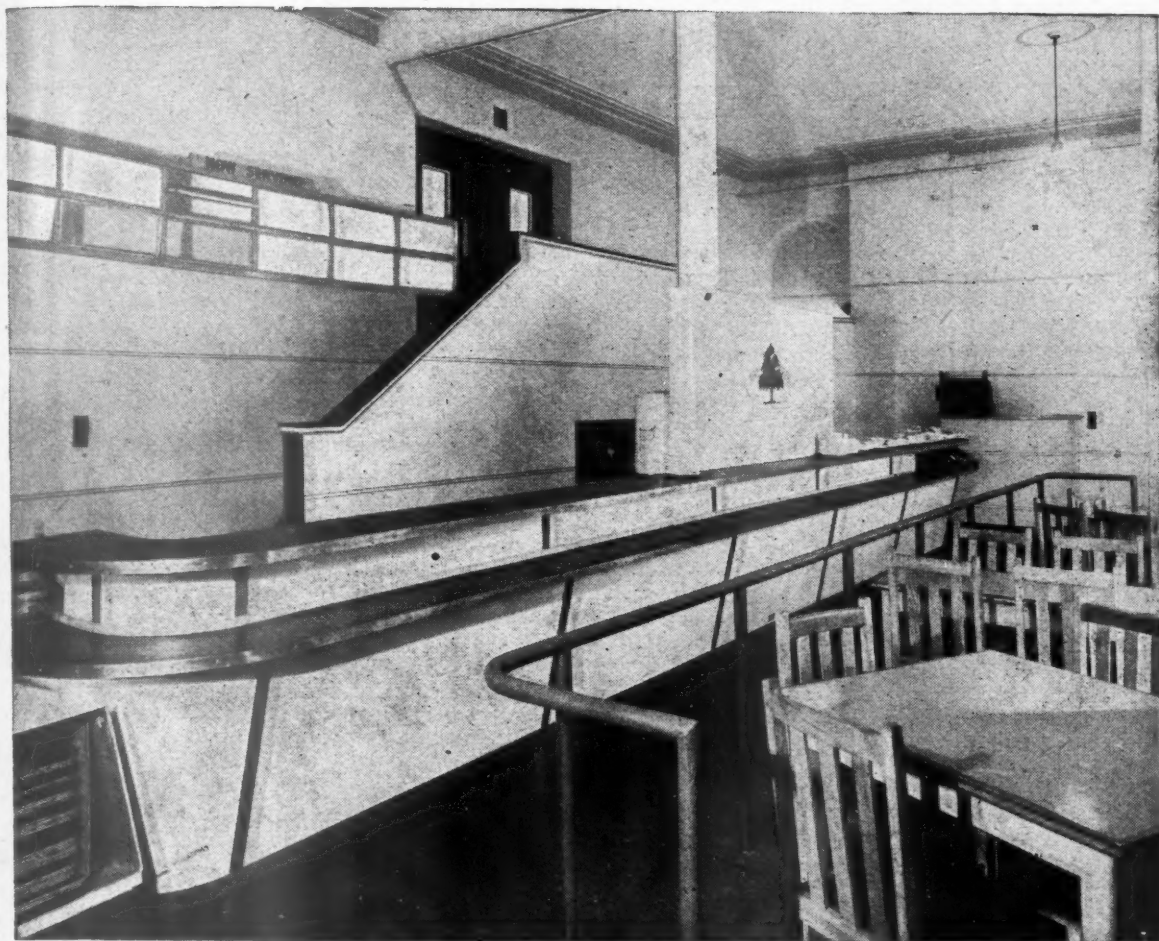
— COOLING - DRYING - FUME REMOVAL Etc  
★ WRITE FOR TECHNICAL BROCHURES... REF. A.J./11

**MATTHEWS & YATES LTD**  
SWINTON (Manchester) & LONDON  
Phones: SWinton 2273 (4 lines) London CHAncery 7823 (3 lines)

Electric Propeller Fans  
reversible — rotation being reversed by change-over switch — highly efficient and quiet in operation.

Also at GLASGOW, LEEDS, BIRMINGHAM, CARDIFF





Architect: W. L. LOWE, A.R.I.B.A.  
Messrs. Gray Evans & Crossley.

This 40 ft. Cafeteria Service Counter—carried well off the ground on tubular feet for ease of cleaning—is fitted for speedy hot and cold service. The service shelving and tray slide are covered with inlaid linoleum, whilst the main construction is of steel, suitably enamelled. Over 2,000 meals a day are served across it.

The screen is designed, not only to hide an otherwise ugly structural column, but gives cover to a "Bell" automatic Cafe Set.

The counter front is stove enamelled in a delicate shade of oyster and blue; the edging to the tray slide is stainless steel. The menu frame located at the rear swings over to cancel dishes which are 'off' and enables the kitchen staff to change the menu easily. We can design, construct and erect counters to meet your requirements.

Illustrated catalogue available



# BARTLETT

100 YEARS OLD IN 1932

Designers and Manufacturers of

## COOKING & FOOD SERVICE EQUIPMENT

BELL STREET, LONDON. N.W.1. TELEPHONE: PADDINGTON 8222

May we do your bending?



## BENDING LIST

Contract

Location	No of Bars	Size	Bar Mark
Floor Slab		Re	
Top	38	5/8"	462
Reinforcement	5	1/2"	463
	1	1/2"	464
	1	1/2"	465
	5	1/2"	466
	1	1/2"	467
	178	3/4"	468
	6	3/4"	486
Walls	108	5/8"	469

Bending, of course, is only part of the service you'll want from your supplier of reinforcing material, but when we get a specification you can leave it to us to do all that's necessary and to see that you get deliveries on time, in the right order, and bundled and labelled for easy handling on the site.

**GUEST, KEEN & NETTLEFOLDS LTD.**

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CASTLE WORKS AND ROLLING MILLS, CARDIFF. 66, CANNON STREET, LONDON, E.C.4. 111, NEW STREET, BIRMINGHAM.



**When your client needs water from depth . . .** For raising water<sup>™</sup> from 100 ft. or more, the performance of the wet motor submersible pump is so marked that we no longer recommend any other pump for this purpose. Data on performances, power costs, silent operation, flexible switching methods, simple maintenance, compactness and headgear-less installation, will be sent at your request.

**HAYWARD—TYLER**

**wet motor pumps**

for A.C. Mains

*Please enclose penny stamp with enquiry (paper regulations) to Hayward-Tyler and Co. Ltd., Luton, Bedfordshire.*

# PANEL DOORS



*from*  
**GRAYS  
ESSEX**

## **MAGNET JOINERY** LIMITED

WHITLEY STREET, BINGLEY, YORKS  
Telephone 547 (3 lines)

LONDON ROAD, GRAYS, ESSEX  
Telephone 77 (5 lines)

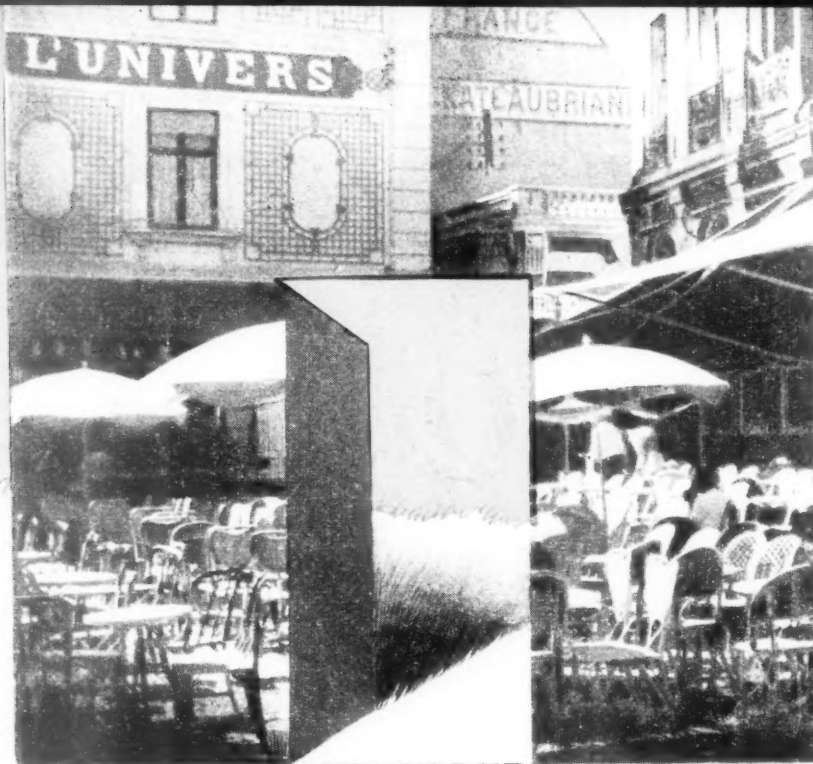
Branches also at  
ANNE ROAD, SMETHWICK, BIRMINGHAM, AND KNARESBOROUGH, YORKS



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## Mat at the door of France

How do you get heavy wheeled vehicles across the sand or shingle that separates the water's edge from firm ground? We built specially designed, flexible concrete landing mats over which military traffic proceeded under its own power, from beach landing craft, almost without getting its feet wet. Looking back over the war years we remember many far bigger and, from a constructional point of view, more important jobs. But the landing mats, like the Mulberry pier pontoons, serve to illustrate the point that we always found the answer when we were asked "Can you do so and so and by such and such a date?" We'll be glad to place our services at the disposal of Architects and Consulting Engineers who are thinking in terms of post-war reconstruction.

**WATES BUILD**

**WATES LTD.** BUILDING & CIVIL ENGINEERING CONTRACTORS

1258-1260 LONDON ROAD, LONDON, S.W.16

TELEPHONE: POLIards 4401 (15 lines)

*Our  
new name  
is*

**DURESCO PRODUCTS LTD**

After seventy-one years of progressive trading we are re-christening ourselves. We have changed the name of our Company from "The Silicate Paint Co., J. B. Orr & Co. Ltd." to "Duresco Products Limited"; our factory address still being Charlton, London, S.E.7.

The reason is simple. Duresco is by now a name well-known to architects, builders and decorators all over this

country — and far beyond it. It is so well-known that it was felt to be in everybody's interest that the old name of the Company (which is a cumbersome one) should now be changed.

We remind you that tint books, literature and price-lists are available on request to Duresco Products Ltd., Charlton, London, S.E.7. Telephone: Greenwich 0034, 5/6.

**DURESCO**

*the King of Water Paints*



# ADAPTABILITY IN WOOD

After five years of high speed launches, motor fishing vessels, dinghies, and other equipment for the Forces, Sadds and their craftsmen are preparing to reorganise themselves for the staircases, windows and joinery work of peace time.



## JOHN SADD & SONS, LTD.

### HIGH-CLASS JOINERY

Windows, Doors, Mouldings, Staircases, Dressers, Kitchen Units

**MALDON**

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Telephone: Maldon 131.

London Office: ALDWYCH HOUSE, W.C.2.

Telephone: Holborn 7225

*Stoneham & Kirk*

# CONSOL

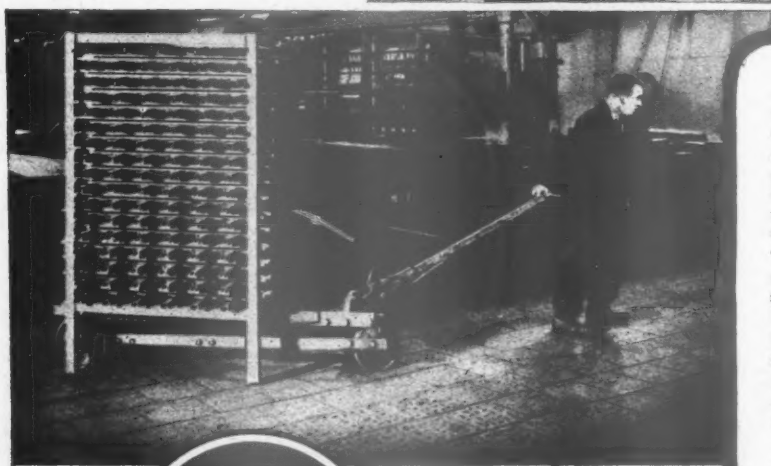
REGD TRADE MARK

## ANCHOR FLOOR PLATES

*"Better with the Helical Anchor & Air Vent"*



The illustration on the right demonstrates the 'unnecessary strain upon personnel caused by a bad floor surface. The illustration below shows how a "Consolplated" floor facilitates the movement of trucks and eliminates fatigue.



"Consol" Anchor Floor Plates provide the ideal flooring for the modern factory.

Composed of 10 gauge steel, the plates are so designed, that, when anchored in the base concrete, a rigid flooring of great strength and durability is obtained.

The Helical Anchors prevent any upward lift, consequently the plates remain rigidly embedded, even when heavy weights are moved over them.

Laying costs are moderate, maintenance expenses are negligible.

No reconstructed or new factory should be without a "Consolplated" floor.

All enquiries to the sole Licensees

**PRODORITE**

LTD

EAGLE WORKS · WEDNESBURY · STAFFORDSHIRE

Phone: WEDnesbury 0284

Grams: 'PRODORITE, WEDNESBURY'

**"FLOORS ARMoured FOR SERVICE"**



TYPICAL THEATRE & CINEMA CONSTRUCTION

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Dawnays specialise in the design, fabrication and erection of bridges, riveted and welded platework of every description. Steel framed buildings — workshops, office blocks, hangars, factories, cinemas, storage bins, tanks, silos, etc., etc., etc.

WORKS: LONDON, NORWICH, SWANSEA, CARDIFF,  
and WELWYN GARDEN CITY.

**DAWNAYS OF BATTERSEA**

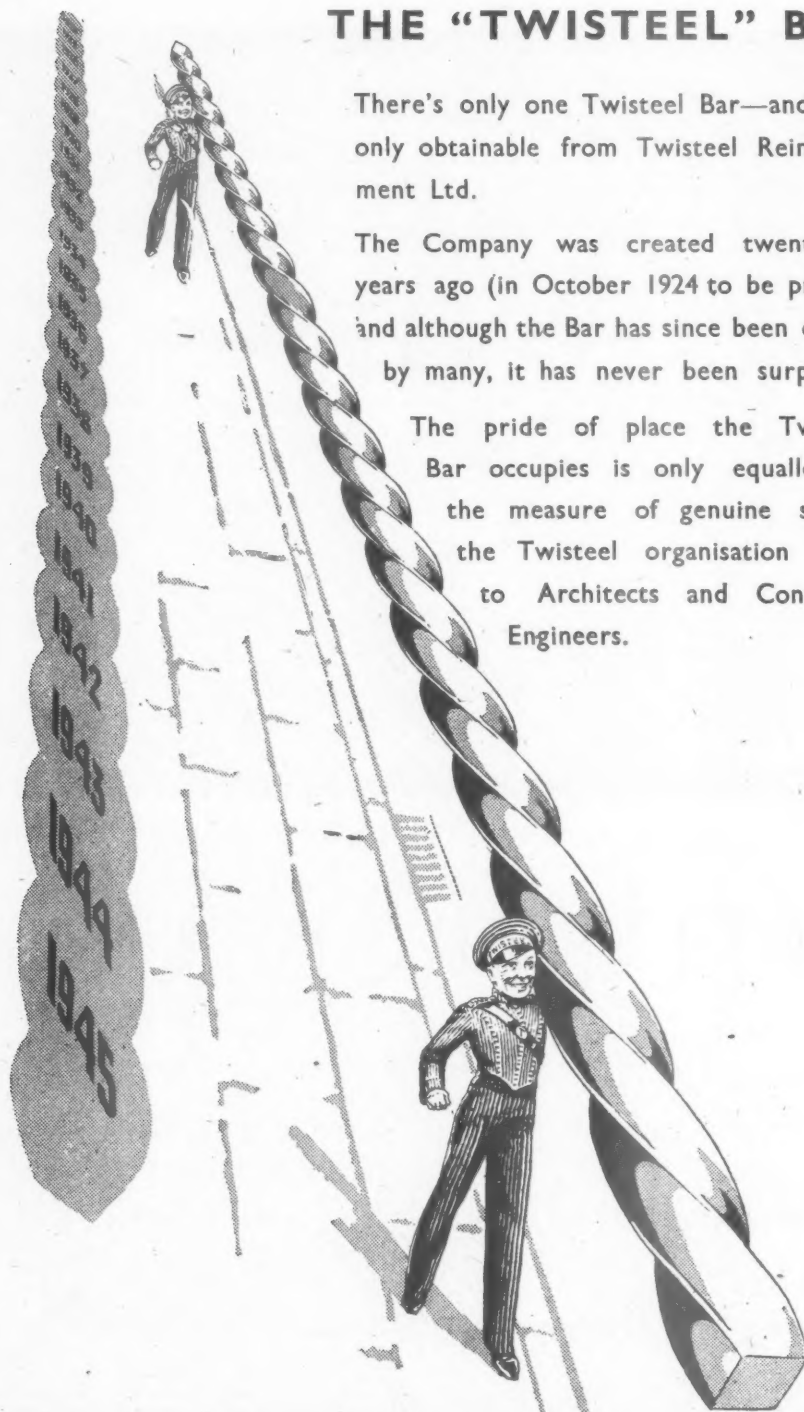
TELEPHONE: BATTERSEA 2525 (6 LINES).

## THE "TWISTEEL" BAR

There's only one Twisteel Bar—and it is only obtainable from Twisteel Reinforcement Ltd.

The Company was created twenty-one years ago (in October 1924 to be precise) and although the Bar has since been copied by many, it has never been surpassed.

The pride of place the Twisteel Bar occupies is only equalled by the measure of genuine service the Twisteel organisation offers to Architects and Consulting Engineers.



**TWISTEEL REINFORCEMENT Ltd., Alma St., SMETHWICK, STAFFS**  
And at London, Belfast, Warrington and Glasgow

Telephone Nos :

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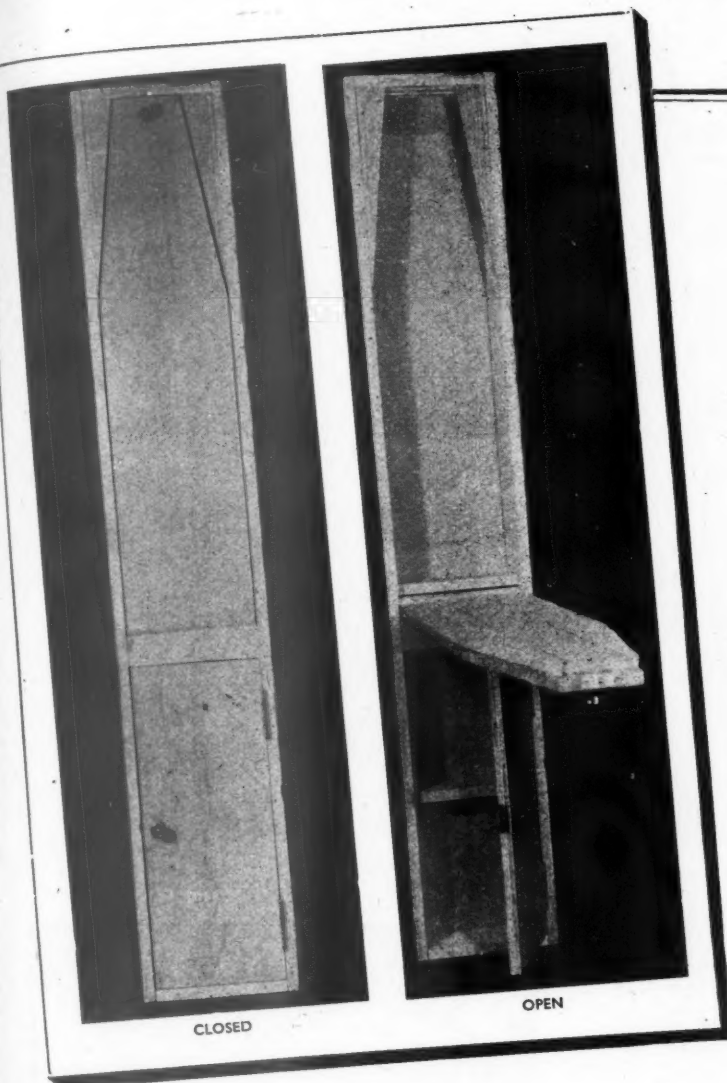
LONDON : SLOANE 4218 (3 LINES)

BELFAST : 24641 (3 LINES)

WARRINGTON : 273

GLASGOW : CITY 7661 (4 LINES)





## *Keep the 'Skeleton' out of the Cupboard*

Skeletons have always been unpopular things, particularly the kind that have to be taken out of the cupboard and put back several times a week, getting their legs tangled with brooms, boots, boxes, and all the other occupants of that cupboard under the stairs. No housewife likes the task of dragging that awkward ironing table out of the cupboard, and in the house of the future it will be quite unnecessary.

## THE "FLAPJACK" IRONING TABLE

(PROV. PAT.)

is built into the kitchen wall during the erection of the house. When closed it lies flush with the wall. When open it provides a sturdy ironing table, securely pivoted and held in position by a rigid stop.

The illustrations above are of the standard design suitable for most requirements. It can be supplied without cupboard at bottom, and we are prepared to vary details where necessary for large housing programmes.

APPLY FOR SPECIFICATION AND PRICES TO:

NEEDS NO ROOM

OPERATED IN A  
SECOND

DOES NOT MARK  
FLOOR

AVOIDS CRUSHED  
FINGERS

### GLIKSTEN DOORS LTD.

CARPENTERS ROAD, STRATFORD, E.15

Telephone :  
AMHERST 4444



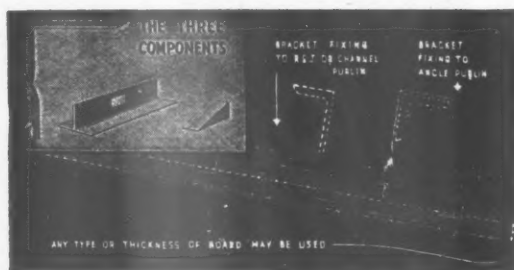
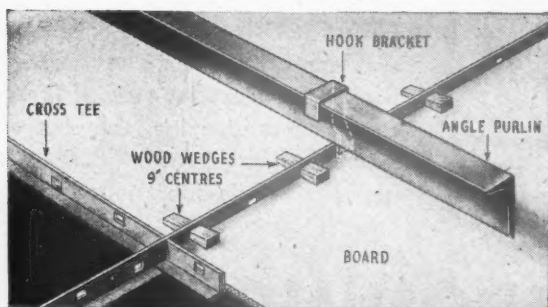
Patent No. 519406

## FOR APPLYING ANY TYPE OF BOARD TO CEILING & WALLS

The Wallboard is secured to sherardised, pressed steel, slotted T-section by wedges. Below are shown the methods of attaching the support to various forms of purlin.



Escalator Tunnel of St. John's Wood Underground Station. Architect: S. A. Heaps.



### 8 POINTS TO BE NOTED

1. Fixed to **UNDERSIDE** of purlins—steel or wood—covering unsightly hook bolts, clips, etc.
2. Assures the insulating value of air-space between roof and underside of purlins. No dust or dirt.
3. Can be fixed to steel or wood purlins of roofs and joists of flat ceiling.
4. No unsightly nail heads showing.
5. Can be applied to new or old buildings of any construction independently of the roofing contractor,
6. who proceeds with his work ahead of the AnD Wedge Method.
7. Any thickness of board can be used, from  $\frac{1}{8}$ " to  $\frac{3}{4}$ ".
8. This method can be used for applying linings to exterior walls.
9. The simplicity of application is such that any contractor can apply the AnD Wedge Method, and the materials making up this method can be purchased by the contractor.

Full particulars, specification and a typical layout will be sent on request

## C. F. ANDERSON & SON, LTD.

### Wallboards for Government Work

HARRIS WHARF, GRAHAM STREET, LONDON, N.I.

TELEPHONE: CLERKENWELL 4582

# **Copperad** *unit heaters*

**ANY STANDARD VOLTAGE  
IMMEDIATE DELIVERY**

**No. 1 "COPPERAD" SERIES OF TECHNICAL  
ANNOUNCEMENTS DEMONSTRATES:**



**TOTALLY ENCLOSED MOTORS.**



**SMOOTH COPPER FINNS TO MINIMISE COLLECTION OF DUST.**



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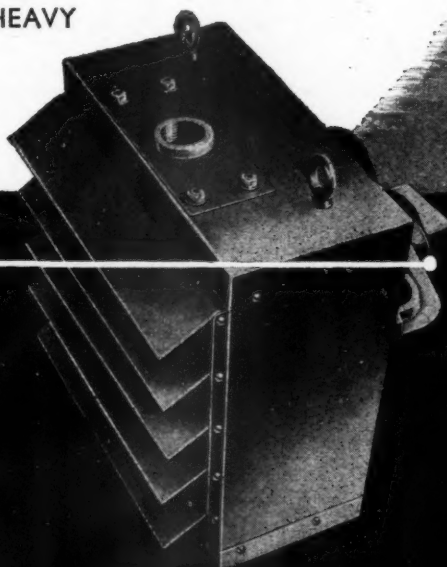
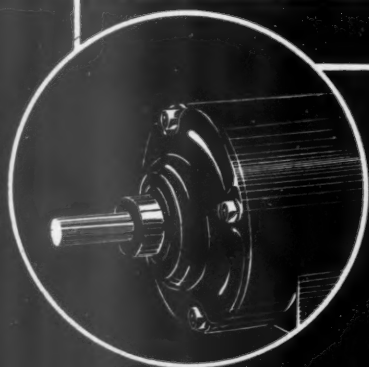
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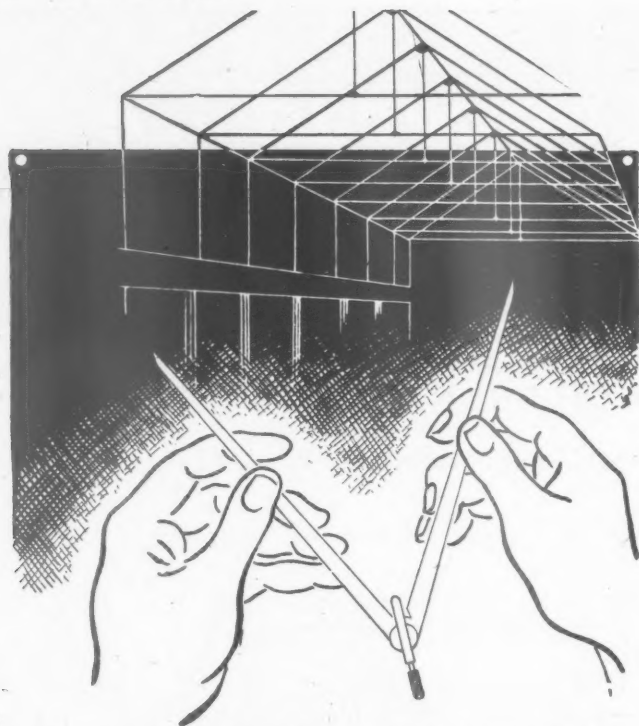
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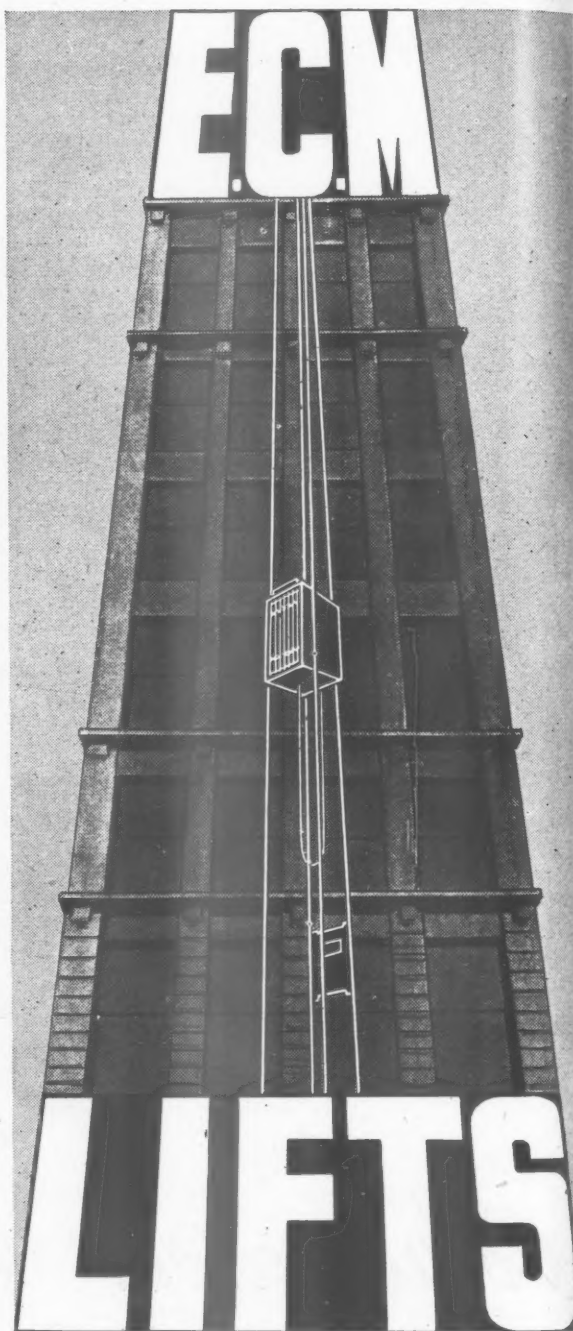
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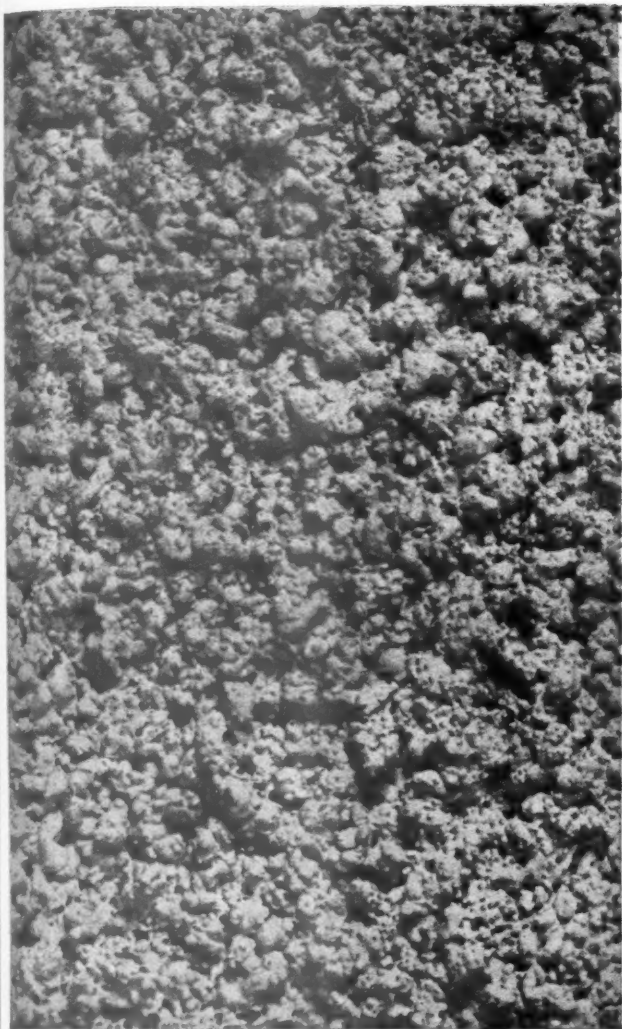
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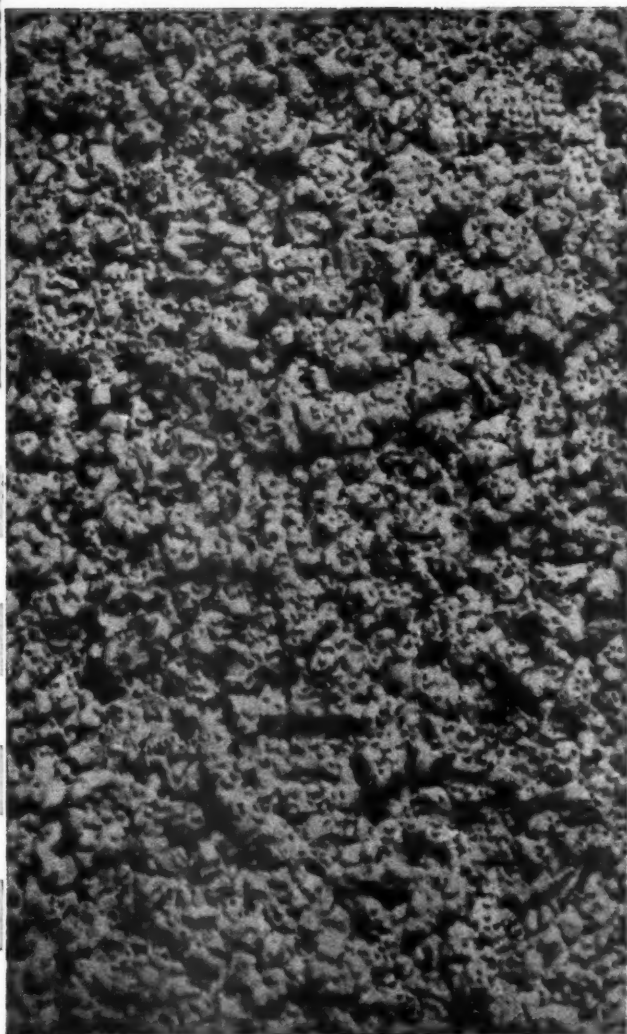


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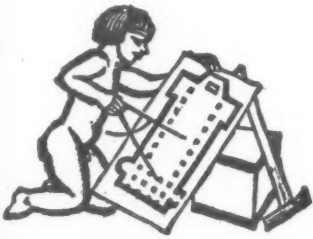
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## DIARY FOR OCTOBER NOVEMBER AND DECEMBER

Titles of exhibitions, lectures and papers are printed in italics. In the case of papers and lectures the authors' names come first. Sponsors are represented by their initials as given in the glossary of abbreviations on the front cover.

**BRISTOL.** *Modern Building Tools Exhibition.* At Black Boy's Hill. (Sponsor, MOW.) Oct. 25-27  
**LONDON.** Sir Charles Tennyson, Chairman, Central Institute of Art and Design. *The Place of the Artist in Industrial Design.* At the Polytechnic, Regent Street, W.1. (Sponsor, The Polytechnic.) 6.30 p.m. Nov. 21  
*Conference on Housing.* At the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1. First session, 2.30 to 4.45 p.m. Address by the Rt. Hon. Aneurin Bevan, Minister of Health. Discussion opened by Thomas Sharp, President of the Town Planning Institute, and Frederick Gibberd. Subjects for session include neighbourhood and site planning, the planning of dwellings and the organization of building works. Tea, 4.45 to 5.30 p.m. Second session, 5.30 to 8.0 p.m. Discussion opened by D. E. E. Gibson, Coventry City Architect, and Professor J. D. Bernal, Chairman of the Scientific Advisory Committee of the Ministry of Works. Subjects include methods of construction, experimental building, and research. Summing-up of the Conference by Kenneth Campbell, President ABT. Tickets from General Secretary ABT, 5, Ashley Place, London, S.W.1, price 2s. (including tea). 2.30 p.m. to 8 p.m. Nov. 3  
*Sculpture in the Home.* At Heal & Son, 195-199, Tottenham Court Road, W.1. (Sponsor, Artists' International Association.) Weekdays, 9 a.m. to 5.30 p.m. Saturdays, 9 a.m. to 1 p.m. Oct. 25-27  
William Allen, Scientific Officer on the Staff of the Building Research Station. *Science in the Construction of Houses.* At the AA, 34-36, Bedford Square, W.C.1. (Sponsor, AA.) 6 p.m. Oct. 30  
*Building Congress.* At the Central Hall, Westminster, S.W.1. (Sponsor, BINC.) Oct. 30-31  
Charles Wheeler, R.A. *Modern Sculpture.* At the Polytechnic, Regent Street, W.1. (Sponsor, the Polytechnic.) 6.30 p.m. Oct. 31  
Donald V. H. Smith. *Town Planning and District Heating.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch 12.45 p.m. to 1.15 p.m. Talk and discussion 1.15 p.m. to 2.15 p.m. Oct. 25  
*Aluminium and Plastics in Building.* Exhibition at Runcolite, Ltd., 3, Vere Street, W.C. (Sponsor, International Plastics, Ltd., in conjunction with Plastic Spray, Ltd., British Artificial Resin Co., Ltd., and the Gas Light and Coke Co.) Oct. 25-Nov. 1

*Should Engineering Concerns be Managed by Engineers?* Discussion at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m. Oct. 29  
*Exhibition of Pencil Drawings by R. Myerscough-Walker.* At the Building Centre, Maddox Street, W.1. Exhibition free. Nov. 5-17  
Dr. F. Saxl. *The Borgia Apartments.* At the Courtauld Institute of Art, 20, Portman Square, W.1. (Sponsor, Courtauld Institute of Art.) 5.30 p.m. Nov. 7  
H. V. Lobb. *Construction of an Underground Factory.* ASB Lecture. At the RIBA, 66, Portland Place, W.1. (Sponsor, RIBA Architectural Science Board.) 5.45 p.m. Nov. 7  
Herbert Woodman. *Design and Textiles.* At the London School of Hygiene, Gower Street, W.C.1. Chairman, Dr. Herbert Read. (Sponsor, DIA.) 7 p.m. Nov. 7  
H. S. Goodhart-Rendel. *Modern Architecture.* At the Polytechnic, Regent Street, W.1. (Sponsor, the Polytechnic.) 6.30 p.m. Nov. 7  
Geoffrey Clark. *Planning an Agricultural County.* At the Planning Centre, 28, King Street, Covent Garden, W.C.2. (Sponsor, TCPA.) Buffet lunch 12.45 p.m. to 1.15 p.m. Talk and discussion 1.15 p.m. to 2.15 p.m. Nov. 8  
E. C. Lennox. *Street Lighting.* At the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. (Sponsor, IEE.) 5 p.m. Nov. 8  
E. B. Gillett. *Presidential Address.* At the Chartered Surveyors' Institution, 12, Great George Street, Westminster, S.W.1. 2.30 p.m. This will be the first time since 1938 that a president has delivered an inaugural address, and the hour of the meeting has been specially arranged to enable country members to attend. New members attending a meeting for the first time are invited to meet in the Library at 2 p.m. prior to the meeting for introduction to the President. Those intending to avail themselves of this opportunity are requested to notify the secretary beforehand. (Sponsor, CSI.) Nov. 12  
Dr. Joan Evans. *Medieval and Renaissance Art in 15th Century France.* At the Courtauld Institute of Art, 20, Portman Square, W.1. (Sponsor, Courtauld Institute of Art.) 5.30 p.m. Nov. 14  
**RUGBY.** *NALGO Exhibition.* At Percival Guildhouse. (Sponsor, BIAE.) Oct. 25-Nov. 3  
**WATH-UPON-DEARNE.** *NALGO Exhibition.* At the Grammar School. (Sponsor, BIAE.) Oct. 29-Nov. 4

## NEWS

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No. 2648. VOL. 102

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Though no feature in the JOURNAL is without value for someone, there are often good reasons why certain news calls for special emphasis. The JOURNAL's starring system is designed to give this emphasis, but without prejudice to the unstarred items which are often no less important.

★ means spare a second for this, it will probably be worth it.

★★ means important news, for reasons which may or may not be obvious.

Any feature marked with more than two stars is very big building news indeed.

**Brighton and Windsor have FOLLOWED BRISTOL'S EXAMPLE** and decided to requisition all suitable premises advertised privately or by public auction with vacant possession. Councillor S. Davey, submitting the report of the Health and Housing Committee to a meeting of Brighton Town Council, said the council should know that the Requisitioned Premises Sub-committee had decided to requisition all suitable premises in the borough which may be advertised for sale privately or by auction with vacant possession. He added: I think it is only fair to tell the council that before we act. Copying Bristol, commented Alderman H. J. Galliers.

**A new idea in the design of block dwellings — A GRANDMOTHER'S FLAT with a connecting door to the family's home — is being brought to the notice of housing authorities by the RIBA.** The flat has been designed to solve the problem when a grandmother ought not to be left to live alone, and yet is unwilling to give up an independent life and to surrender all her furniture. The grandmother has her own bed-living room, with her own entrance, so that she can come in and out as she chooses. She has her own fireside and her own fuel store indoors. A bell-push is provided by the bed to call in the family in case of emergency.

Herbert J. Manzoni, C.B.E., *City Engineer & Surveyor, Birmingham*



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## From AN ARCHITECT'S Commonplace Book

UMBRELLA-STANDS FOR THE GLORY OF CHRISTENDOM. [From The Houses of Parliament, by Hans Wild and James Pope-Hennessy (Batsford).] All his life Pugin regarded beauty and religion as synonymous, and for him a return to Gothic ways implied a return to the simple religious outlook which he conceived to have been universal during the Ages of Faith. The ugly materialistic society around him could only be fought and changed by a return to Christianity and to Gothic architecture. How strange that this simple, earnest creed should have impelled him to complicate ever more tortuously each building, or fitting or detail which he settled down to design. Single-mindedness produces its own peculiar efflorescence. The results of Pugin's anxiety to convert the Victorians by the strong clear light of the fourteenth century are to be found in such objects as the iron Gothic date-markers on the library tables at Westminster, or the curious perpendicular umbrella-stands in the Lobby of the House of Lords.

★ *The RIBA: It is not generally realized that the employment by public bodies of qualified assistant architects to work under another specialist official CANNOT TAKE THE PLACE OF THE INDEPENDENT ARCHITECT who is directly responsible to his employer, the public authority itself.*

This opinion, with which every architect will agree, is given by the RIBA in a memorandum on the employment and status of architects in the design and construction of public building work. For many years the Institute has initiated action in a desire to impress upon the public the need for employing qualified architects if the creation of good architecture and sound building throughout the country is to be assured. The Institute is continuing to do all in its power to make possible the achievement of this objective and, in an endeavour to utilize, to the utmost, all the available resources of the profession, consideration has been given to the methods adopted by public bodies for dealing with architectural building undertaken by them. The memorandum is published as the policy of the Institute and in particular as a guide to the President or other honorary officers in advising government and local government authorities in connection with the employment of architects. Here are some extracts: There are some authorities who continue to encourage a divided responsibility amongst their technical experts. Their schemes are thus brought to completion without the wide co-ordinating supervision of the qualified architect whose authority would ensure technical, economic and aesthetic balance in the result. It is not realized that the employment of qualified assistant architects to work under another specialist official cannot take the place of the independent architect who is directly responsible to his employer—the public authority itself. The architect in such conditions still remains to them an exterior decorator with a possibly fortuitous facility for interior planning. The final disposal of such reasoning lies in the world-wide recognition of the social contribution made by earlier English housing schemes, initiated just before and shortly after the turn of the century and carried out by British architects many years before the more ambitious examples from Europe. The Council is of opinion that the position with regard to employment of private architects or salaried staff under the direction of a qualified architect will depend largely on the convenience and economic circumstances of the employing authority. (a) For an authority needing the services of an architect intermittently, the reasonable course is to employ private practitioners. (b) Where the volume of work of a public authority is continuous, it is economically sound policy

to employ salaried architectural staff provided it is directed by a properly qualified architect. (c) In cases where salaried staffs are employed, it is inevitable that there will be periods of great pressure, and it is felt that this position can best be met by calling on the services of the private practitioner rather than by temporary increases of staff. (d) It is also desirable that official architects should encourage their authorities to employ and consult specialists by the institution of competitions or otherwise, in cases where works and buildings of a specialist character are proposed. (e) It is essential that when private architects are employed, they should be responsible for the contracts they control, but it is desirable also that they should work in the closest collaboration with and under the general direction of the principal architect of the authority concerned. For complete memorandum see page 306.

*The Co-operative Union, Ltd., is offering £100 in COMPETITION FOR THE BEST EMBLEM DESIGN for use on co-operative shops, vehicles, productions, publications, etc.*

The National Co-operative Authority of the Co-operative Union, Ltd., which comprises



*Mr. J. F. Pain, who was in charge of the calculations for the design of Sydney Harbour Bridge, has been appointed a Special Director of Dorman, Long and Co. Three other senior officials, Messrs. G. E. Chicken, F. L. Shepherd and L. Shuttleworth, have also been appointed Special Directors.*

representatives of the Co-operative Union, Ltd., the Co-operative Wholesale Society, Ltd., the Scottish Co-operative Wholesale Society, Ltd., the Co-operative Press, Ltd., the Co-operative Productive Federation, Ltd., and the Co-operative Party, is offering £100 in a competition for the best co-operative emblem which is submitted, provided that in the view of the adjudicators the best entry is deemed to be worthy of adoption as a co-operative emblem. The emblem chosen will be for co-operative use throughout Great Britain on publications, note-paper, invoices, advertisements, productive, distributive, and administrative premises, vehicles, and a wide range of consumer goods comprising mainly foodstuffs, clothing, and household articles, etc.; moreover, the emblem must be capable of reproduction in print, stone, metal, wood, cardboard, and other media of reproduction. An emblem is desired which, of itself, or symbolically, will identify co-operative premises, productions, publications, etc., so that in the public mind the emblem will immediately and strikingly indicate co-operative identity. The following regulations will apply:—(1) The competition is open to all, irrespective of age, occupation, sex, or co-operative membership; (2) entries should be submitted of a size not less than 10 in. by 8 in.; (3) entries may be in black and white, or any other colour or combination of other colours; (4) if in any entry there is an element of symbolism a description of the symbolism should be sent with the entry; (5) all rights of reproduction and use of the entry in respect of which the prize of £100 is paid shall vest absolutely and unconditionally in the Co-operative Union, Ltd.; (6) all unsuccessful entries will be returned to competitors; (7) the last date for submission of entries is December 31, 1945; (8) entries should be sent to the General Secretary of the Co-operative Union, Ltd., Holyoake House, Hanover Street, Manchester, 4, in an envelope or other container endorsed "Emblem Competition"; (9) entries should not be marked in any manner to identify the entrant, but each entry should be accompanied by a form, to be obtained from the Co-operative Union, Ltd., which will be used by the Co-operative Union, Ltd., for identification purposes, before and after adjudication; (10) the Co-operative Union does not bind itself to award the prize offered if in the view of the adjudicators no entry is considered to be worthy of adoption.

*Sir Harry R. Selley has been APPOINTED PRESIDENT OF THE FEDERATION OF MASTER BUILDERS to succeed the late Mr. Charles Boot. Mr. H. A. Maxfield has been appointed Hon. Treasurer.*





## *Trees Create Street Unity—II*

Continuing the short series of examples which illustrate the value of trees in bringing æsthetic unity and organic contrast to architectural geometry in street design, we show this week two streets in Stockholm. Top, a view in the suburban dis-

trict of Angby, spoiled only by the unfortunate telephone poles and wires. Below, a road in the Traneberg district, spacious, uncluttered, dignified, which owes its character largely to the informally spaced pines.

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**Old-established parts of London, says the London Council of Social Service, are in URGENT NEED OF COMMUNITY CENTRES.**

Ten reasons are given by the council. They include, on the one hand, the present lack of halls and rooms for group activities and the almost complete lack of intimate social centres. On the other hand, there will be a demand due to the broadening of education generally, and in particular to the return of men and women from the Forces, and also to the growth in neighbourliness brought about by the war, and the anticipated increase in leisure. Emphasis is laid on the need for community associations as well as for community centres. The council recognises that, for some time, the building of permanent centres will not be possible, but certain preliminary steps can and should be taken at once. There should be consultations in each borough between the borough council, the voluntary organisations and the local education authority; a survey of the needs of the borough; the reservation of sites; the formation of local community associations; and the acquisition of temporary accommodation.

**Mr. Shinwell : We should not be deterred from developing existing forms of fuel and power by speculations on ATOMIC POWER.**

Inaugurating the construction of a new Power Station at Croydon, which, when completed, will be one of the largest in S.E. England, Mr. Shinwell, Minister of Fuel and Power, said: It is essential to provide ourselves with cheap power otherwise our industrial prestige will decline, which in turn is bound to have an adverse effect on our standard of living. There is much speculation at present about the advent of atomic power and its effect on our fuel and power position. Should its development lead to the universal application of cheap power we shall welcome it with open arms, but that should not deter us from development in the sphere of existing forms of fuel and power. The scientists may or may not be right in their speculations, and in any event it would be many years before atomic power, applied to industry, will displace electricity or make it unnecessary to operate our coal mines.



Mr. Hulme Chadwick, the chief designer of the Women's Electrical Exhibition at Dorland Hall, points out a feature to the Duchess of Kent when she opens the exhibition. Photographs of the exhibition appear on pages 302-303.

## READY FOR ACTION

**E** VOLUTIONARY forward leaps can only be made when the leaper is fully prepared, tense and crouched ready for the spring. Studies of the apparently quiescent period before any great advance will uncover a ferment of intense intellectual activity. The vigour of the imminent advances in physical planning owe much, not only to the impetus of the curb and blitz of war, but also to the background research work in the scope and content of physical planning carried out, despite the pressure of war duties, by specialists in many fields who pooled their several skills and each made his special contribution to the composite mind that must inform the planning team.

As well as official bodies such as MOTCP, small groups with this ideal in view have been working in different parts of the country : with Dr. Mears in Scotland, with Max Lock in Hull and Middlesbrough, with the Association for Planning and Regional Reconstruction in London. And recently the stimulating Bristol Summer School sponsored by the Town Planning Institute provided a typical example of the intense intellectual effort now being expended on the theoretical discussion and teaching of the ideals of physical planning—of the experts great hopes for their large-scale practical application in the future. Not only did the new Minister of Town and Country Planning choose this audience of 400 local government officers and research workers to receive his first, and most cheering, utterances as a Minister of the Crown, but the greater part of the week was spent in open and intensive discussions between Government officials and the technicians in the field upon details of the form and content of impending legislation. While no official promises or commitments were implied, it was clear that town clerks, city architects, borough surveyors and university research workers alike all felt that they were being enabled to take a formative part in the new legislation that would guide their future work.

Now an important publication appears as an earnest of the present intense theoretical planning activity. In *Physical Planning*\* the range and purport of the contemporary development of Geddesian planning has for the first time been clearly and agreeably presented as a comprehensive whole to the public. Our readers will remember the series of articles that appeared in the Planning Supplement of the Journal throughout the flying bomb period of the war. They will find that these have gained much by being grouped together in one volume and that the numerous pictures, maps and diagrams that accompany them are a delight to the eye. An annotated bibliography included in the book and compiled by each of the 24 authors, is in itself a unique contribution to planning literature.

Recent books on planning have tended to be dominated by the architectural reconstruction of war-damaged towns. Reference is often made to planning principles and theory and to

\* *Physical Planning*, edited by Ian McCallum (Architectural Press, £1 1s. 0d.)

the value of surveys and research, but these remain but words in the mind of the reader. In this book, writers as eminent and diverse as Dr. W. A. Robson, R. E. Dickenson, Misha Black and L. B. Escritt show the relationships of physical planning with their especial fields of Government, Ecology, Publicity and Utilities, and the contribution that each can make to the planning team. This is the sort of book that will be read with interest by the planner in the field, absorbed in his daily routine of reconciling incompatibles to create a coherent pattern of development, but, more importantly, it is the sort of book that will sharpen the eyes and deepen the understanding of the student generation to whom we look for the interpretation of the paper plans of the wartime workers.

The immediate post-war period is bound to be characterised by much *ad hoc* building. Unless the students of to-day are able to develop the synoptic vision, we may soon have houses, we may even have neighbourhoods, but we shall never have the varied vitality and constructive beauty of towns that have a conscious function to fulfil and a unique contribution to make to the life and art of the nation.

But vision without final action is futile. In lectures, discussions, schools, books and in surveys the theoretical ground has been prepared. We know what has to be done. The crouched leaper is ready. His spring must now be vigorous, true and unfrustrated.



The Architects' Journal

War Address: 45, The Avenue, Chesham, Surrey

Telephone: Vigilant 0087-9

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#### INVESTIGATIONS IN GERMANY

It is common knowledge that, since the German surrender, British technicians and scientists have been visiting Germany to bring back information upon any German developments that can be of use to us. The Building In-

dustry, under the ægis of MOW, has participated—as already noted in THE ARCHITECTS' JOURNAL—and special short-term teams of investigators have been going out during the summer to report upon particular targets such as Glass, Prefabricated Housing (a disappointing target, this one), Clay Products, Soil Mechanics, Contractor's Plant.

These investigations are not to continue through the winter, but will be resumed in the spring. In order to draw up the spring programme of targets to the best advantage, an Assessing Commission has just left this country and will spend 2 or 3 months in Germany to review the whole field of recent German architecture, building and civil engineering. M. Hartland Thomas, M.A., F.R.I.B.A. (representing the RIBA) leads the Commission; Eric White (of Messrs. James Langley, of Crawley) represents the NFBTE; John Mason, B.A., A.M.I.C.E., M.I.STRUCT.E., brings the Civil Engineer's contribution; whilst E. K. Adamson, M.INST.C.E., sometime Director of Plant at MOW, will be on the look-out for matters of interest to the Civil Engineering Con-

tractor. The other architect in the team is R. Llewellyn Davies, B.A., A.R.I.B.A., and E. Loewy, B.S.C., of MOW, is the technical interpreter.

Hartland Thomas tells me that, although the Commission has access to the results of the earlier British (and American) investigations, they will have very largely to find their own programme. The difficulty with so vast a field is to make the right selection. Their job is not to compile a full report upon the German building industry, but to pull out the few plums from a large mass of very plain cake. They will probably begin by interviewing German technicians from Speer downwards. Later they will tour around to make sure that the targets provisionally selected are still standing.

#### LIGHT FROM THE WEST

A report comes from one of Astragal's invisible technical spies of a private exhibition recently held by a Government department at which an extensive range of American fluorescent lighting equipment and lamps were shown for the first time in this country.

Mr. X reports that the exhibition was especially interesting in showing the great development that has recently taken place in fluorescent lighting in the USA. His language is pretty technical but Those Who Know will understand the jargon.

"Lamps in various sizes," he writes, "extending from the miniature 6 watt, 9 inch tube (with neat fitting for inspection purposes) to the 100 watt, 5 feet tube, all fitted with two-pin valve type contacts, show both the variety of application and improvements in mounting of the future. In general, more than one lamp was provided for in each fitting with control gear for 'phase displacement.' Flexibility of fixing was also an outstanding feature, spot-welded 'knock-outs' being provided for suitable selection of fixing centres on site. The chokes were of dimensions which permitted mountings on the fittings without the unsightly protruberances we have seen in this country. Combined starter switches and radio interference suppression condensers, readily replaceable, were a notable feature."

## HOW AMERICA EATS

The menu reproduced below—don't show it to any British factory worker—is taken from *How America Eats*, an illustrated report on American catering methods issued by Messrs. Barkers (Contractors), Ltd.

It is a fascinating document, full of such information as the fact that in America alcohol is seldom drunk with meals, that more Americans eat out, that eggs, salad, fruit and ice are almost unlimited in quantity, that absenteeism among employees is widespread, that prices (and wages) are double those in Britain, that service in such restaurants is slow, that no American worker is resistant to dietetics, and American cooking is undistinguished but superbly presented, and that the "Motel" system, which provides for motorists' accommodation by

the hour, has obvious drawbacks on the management side. One might add to these the evidence of the illustrations that the layout and typography of American menu cards are deplorable.

The ultimate object of the pamphlet—and I can think of none better though I've thought for a good seven seconds—is to improve the general standard of industrial catering in this country. To this end Messrs. Barkers are circulating this number, and the following numbers which are proposed, throughout the industry.

Meanwhile, as you crouch over your five-bob plate of bully beef, with apples to follow, you will find it pleasant reading and a change from the newspapers' warnings about Lend/Lease.

ASTRAGAL



## LETTERS

R. S. Collins

T. W. Carron

(Deputy for Director, Thames Board Mills Limited.)

FORD WILLOW RUN  
DINING ROOM

BOMBER PLANT.

Wednesday, March 21, 1945

## MENU

Fresh Shrimp Cocktail

Cream of Tomato Soup

Spiced Peaches

## CHOICE

Fried Cod Fish Cake, Parsley Sauce

Stuffed Cabbage

Baked Turkey Hash with Poached Egg

Fresh Broccoli

Buttered Carrots

Cottage Fried Potatoes

Waldorf Salad

Rolls

Biscuits

## CHOICE

Butterscotch Cream Pie

Cherry Pie

Pullman Pudding

Fruit Slices

Chocolate Sundae

Choice of Beverage

(All prices listed are our ceiling prices unless otherwise indicated, in which case they are below ceiling prices. By O.P.A. regulation, our ceilings are our highest prices from April 4, to April 10, 1943. Records of these prices are available for your inspection.)

## Mutilating a Model Estate

SIR,—It occurs to me that you might be disposed to give some publicity to the state of affairs in which, as a builder, I find myself at present.

I think it was in the May issue, 1934, that some large photographs were published in *Design and Construction* extolling my estate development. Over a period of about fifteen years I built about three hundred houses on two estates. In 1939 I had about completed one third of an estate, and in that year the Ministry of Health published a brochure entitled *The Houses We Live In*, which contained a number of photographs illustrating the wrong and the right way to design and lay out a housing estate. There were about twenty of the latter shown, of which about eight were taken on my estates, including the only one colour plate, to illustrate correct colour; and the two cover pieces. The photographs were taken without any reference to me and the book was on sale.

Of course I knew, or soon discovered that this kind of development was far less profitable than the ordinary repetition system usually adopted, because the ordinary self-supporting citizen strongly dislikes the idealist layout, because he feels controlled and planned like a council house dweller. Indeed it is the resemblance to council houses that damns it so far as selling is concerned. Moreover, one is up against endless troubles with authorities controlling services, who demand payment for long runs over greens and crescent roads, etc. Residents use vacant areas left for aesthetic reasons, for rubbish dumps from their gardens. However, I persevered, but one result of sluggish sales was that I could not cover the land fast enough, with the result that in 1939 when the estate might have been built up, it was, in fact, only a third covered.

From *How America Eats* discussed by Astragal this week.



# DESIGNS FROM NORWAY



An article in this issue describes contemporary industrial design in Norway. Above are some further typical examples of furniture. Top left, a birch chest of drawers designed by Alf Sture. Top right, dressing table in elm with fittings of matt-finished brass by Bernt Heiberg. Below, sideboard in birch by Alf Sture. All have been designed for quantity production.

So that now in 1945 the local council have come along and found some unbuilt-on land all ready for development and have promptly seized it for temporary houses. Of course, it will never be returned. The fact that it was only a few acres of an uncompleted estate for which their town has received a good deal of compliment and that plans had already been passed was apparently not considered. The whole scheme is to be mutilated; its broadly planned layout to be amputated all for the sake of a few paltry acres whereon, by the way, it is believed to be the intention to house people from the slums; and that on an estate originally scheduled for the self supporting type of black coated worker.

I, personally having disposed of a small-timber business that I was conducting during the war, am now idle and have been so for months. Since last May I have been submitting plans for another small estate further out. So far the Town Planning authority have disapproved these because they show the ordinary builder's development scheme, which they say is too monotonous and ugly. I have told them that as the local pioneer of idealistic development I have found so little encouragement, especially in official quarters—whose practice have been shown not to have the slightest accord with the authorities' precepts—that I am not disposed to invest any more capital in which might be termed "architects' layouts and designs."

Southampton.

R. S. COLLINS

P.S.—It has been urged in justification that the Council must put their houses somewhere, but the fact is that they have ample land on their own partly developed land elsewhere. It seems very significant that the Ministry of Health, with the whole country at their disposal have to come to Southampton for such a large proportion of their photographs, and should then sanction the mutilation of the very estate which they have held up as an example to others to follow.

## Waste Paper Salvage

SIR,—It is not generally known that with the advent of peace, the raw material situation for the Board Industry, on which a very large number of British industries depend for packing and raw material in the form of board, has become more critical than it was during wartime, partly owing to actual shortage of paper which has not yet been made good, and partly owing to the public's natural impression that with the war over the need for national salvage has ceased.

As the largest producers of board in the country and responsible for the output of thousands of tons of board a week, which is urgently required for peacetime industry as well as export, we feel it our duty to give every possible publicity to the facts which are not sufficiently widely known, and we write to you in the hope that you will see your way to lend your aid in drawing attention to the continued importance of waste paper salvage, particularly during the period of reconstruction. It was obviously never more important than now not to waste valuable raw material or to import what can be produced in this country. The local salvage scheme, which has functioned with the encouragement of the Government during the war, is still being continued, but public co-operation is vital to its continued success.

We are not desirous of securing personal publicity, but any reference you make to the matter will help British industry generally, which is suffering severely from a shortage of packing materials, as are other trades—e.g., the book-binding trade—which also employs board as a raw material.

THAMES BOARD MILLS, LIMITED  
(T. W. Carroll)

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*In our issue for September 27, we published an article by Major Davis on the new architecture which he saw in Oslo when on active service in Norway. Now he describes what interested him in contemporary Norwegian industrial design from trams and posters in the street to furniture and fabrics in the home.*



## DESIGN in NORWAY

[by Alec E. Davis]

### IN THE STREET

**Street furniture:** Not only in the main parks, but at every road junction where there are a few trees and a few square feet of grass, you will find white benches. Whether they would be practical in our more smoke-laden English atmosphere I do not know, but they certainly look more attractive than the familiar dark green—and they have the advantage of being easier to find in the dark. The festive atmosphere which they help to create is further helped by the simple, slender lamp-posts common in Oslo's parks and in the newer streets.

**Telephone kiosks** are draughty. Their lower portions are unpanelled, the sides consisting of narrow metal slats with wide open spaces between them. This construction has obvious disadvantages, but at least one advantage: it removes the cause of that unpleasant odour so common in the more solid English 'phone box which

suggests it should be renamed a Public Inconvenience.

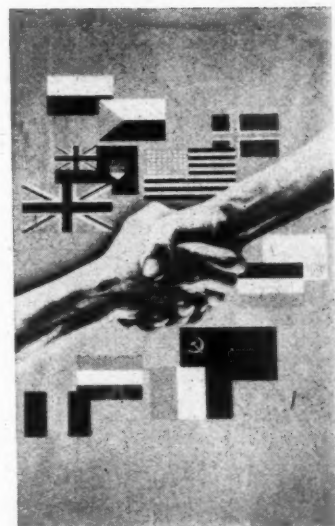
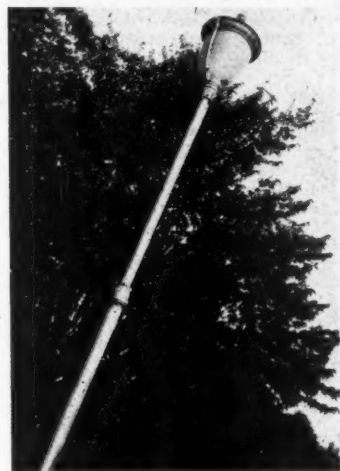
**Street decorations** blossomed for the return of the King and Crown Prince from England, for Allied Forces' Day, for American Independence Day. In Karl Johans Gate—inevitable processional route, Oslo's Regent Street and Mall in one—each event saw a new decorative scheme. On Allied Forces' Day each flagstaff bore (besides a flag of one of the allies) a panel with the portrait of a national leader; the panels were surrounded, and bases of flag-staffs swathed, in fresh greenery placed in position only a few hours before the procession. The whole street decoration for this occasion—including a grand-stand for distinguished onlookers and a triumphal arch in front of the Palace—was planned by a professional display-designer, Ragnvald Iversen.

**Signs:** One's childlike pleasure in seeing red and blue and green neon signs again, after years of blackout, makes a purely æsthetic judgment difficult. Some signs are excellently sited as integral parts of the buildings they adorn, but others have been added to older buildings as an afterthought, ruining many skylines which would otherwise be dignified if not particularly distinguished.

**Window display** has been hampered by the lack of goods to display, but not by lack of important display materials, wood and paper. Oslo display men show their ingenuity in devising displays to arouse interest in articles which do not normally sell on the strength of attractive appearance: hacksaw blades, garden tools, bathhooks or bicycle spares. Styles are less sophisticated and at the same time less orthodox than those of the larger English cities; some exploit local interest—e.g., a series of dress and footwear displays with a sketch of some well-known Oslo landmark forming a background to each window. Many windows in department stores and vacant shops have recently been devoted to non-commercial displays welcoming (a) peace and freedom, and (b) the Allied Forces who made Norway's peace and freedom possible.

**Posters:** The local counterpart of MOI has produced some notable specimens, mostly intended to express gratitude to the Allies and to make the individual Allied soldier feel that he is welcome here. One of the best of these posters tells its story without a word of text: two clasped hands are shown photographically in black and white across a conventionalised background of allied nations' flags, which make a pattern of bright colours. This poster was a popular success—so much so that it appeared in many shop windows as well as on walls and on boards attached to lamp-posts. (There are no hoardings as we know them in Oslo.)

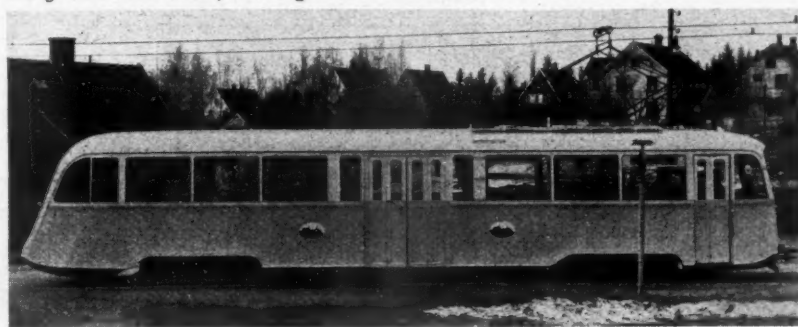
**Packages:** Surface design of printed cartons for foodstuffs, cigarettes, cosmetics and similar consumer-goods is simpler than



ours, but on the average little or no better—and Norway's best package design is well below the standard of Britain's best.

**Trams,** all single-deckers, include a quantity of twin-bogied beaver-tailed monsters, designed and made in Norway by Strømmen Verksted A/S, which would be an eye-opener anywhere in Britain, with the possible exception of Blackpool. I have heard the criticism that these trams are not so good as they look because their great length in relation to their width gives them a tendency to rock from side to side; but

*Top, lamp-post in an Oslo park, typical of contemporary Norwegian industrial design. Above, a poster without words issued by the Norwegian counter part of MOI. Below, one of Oslo's new trams, twin-bogied and beaver-tailed.*



personal experience does not confirm the criticism. The Herrenvolk admired Oslo's streamlined trams so much that they sent a large batch of them home to the Fatherland.

*Motor-cars* are not a Norwegian product, but the streets of Oslo provide an international motor-show wherein can be observed developments of design which have taken place in other countries from which England has been more or less shut off for the last few years. Of German car design as seen here, the most noticeable feature is a tendency to follow American precedents. This is most conspicuous in the Opel, which comes from a German factory that was once American-controlled. The Opel *Kapitän* roadster, for instance, might have been driven straight out of the coloured advertisement pages of the *Saturday Evening Post*.

In every country, the radiator has been such a dominant feature of coachwork design for many years that the lines of the rest of the car have been subservient to it; but American designers since 1939 have reduced it to a grille which is merely one component of the whole and may be of any shape required—tall and narrow, broad and low, or split into two or three sections. The resulting lines are still unfamiliar to English eyes but not always displeasing; in fact, the newer American cars are good to look at not only from the front but from the rear or from above or, as Runyon would say, "every which way."

To lapse for a moment into economic nationalism: the present-day Norwegian takes streamlined trams and streamlined prams alike for granted, and if you talk to him about British cars he is liable to make angular gestures with the hand and say, "Ah, but your cars—they are *not* streamlined." If you could show him a few Jaguars or MG's or the larger Wolseley coupés, it might be possible to change his opinion; but there isn't much you can show him except Baby Austins of the model before the one before the last—which is poor propaganda for that export trade about which our politicians talk so often.

## IN THE HOME

*Pottery*: Quantities on sale are very limited, shapes good, surface design unexciting. For years such celebrated marks as Porsgrunn have appeared on thick, heavy mugs made (at the pistol's mouth) for the German soldiery, and I don't think the industry has yet recovered from this setback. A few studio potters continued to do good work during the war—some even made pottery after they'd been put

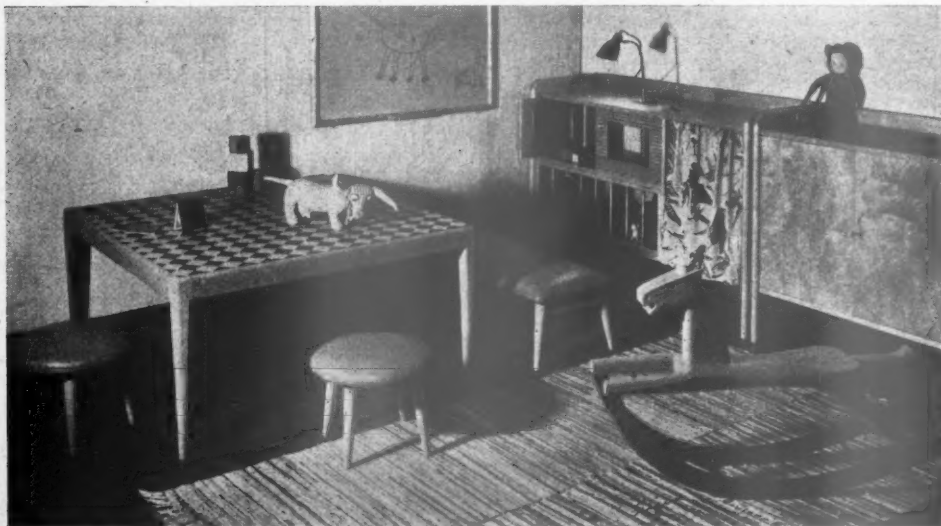
away in Grini concentration camp—but their output is insignificant in quantity however high its artistic quality.

*Silverware* is good but scarce. The Norwegian who wishes to buy silver must hand over to the silversmith a quantity of the metal equal in weight to the article he is buying. There is less mass production of silver and plate than in Sheffield or Birmingham, but the total productive capacity of the craftsmen in silver and the small workshops is high, as there seem to be two or three silversmiths' shops in every street and many of them are manufacturers as well as shopkeepers. During the war the shortage of silver has forced them to experiment in combinations of silver with other materials, including wood and glass. The results are interesting and often attractive—e.g., in cigarette boxes of wood inlaid with silver decoration and standing on feet of cast silver.



*Furniture*: As in England, so in Norway there is a minority of small, progressive manufacturers setting a high standard of design. One such firm which has developed considerably during the thirteen years of its existence is Hiorth og Ostlyngen. Most of their recent work has been designed by Alf Sture, and ranges from elaborate hand-made cabinets to inexpensive chairs, desks and tables produced by machinery in considerable quantities. Birch is probably the material used most widely in Sture's designs, but he has during the war made considerable use of fir—one of the few woods in Norway's own vast forests which are considered suitable for good-quality furniture.

As for covering materials, when Hiorth og Ostlyngen first started making furniture, the selection available in Norway was so poor that the only way they could get well-designed fabrics was by having them made



Above, an example of fine craftsmanship designed by Alf Sture; the cupboard doors are veneered outside with birch inlaid with strips of mahogany and inside with black pearwood inlaid with a design in white; the flap is surfaced with a plastic sheeting. Left, nursery furniture of birch designed by Bernt Heiberg; the table top is of blue and white lino and the seats are of red leather.

Above, a rocking chair designed by Aalto. The top of the chair is made of birch.



Above, an occasional table in birch by Alf Sture. Below, left top, an inexpensive rocking chair in birch and basketwork of string made from paper by Alf Sture. Below, left bottom, sewing table in fir by Alf Sture; the fabric was designed by Mrs. Alvar Aalto. Below right, furniture in ash designed by Bernt Heiberg; the table has a lino top and the chair has seat and arms covered in mustard yellow leather.



especially; and they had just got their sources of supply well organised when the war came along and almost put paid to the whole of the country's textile industry.

Hjørth og Ostlyngen (who, incidentally, hold the Norwegian manufacturing rights for furniture designed by Alvar Aalto) have their own retail shop in Oslo, and in addition sell through other retailers in the larger provincial towns.

There is a great gulf fixed between the progressive furniture designers, working in firms such as this or as free-lances, and the really large-scale manufacturers, but at present industry is showing some interest in bridging the gulf; for example, one factory is contemplating the quantity production of furniture designed by Bernt Heiberg, an architect who is also a furniture designer and has had considerable success with individually-designed pieces, mostly in light-coloured woods contrasting with bright leather seat-coverings or coloured lino table-tops. Though maintaining a contemporary style, his later work is not uninfluenced by English furniture of the eighteenth-century golden age.

Toys in Norway are invariably well-made when wood is their basic material. Illustrated with Heiberg's furniture is a rocking-horse, stoutly made in birch, which seems admirably suited to mass production. The Norwegians in general are born carpenters, and their workmanship is good whether in detailed scale models-or in cheap toys designed to catch the pennies of foreign visitors.



# PRICES

Rates of Wages rose on July 1, 1945, and are now as follows:—

## LONDON DISTRICT

Within 12 miles radius .. ..  
From 12-15 „ „ .. ..

## Craftsmen.

2s. 3½d.  
2s. 3d.

## Labourers.

1s. 10d.  
1s. 9½d.

## GRADE CLASSIFICATIONS

	A	A <sup>1</sup>	A <sup>2</sup>	A <sup>3</sup>	B	B <sup>1</sup>	B <sup>2</sup>
Craftsmen..	2s. 2d.	2s. 1½d.	2s. 1d.	2s. 0½d.	2s. 0d.	1s. 11½d.	1s. 11d.
Labourers..	1s. 9d.	1s. 8½d.	1s. 8d.	1s. 7½d.	1s. 7d.	1s. 7d.	1s. 6½d.

*W.Davis*

F.S.I., F.I.A.

# CURRENT MARKET PRICES OF MATERIALS

BY DAVIS, BELFIELD AND EVEREST,

Chartered Quantity Surveyors.

Prices vary according to quality and the quantity ordered. Those given below are average market prices and include delivery in the London area, except where otherwise stated, but do not include overhead charges and profit for the General Contractor.

## CONCRETOR

### Cements

† All delivered in paper bags (20 to the ton) free.  
\* Paper bags or non-returnable jute sacks charged at 7/- extra per ton.

	6 Tons and over	In 80-ton freights F.A.S. Safe Wharf In River Thames, London Area.
*Portland .. ..	per ton 57/-	54/6
*"417" Ultra rapid hardening .. ..	per ton 78/6	—
*Rapid hardening .. ..	per ton 83/-	80/6
*Water repellent .. ..	per ton 88/6	—
Atlas White (1 barrel 376 lb.) .. ..	per barrel —	6 ton upwards
*Colorcrete rapid hardening, buff and red .. ..	per ton 98/6	98/6
*Colorcrete rapid hardening khaki .. ..	per ton —	98/6
†Colorcrete rapid hardening dark .. ..	per ton —	—
†Colorcrete non-rapid hardening .. ..	per ton from 176/- to 400/6	—
†Snowcrete .. ..	per ton 226/6	—
*Ciment Fondu, delivered Central London area .. ..	1-9 cwt. 15/3 10-19 cwt. 14/9 1 ton and upwards per ton 254/-	—

### Aggregate and Sands (Full Loads)

2" Unscreened ballast .. ..	per yard cube 12/4
½" (Down) Washed, crushed and graded shingle .. ..	per yard cube 13/1
½" (Down) Ditto .. ..	per yard cube 14/1
2" Broken brick .. ..	per yard cube 14/6
½" Ditto .. ..	per yard cube 16/-
Washed pan breeze .. ..	per yard cube 9/6
Coke breeze 1" to dust .. ..	per yard cube —
½" Sharp washed sand .. ..	per yard cube 14/7
White Silver Sand for white cement (one ton lots) .. ..	per yard 40/-

(For Sands for Bricklaying and Plastering see respective trades)

### Pavings

Brick hardcore .. ..	per yard cube 7/-
Concrete ditto .. ..	per yard cube —
Clean furnace clinker and boiler ashes .. ..	per yard cube 3/-
Coarse gravel for paths .. ..	per yard cube —
Fine ditto .. ..	per yard cube —
Clean granite chippings .. ..	per ton 39/2

## CONCRETOR—(continued)

### Pavings—continued

Red quarry tiles, 6" × 6" × ½" .. ..	per yard super 8/6
Ditto 6" × 6" × ½" .. ..	per yard super 7/6
Buff ditto 6" × 6" × ½" .. ..	per yard super 9/6
Ditto 6" × 6" × ½" .. ..	per yard super 8/6
Hard red paving bricks, 2" .. ..	per 1,000 245/-
Ditto 1½" .. ..	per 1,000 225/-

### Reinforcement

Home trade maximum basis price for mild steel rods, ½" diameter and upwards, ex mills delivered to station or siding .. ..	per ton £16 10 6
Extras for:—	
Under ½" to ¾" diameter .. ..	per ton 10/-
Ditto ¾" and over ¾" diameter .. ..	per ton 15/-
½" and over ½" diameter .. ..	per ton 20/-
¾" and over ¾" diameter .. ..	per ton 25/-
1" and over 1" diameter .. ..	per ton 30/-
1½" and over 1½" diameter .. ..	per ton 35/-
2" diameter .. ..	per ton 40/-
Under 2" to 2½" .. ..	per ton 60/-
Lengths over 40 ft. to 45 ft. .. ..	per ton 10/-
" " 45 ft. to 50 ft. .. ..	per ton 15/-
" " 50 ft. (as 50 ft. plus per ft.) .. ..	per ton 1/6

### Sundries

Retarding liquid, in 5-gallon drums (for exposing aggregate) .. ..	per gallon 23/-
Ditto (for obtaining a bond) .. ..	per gallon 14/4
Ex Warehouse, Southwark Bridge Drums chargeable and credited, if returned.	

## BRICKLAYER

### Common Bricks

†Rough stocks .. ..	per 1,000 —
†Third stocks .. ..	per 1,000 —
†Mild stocks .. ..	per 1,000 —
Sand limes .. ..	per 1,000 —
†Phorpres pressed Flettons .. ..	per 1,000 65/-
†Phorpres keyed Flettons .. ..	per 1,000 65/-
Blue Staffordshire wirecuts .. ..	per 1,000 306/9
†Lingfield engineering wirecuts (ex works) .. ..	per 1,000 100/-
Firebricks, best Stourbridge 2½" .. ..	per 1,000 410/-
Firebricks, best Stourbridge 3" .. ..	per 1,000 520/-

### Facing and Engineering Bricks

Sand Limes, No. 1 .. ..	per 1,000 —
Sand Limes, No. 2 .. ..	per 1,000 —
†Phorpres rusto Flettons .. ..	per 1,000 83/-
† At King's Cross (Maiden Lane) Stn. For delivery in W.C. district add 10/- per 1,000.	

## BRICKLAYER

Midhurst W  
Hard stock  
Hard stock  
Sand-faced,  
Sand-faced,  
Red rubbers  
Uxbridge F  
Uxbridge F  
1,000  
†Dunbriks (pressed)  
†Dunbriks (pressed)  
†Southwater (pressed)  
Blue preses

Lime, grey  
Lime, chalk  
Lime, blue  
Lime, hydr  
Washed pit  
(For cem  
Hire of ju  
at 1/9.

Wall ties,  
Wall ties,  
D.P.C. slat  
D.P.C. slat  
D.P.C. slat  
†Ledkore I  
†Ledkore I  
†Ledkore I

† Trade  
include del  
Airbricks:  
Red and  
cotta ..  
Black cast  
Board pe  
Galvanized  
Black hit  
iron ven

Galvanized  
Buff terra  
pota ..  
Fireclay  
Wall reinf  
2½" wide b  
2½" wide g  
2½" wide  
2½" wide

Clinker  
Pumice  
Hollow Bl  
Plaster  
†1" Wood  
†2" Wood  
†3" Wood  
† Price

Straight b  
Backing b  
Cover blo  
Raking bl  
Raking bl  
Offset blo  
Closer blo  
Closer flas  
Straight f  
Terminal  
Middle ter  
End term  
Corbel blo  
Gathering



**BRICKLAYER—(continued)***Facing and Engineering Bricks—continued.*

Midhurst Whites .. .. .	per 1,000	—
Hard stocks, firsts .. .. .	per 1,000	—
Hard stocks, seconds .. .. .	per 1,000	—
Sand-faced, hand-made reds .. .. .	per 1,000 from	227/6
Sand-faced, machine-made reds .. .. .	per 1,000 from	—
Red rubbers (9½-in.) .. .. .	per 1,000	—
Unbridge Flints (white) .. .. .	per 1,000 from	99/-
Unbridge Flints (creams, light greys, etc.) .. .. .	per 1,000 from	130/-
Dunbriks (concrete), greys or Commons .. .. .	per 1,000	67/-
Dunbriks (concrete), various colours .. .. .	per 1,000	—
Southwater engineering No. 1 (first quality red pressed) .. .. .	per 1,000	160/-
Southwater engineering No. 2 (second quality red pressed) .. .. .	per 1,000	140/-
Blue pressed .. .. .	per 1,000	334/3

† Price ex works, delivery extra.

*Limes and Sand*

	1-ton lots	6-ton lots
Lime, greystone .. .. .	per ton	67/-
Lime, chalk .. .. .	per ton	67/-
Lime, blue Lias (including paper bags) .. .. .	per ton	—
Lime, hydrated (including paper bags) .. .. .	per ton	73/-
Washed pit sand .. .. .	per yard cube	13/6

(For cements, see "Concrete.")

Hire of jute sacks charged at 1/6 and credited at 1/6. If left charged at 1/9.

*Sundries*

Wall ties, self coloured .. .. .	per cwt.	—
Wall ties, galvanized .. .. .	per cwt.	—
D.P.C. slates, size 18" x 9" .. .. .	per 100	46/3
D.P.C. slates, size 14" x 9" .. .. .	per 100	39/9
D.P.C. slates, size 14" x 4½" .. .. .	per 100	10/9
Ledkore D.P.C. Grade A .. .. .	per foot super	8½d.
Ledkore D.P.C. Grade B .. .. .	per foot super	10½d.
Ledkore D.P.C. Grade C .. .. .	per foot super	1/-

† Trade discount 5 per cent. and cash discount 5 per cent. Prices include delivery on minimum of £5 orders.

Airbricks:	9" x 3"	9" x 6"	9" x 9"	12" x 9"	14" x 9"
Red and buff terra cotta .. .. .	each 1/-	2/1	4/7	—	12/7
Black cast iron, School Board pattern airbricks .. .. .	9" x 3"	9" x 6"	9" x 9"	12" x 9"	12" x 9"

Galvanized ditto per doz. .. .. .	—	—	—	—	—
Black bit and miss cast iron ventilators .. .. .	—	—	—	—	—
Galvanized ditto per doz. .. .. .	—	—	—	—	—

Buff terra cotta chimney pots .. .. .	1' 0"	1' 6"	2' 0"	2' 6"	3' 6"	5' 0"
.. .. .	each 4/1	4/10	7/-	9/4	21/4	36/5

Fireclay .. per ton 75/-  
Wall reinforcement supplied in standard rolls containing 25 yards lin.

*2" wide black japanned .. .. .	per roll	2/5	} Greater widths pro rata 2½" price carriage paid on orders of £5. Discounts for quantities
*2" wide galvanized .. .. .	per roll	—	
*2½" wide black japanned .. .. .	per roll	3/-	
*2½" wide galvanized .. .. .	per roll	—	

*Partitions, etc.*

	2"	2½"	3"	4"
Clinker .. .. .	per yard super	2/11	3/4	3/10
Fumice .. .. .	per yard super	5/6	6/6	—
Hollow Block .. .. .	per yard super	2/10	3/1	3/8
Plaster .. .. .	per yard super	5/2	5/10	7/1
11" Wood-wool Slabs .. .. .	per yard super from	4/2	4/10	—
12" Wood-wool Slabs .. .. .	per yard super from	6/7	7/6½	—
13" Wood-wool Slabs .. .. .	per yard super from	8/6	9/8½	—

† Prices according to quantity ordered. 2½% Cash Discount.

*Gas Flue Blocks*

	Single Flues.	Double Flues.
Straight blocks .. .. .	each 1/4	2/5
Backing block .. .. .	per set of 3	3/3
Cover blocks .. .. .	each 1/8	3/6
Raking blocks 45° .. .. .	each 3/2	4/11
Raking blocks 60° .. .. .	each 2/2	3/5
Offset blocks .. .. .	each 3/10	5/4
Closer blocks .. .. .	each 1/4	2/5
Closer flashing blocks .. .. .	each 1/1	1/10
Straight flashing blocks .. .. .	each 1/1	1/10
Terminal and cap .. .. .	per set	7/3
Middle terminal and cap .. .. .	per set	6/9
End terminal and cap .. .. .	per set	7/-
Corbel block .. .. .	each 5/4	10/9
Gathering block .. .. .	each —	3/7

**DRAINLAYER***Land Drain Pipes*

	2"	3"	4"	6"
Pipes in 12" lengths .. .. .	per 1,000	77/6	110/-	147/6

(Delivered in full loads Central London Area.)

*Salt Glazed Stoneware Pipes and Fittings*

	4"	6"	9"
Pipe (2' lengths) .. .. .	each 1/8	2/6	4/6
Bends, ordinary .. .. .	each 2/6	3/9	6/9
Single Junction, 2' long .. .. .	each 3/4	5/-	9/-
Yard Gully, without grating .. .. .	each 6/3	6/10½	11/3
Ordinary round or square Grating, painted .. .. .	each -7½	1/3	2/6
Ordinary round or square Grating, galvanized .. .. .	each 1/0½	2/1	4/4½
Extra for Inlets, horizontal .. .. .	each 1/6	1/6	1/6
Extra for Inlets, vertical .. .. .	each 2/3	2/3	2/3
Intercepting Trap with Stanford Stopper .. .. .	each 17/6	22/6	37/6
Grease and mud interceptor with bucket for removing silt and grease for 6", 9" and 12" drains, with iron grating, painted .. .. .	each	20/-	—
Ditto, with iron grating galvanized .. .. .	each	21/10½	—

The above prices to be varied by the following percentages for the different qualities given. All subject to 2½ per cent. cash discount.

	British Standard	British Standard Tested
Orders for 2 tons and over .. .. .	Plus 15%	Plus 40%
Orders under 2 tons, 100 pieces upwards .. .. .	Plus 32½%	Plus 57½%
Orders under 2 tons, less than 100 pieces .. .. .	Plus 42½%	Plus 71½%
Orders for 2 tons and over .. .. .	Best Plus 7½%	Seconds Subject to 15% off the price of best quality for all sizes.
Orders under 2 tons, 100 pieces upwards .. .. .	Plus 25%	—
Orders under 2 tons, less than 100 pieces .. .. .	Plus 35%	—

*Cast Iron Drain Pipes and Fittings*

Socket and Spigot Pipes:—	Weight (per 9 ft.)	Size	9 ft.	6 ft.	4 ft.	3 ft.
1. 1. 8	4"	per yard ..	8/7	9/7	15/4	11/7
1. 1. 17	4"	per yard ..	8/11	9/11	15/8	12/-
2. 0. 1	6"	per yard ..	13/3	15/9	20/8	20/3
3. 3. 21	9"	per yard ..	24/-	31/6	54/7	41/7
1. 1. 8	4"	each ..	9/7	8/1½	7/6	6/9
1. 1. 17	4"	each ..	9/10	—	—	—
2. 0. 1	6"	each ..	15/3	—	—	—
3. 3. 21	9"	each ..	—	—	—	—

*Tonnage Allowances:—*Orders up to 2 tons nett.  
Orders 2 to 4 tons less 2½%.  
Orders 4 tons or over less 5%.

	4"	6"	9"
Bends (short radius) .. .. .	each 8/5	17/6½	53/11
Single junctions .. .. .	Fig. No. 18 each	14/10	30/4
Intercepting traps .. .. .	each 40/5	67/5	165/9
Gulleys ordinary trapped "P" .. .. .	each 19/6½	—	—
Extra for inlet 4" .. .. .	each 10/1	—	—
Grease Gully trap .. .. .	each 160/8	—	—
H.M.O.W. large socket gully trap with 9" gully top and heavy grating and one back inlet .. .. .	each 35/4	63/-	—

*Channels in Brown Glazed Ware*

	4"	6"	9"
Half round straight channels 24" long .. .. .	each 1/3	1/10½	3/4½
Half round straight channels 30" long .. .. .	each —	—	4/2½
Ditto, short lengths .. .. .	each 1/3	1/10½	—
Half round ordinary channel bends .. .. .	each 1/10½	2/9½	5/0½
Ditto, short .. .. .	each 1/10½	2/9½	—
Ditto, long .. .. .	each 3/9	5/7½	10/1½
Three-quarter round branch bends .. .. .	each 5/-	7/6	—
Half round taper channels 24" long .. .. .	each 3/9	6/9	—
Half round taper channel bends .. .. .	each 4/8½	8/5½	—

The above prices are subject to the same discounts as those given for "Best" quality salt glazed stoneware pipes.

*Manhole Covers, etc.*

	Black Galvanized
†24" x 18" single seal for foot traffic. (Weight 0.0.3 in lots of 24) .. .. .	each 19/3
†24" x 18" single seal for light car traffic. (Weight 2 cwt. in lots of 24) .. .. .	each 49/7
†24" x 18" Wood Block pattern. For road traffic. (Weight 3 cwt.) .. .. .	each Coated 79/3

**DRAINLAYER—(continued)***Manhole Covers, etc.—(continued)*

	Fine Cast	Galv.
† Cast iron steps, 13½" long, 6" wide, 9" in wall, approximate weight 5½ lb. each .. per dozen	17/4	28/11
† Galvanized fresh air inlets with cast brass fronts (L.C.C. pattern) .. each	4" 7/7	6" 31/-

† These prices are subject to 7½% advance.

**MASON***Yorkstone*

Building quality Robin Hood and Woodkirk Blue Stone.		
Blocks scrapped, random sizes .. .. per foot cube		6/6½
Add for blocks to dimension sizes .. .. per foot cube	8½d. (each dimension)	
Templates with sawn beds, edges rough (up to 4 ft. super and not over 2' 6" long) .. .. per foot cube	7/3	
Templates with sawn beds, sawn one edge, .. .. per foot cube	8/8½	
Templates with sawn beds, sawn two edges, .. .. per foot cube	10/1½	
Price f.o.r. Yorkshire, railway rate to London Station per ton. (Minimum 4-ton loads.)	29/1	

*Artificial Stone*

6" x 3" Copings and sills .. .. per foot run	2/3
6" x 6" Copings and sills .. .. per foot run	3/6
9" x 3" Copings and sills .. .. per foot run	2/9
9" x 6" Copings and sills .. .. per foot run	5/-
12" x 3" Copings and sills .. .. per foot run	3/6
12" x 6" Copings and sills .. .. per foot run	6/-
Cornices according to detail, per foot cube (from)	10/9

**SLATER, TILER AND ROOFER***Best Bangor Slates*

	£	s.	d.
24" x 12" .. .. per 1,000 actual	—	—	—
20" x 10" .. .. per 1,000 actual	—	—	—

Prices include for delivery to site in lots of 1,000 and upwards.

*Tiles*

	£	s.	d.
Hand-made sandfaced 10½" x 6½" red roofing tiles .. per 1,000	—	—	—
Machino-made sandfaced 10½" x 6½" red roofing tiles .. per 1,000	—	—	—
Berkshire rustic pantiles .. .. per 1,000	—	—	—

*Asbestos-cement*

6" corrugated sheets, grey .. .. per yard super	3/5
Standard 3" corrugated sheets, grey .. .. per yard super	3/1½
Slates ( <i>Manufacture temporarily suspended</i> ):—	
* 15½" x 7½" grey .. .. per 1,000	£7 6 0
* 15½" x 15½" diagonal, grey .. .. per 1,000	£14 12 0
* 15½" x 15½" diagonal, russet or brindled .. .. per 1,000	£23 12 6
Pantiles ( <i>Manufacture temporarily suspended</i> ):—	
* Large russet brown .. .. per 1,000	—

\* Prices are for minimum two-ton loads, and are subject to 5% trade discount.

**WALLBOARDS, Etc.**

½" Insulating board .. .. per yard super	2/4½
½" Building board .. .. per yard super	2/0½
½" Standard hard board .. .. per foot super	-4½
Do. .. .. per foot super	-5½
½" Tempered hard board .. .. per foot super	-5½

*Laminated Wallboard*

½" Thickness (standard):	
1 bundle up to 2,500 sq. ft. .. .. per foot super	-2½
2,500 sq. ft. to 5,000 sq. ft. .. .. per foot super	-2½
5,000 sq. ft. and over .. .. per foot super	-2

*Asbestos-cement and Asbestos Products*

† ½" Semi-compressed flat building sheets, grey .. .. per yard super	1/6½
† ½" Ditto .. .. per yard super	1/7
† ½" Ditto .. .. per yard super	2/3½

† Prices are for orders of two tons and over and are subject to 5% trade discount.

½" Asbestos wallboard (in sheets 8' 0" x 4' 0"), .. .. per foot super	-5
½" Ditto .. .. per foot super	-4
½" Asbestos wood (in sheets 8' 0" x 4' 0") .. .. per yard super	2/6½

\* Prices are for orders of 2 tons and over.  
The following asbestos prices are for minimum 1-ton lots and are subject to 10 per cent. trade discount:—

Asbestos-cement stipple glazed sheets (in sheets 8' 0" x 4' 0") .. .. per yard super	8/8
Marble glazed sheets (in sheets 8' 0" x 4' 0") ( <i>Manufacture temporarily suspended</i> ) .. .. per yard super	—

**WALLBOARDS, Etc.—(continued)***Asbestos-Cement and Asbestos Products—(continued)*

½" Asbestos Insulating Board .. .. per foot super	—
	25-75 150-300 Over 600
	yards yards yards
½" Fireproof plaster board .. .. per yard super	2/7 2/3 1/11
½" Ditto .. .. per yard super	2/5 2/1 1/9
Joint tape .. .. per 100 yard roll	— 7/6
Joint filler .. .. per lb.	— -4

*Sundries*

Slaters or sarking felt .. .. per yard run	-10
Roofing felt (1-ply bitumen) .. .. per yard sup.	1/1½
Bituminous hair felt .. .. per roll	58/-

All rolls 25 yards long by 32" wide.

Building paper, 50" wide (B.I. 20) .. .. per yard run	1/1
(K. 40) .. .. per yard run	-5½
"Cabots" Quilts:—(Ex Works) Twenty roll lots delivered carr. free	
Double ply .. .. per roll	per half roll
All rolls 28 yards long by 36" wide. Special terms for quantities.	
Cut steel clasp nails .. .. 1" per cwt.	39/3
floor brads .. .. 2" "	31/3
Bright oval wire nails .. .. 1" "	43/4
Galvanized wire staples with slice cut points .. .. 1" x 12 gauge per cwt.	52/-
Scotch glue .. .. per cwt.	—

**STEEL AND IRONWORKER***Steelwork*

£ s. d.

Basis price for rolled steel joists sections	
5" x 3" to 16" x 6", in 10 ft. to 50 ft. lengths	ex mills
	per ton 15 10 6

**PLASTERER***Plaster and Cement*

	1-ton loads
Sirapite (coarse) .. .. per ton	91/6
" (fine) .. .. per ton	99/6
Victorite No. 1 (White) .. .. per ton	—
" No. 2 (Buff) .. .. per ton	—
Thistle (browning) .. .. per ton	91/6
Thistle (haired) .. .. per ton	—
Pink plaster .. .. per ton	91/6
White plaster .. .. per ton	94/6
Keene's pink .. .. per ton	142/6
Gypstone .. .. per ton	70/6
Glastone .. .. per ton	73/-
Paristone (haired) .. .. per ton	70/6
Cullamix (Tyrolean Finish) 1 ton lots and upwards	per ton from 149/- to 182/6

*Sundries*

Sharp washed sand .. .. per yard cube	14/7
Cow hair .. .. per cwt.	70/-
Goat's hair .. .. per cwt.	100/-
Expanded metal lathing, 9' 0" x 2' 0" ½" mesh x 26 gauge .. .. per sheet	3/-
Wire Slate nails (galvanized) 1½" x 15 gauge .. .. per cwt.	62/5
" " (bright wire) .. .. per cwt.	—
½" Plaster board (plaster base) .. .. 25-150 yards	150-300 Over 600 yards
per yard super	2/2 1/10 1/8
1½" Galvanized nails .. .. per cwt.	62/5
Scrim cloth in 100-yard rolls per roll	4/6

*Wall Tiles*

The following prices are subject to 75 per cent. addition:

Commercial quality.	
Ivory, white, etc., glazed 6" x 6" x ½" .. .. per yard super	10/1
Angle beads (1½" wide) .. .. per yard run	1/2½
" (1" " ) .. .. per yard run	-10
Rounded edge tiles .. .. per yard run	2/6½
Coloured enamelled bright glazed, 6" x 6" x ½" .. .. per yard super	14/3
Angle beads (1½" wide) .. .. per yard run	1/4½
" (1" " ) .. .. per yard run	-11½
Rounded edge tiles .. .. per yard run	2/7
Eggshell gloss enamelled, 6" x 6" x ½" .. .. per yard super	15/-
Angle beads (1½" wide) .. .. per yard run	1/7½
" (1" " ) .. .. per yard run	1/0½
Rounded edge tiles .. .. per yard run	2/8½
Special rates for quantities	

**PLUMBER**

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**PLUMBER***Lead*

34 lb. and upwards milled sheet lead in quantities of 5 cwt. to 1 ton in sheets .. .. .	per cwt.	42/6
Lead ternary alloy, No. 2 quality extra over sheet lead or lead pipe .. .. .	per cwt.	7/-
Allowance for old lead delivered to merchant or manufacturer .. .. .	per cwt.	23/9

*Cast Iron Goods*

Percentage Adjustment.  
on List No. 3100 A.B.  
1/2/40

Rainwater Goods (painted or unpainted) ..	Plus 29%
Soil goods (coated or uncoated) .. ..	Plus 29%

*Mild Steel Rainwater Goods*

The following prices for Pipes and Fittings are subject to 42½ per cent. addition, and Gutters are subject to 35 per cent. addition.

34 gauge rainwater slip jointed pipes.	2"	2½"	3	3½"	4"
Galvanized round pipes with ears .. .. .	per 6' 0"	2/7½	3/1½	3/9	4/3
Painted round pipes with ears .. .. .	per 6' 0"	2/4½	2/9	3/1½	3/7½
Painted or galvanized short lengths with ears, extra each	-/6	-/6	-/6	-/6	-/6
18 Gauge gutters.	3"	3½"	4"	4½"	5"
Galvanized half round gutters .. .. .	per 6' 0"	2/-	2/3	2/4½	2/9
Painted half round gutters .. .. .	per 6' 0"	1/6	1/9	2/-	2/3
Painted or galvanized short lengths extra	each	-/3	-/3	-/3	-/3

*Asbestos-Cement Rainwater Goods*

The following prices are subject to 12½ per cent. trade discount. Orders over £30 are subject to 17½ per cent. trade discount.

*Rainwater Pipes.*

Prices are for 6' 0" lengths, 10' 0" lengths available in 2", 2½", 3", 3½" and 4" diameters. Short lengths up to 2' 0" are charged as 1 yard. From 2' 0" to 4' 0" charged as 1½ yards. From 4' 0" to 6' 0" charged as 2 yards. Over 6' 0" charged as 10' 0".

*Round pipes*

2"	per yard run	2/3½
2½"	per yard run	2/6½
3"	per yard run	3/1
3½"	per yard run	3/7½
4"	per yard run	4/2½
4½"	per yard run	6/-
5"	per yard run	7/1½
6"	per yard run	8/10½

*Gutters.*

Short lengths of gutter up to 2' 0" charged as 1 yard; from 2' 0" to 4' 0" as 1½ yards, and over 4' 0" as 2 yards.

Half round gutters	3"	4"	4½"	5"	6"	8"
per yard run	1/7½	1/11½	2/-	2/4½	3/3½	4/1
Ogee gutters per yard run	—	2/4½	2/6½	3/1	3/9	4/10½

**INTERNAL PLUMBER**

Lead pipe in coils, 5 cwt. and upwards .. .. .	per cwt.	44/-
Lead soil pipe .. .. .	per cwt.	46/-
Add if ribbon marked .. .. .	per cwt.	-/3
Lead ternary alloy, No. 2 quality extra over lead pipe .. .. .	per cwt.	7/-
Plumber's solder .. .. .	per cwt.	132/6
Timman's solder .. .. .	per cwt.	168/6
Drawn lead traps with brass screw eye, 6 lb.		
S. trap .. .. .	each	2/5
P. trap .. .. .	each	2/1
Extra for 3" deep seal "S" trap each	-/6	-/7
Extra for 3" deep seal "P" trap each	-/4	-/5

*Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.*

Tubes.						
Tubes 2 ft. long and over	½"	¾"	1"	1½"	1¾"	2"
per ft.	-/5½	-/6½	-/9½	1/1	1/4½	1/10
Pieces 12" to 23½" long						
each	1/1	1/5	1/11	2/8	3/4	4/9
Bends .. .. .	each	-/11	1/2	1/7½	2/7½	3/2
Fittings.						
Elbows, square	each	1/1	1/3	1/6	2/2	2/7
Elbows, round	each	1/2	1/5	1/8	2/4	2/10
Tees .. .. .	each	1/3	1/7	1/10	2/6	3/1
Crosses .. .. .	each	2/9	3/3	4/1	5/6	6/7
Socket, plain .. .. .	each	-/4	-/5	-/6	-/8	-/10½
Socket, diminished	each	-/6	-/7	-/9	1/-	1/4

**INTERNAL PLUMBER—(continued)***Screwed and Socketed Steel Tubes and Fittings for Gas, Water and Steam, etc.—(continued)*

Flanges .. .. .	each	1/-	1/2	1/4	1/9	2/-	2/9
Caps .. .. .	each	-/5	-/6	-/8	1/-	1/3	2/-
Plugs .. .. .	each	-/4	-/5	-/6	-/8	-/10	1/3

Fittings and flanges and tubes ordered in long random lengths are subject to the following trade discounts:—

"Light Weight" .. .. .	Tubes	50½%	Fittings	40½%	Flanges	25%
"Heavy Weight" .. .. .	Tubes	42½%	Fittings	32½%	Flanges	9½%

**COPPERSMITH AND ZINC WORKER***Copper*

Hot rolled copper sheeting in 1 cwt. lots, all gauges to 24 wire gauge (3 cwt. lots and over)	per lb.	1/1½
Basic for light gauge copper tube, solid drawn ..	per lb.	1/1
Basic for copper tube, solid drawn screwing sizes	per lb.	1/1
Copper wire, 10 and 12 gauge .. .. .	per lb.	1/1
Copper nails, 1" and up .. .. .	per lb.	1/3

**GLAZIER***Sheet Glass cut to size (ordinary glazing quality)*

18 oz. clear sheet .. .. .	per foot super	3½d.
24 oz. ditto or "R" quality .. .. .	" "	5d.
26 oz. ditto .. .. .	" "	6½d.
32 oz. ditto .. .. .	" "	8½d.
¾" figured rolled and cathedral glass (white) ..	" "	6½d.
¾" ditto, approved tints .. .. .	" "	9½d.

*British Polished Plate Glass cut to size*

Ordinary ¼" Substance	Glazing for Glazing Purposes	Selected Glazing Quality	Silvering
In Plates not exceeding			
2 ft. super .. .. .	per foot super	2/2	2/10
3 " .. .. .	per foot super	2/6	3/6
5 " .. .. .	per foot super	2/9	4/-
*45 " .. .. .	per foot super	3/3	5/-
*100 " .. .. .	per foot super	4/1	6/6

\*Plates exceeding 100 ft. super or 160 in. long or 100 in. wide at higher prices.

Special quotations should be obtained for other qualities and thicker substances.

*Wired Glass Cut to Sizes*

¼" Wired cast .. .. .	per ft. super	9½d.
½" Georgian wired cast .. .. .	per ft. super	10d.
¾" Polished Georgian wired glass .. .. .	per ft. super	3/2

For cutting to allow for wires in adjacent pieces to be "lined up," add 4d. per foot super.

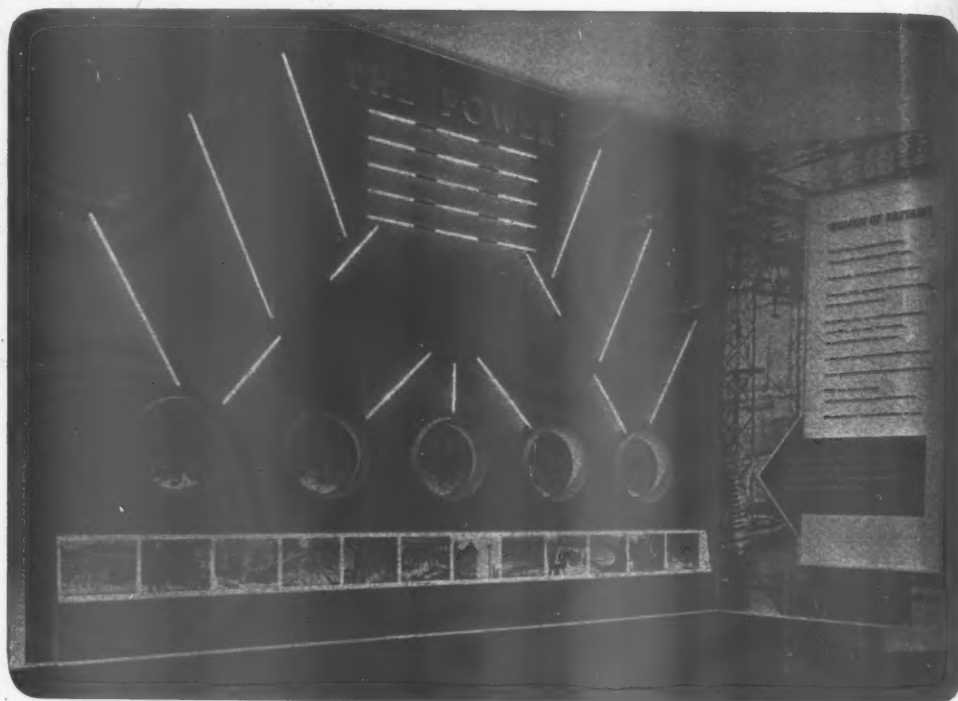
Supplied in sizes up to 110 in. long and up to 36 in. wide.

**PAINTER**

Snowcem paint .. .. .	per cwt.	56/-
White ceiling distemper .. .. .	per cwt.	22/-
Washable distemper .. .. .	per cwt. from 48/-	to 66/-
Ready mixed white lead paint (best), semi-gloss, per 28 lb. .. .. .		25/3
Aluminium paint (best quality) .. .. .	per gallon	32/-
White enamel .. .. .	per gallon	—
White enamel paint .. .. .	per gallon	27/-
Stiff white lead (genuine English stack process, 1 ton lots, 1 cwt. kegs) .. .. .	per cwt.	70/7½
Liquid driers .. .. .	per gallon	22/-
Linseed oil raw (5-gallon drums) .. .. .	per gallon	7/10
" " boiled (5-gallon drums) .. .. .	per gallon	8/-
French polish .. .. .	per gallon	20/-
Knotting .. .. .	per gallon	24/-
Oil stain (scumble) .. .. .	per lb.	3/-
" " red oxide .. .. .	per cwt.	64/-
" " middle Brunswick green .. .. .	per cwt.	90/-
" " dark umber .. .. .	per cwt.	103/-
" " golden ochre .. .. .	per cwt.	82/-
Varnish (outside quality) oak .. .. .	per gallon	22/-
" " " copal .. .. .	per gallon	24/-
" " " flattening .. .. .	per gallon	26/-
Turpentine, genuine American 5-gallon lots ..	per gallon	—
" " substitute .. .. .	per gallon	4/-
Creosote, 1-gallon lots .. .. .	per gallon	1/9
Linseed Oil Putty .. .. .	per cwt.	28/3
Utility Glazing Putty .. .. .	per cwt.	—
Size .. .. .	per cwt.	130/-
Best quality English gold leaf, 23 carat ..	per book	3/8
Extra thick, ditto .. .. .	per book	4/8

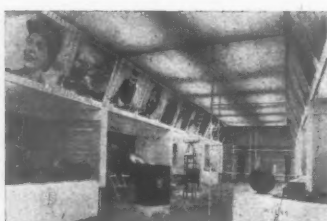
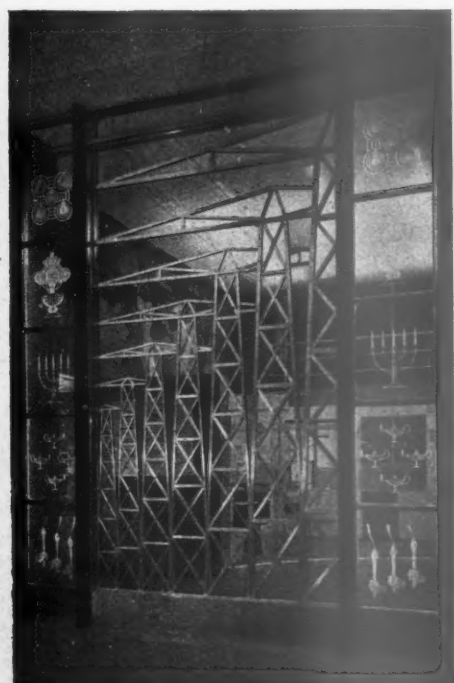


Right, the main entrance feature, showing how Britain's electric grid system during the periods of severe bombing "like the women of Britain, sometimes faltered but never failed." Below, left, a screen of anodised aluminium and Perspex; the Perspex is engraved and lit from the side. Below right, from top to bottom, the main hall with its series of large photographs printed on sensitized canvas; the screen on "Careers for Women in the Electrical World" in anodised aluminium sheets and mesh and photographic transparencies lit from behind; the catering screen.



# WOMENS' FIRST ELECTRICAL EXHIBITION

DESIGNER: L. HULME CHADWICK



This exhibition at Dorland Hall has been staged by the British Electrical Development Association to celebrate the 21st birthday of the Electrical Association for Women, and also as a tribute to the eight million women mobilised for war.

The main hall is composed of a number of bays illustrating the work of the Women's Services, including demonstrations of Radar by the WAAF, of magnetic mines by the WRNS, of radio communications by the ATS as well as the work of women in Civil Defence, the Post Office, the factory and on the land in connection with the use of electricity.

Other parts of the exhibition show the application of electricity to future peace-time uses—in schools, restaurants, clinics, horticulture, and in homes and kitchens.

Welded steel tubing forms the main structure of the stands. Anodised aluminium is used in sheets in decorative grills and for lettering. Plastic materials are

widely used in its usual kitchen backs. coloured panels. Interesting cooker n parent P of more signed f quick he trols and tors. N chines, vectors, quency fires are a new t with low heated heater.



widely used, notably Perspex, in its usual transparent form and also in its opaque coloured form for kitchen table tops, and splash backs. Use is also made of pre-coloured sands and sawdusts in various grades for relief work on panels.

Interesting equipment includes a cooker made throughout of transparent Perspex, and other cookers of more orthodox materials designed for controlled cooking by quick heating, flexible simmer controls and automatic oven regulators. New electric washing machines, background heating convectors, television sets, high-frequency apparatus and electric fires are exhibited. There is also a new type of wall radiator filled with low-expansion oil, sealed and heated by an electric immersion heater.



*Above, the cooker made entirely of clear Perspex. Below, the model kitchen in which wide use is made of plastics—on the floor, on table tops and splash backs, and as curtains; an interesting feature is the transparent cabinet dividing the main part of the kitchen from the eating bay.*



# INFORMATION CENTRE

The function of this feature is to supply an index and a digest of all current developments in planning and building technique throughout the world as recorded in technical publications, and statements of every kind whether official, private or commercial. Items are written by specialists of the highest authority who are not on the permanent staff of the Journal and views expressed are disinterested and objective. The Editors welcome information on all developments from any source, including manufacturers and contractors.

## STRUCTURE

### 2163 Temporary House

**THE AIROH ALUMINIUM TEMPORARY HOUSE.** (*Architects' Journal*, June 21, 1945, pp. 461-466.) House made in four sections, each complete in itself, erected within a few hours.

The Airoh house, designed by the Aircraft Industries Research Organisation on Housing, makes wide use of aluminium. The floor frame is made in aluminium alloy, faced with normal timber floor-boards. The walls are faced externally with alloy sheet painted with a rough-cast finish of stone appearance, and internally with plaster-board and spray painted in colour. The wall filling is aerated concrete. The roof is faced externally with aluminium alloy sheet packed with cork. There is a high standard of thermal and sound insulation throughout. Experience in the use of these alloys in aircraft justifies the expectation that a house faced with aluminium should easily stand up to British weather conditions.

### 2164 Temporary House

**THE PHOENIX TEMPORARY HOUSE.** (*The Builder*, September 7, 1945, p. 195.) One of seven types of temporary houses supplied to local authorities.

The house is rectangular in plan, overall size 32 ft. 4 in. by 21 ft. 3 in. The construction consists of a series of tubular steel portal frames connected by timber rails and purlins strengthened with steel channels. Walls: units of full storey height covered externally with corrugated asbestos sheeting, internally with hardboard, with 1 in. fibre glass wool insulation slabs between. Internal partitions: light timber framing with hardboard both sides. Roof covered with corrugated asbestos cement sheeting, ceiling formed of hardboard panels, both fixed to wood purlins.

### 2165 Howard House

**THE HOWARD HOUSE.** Designed by Frederick Gibberd. (*The Architects' Journal*, April 26, 1945, pp. 317-324, and other journals.) Light welded steel frame of standard rolled sections with only dry assembly on site.

The Howard house has been designed as an ideal house rather than as a system of construction or to suit a particular building material. A single house can provide three distinct plan types. Brickwork has been entirely eliminated and timber reduced to a minimum. The prototype has been built on a site at Datchet.

The steel frame is erected in a few hours, after which the ribbed asbestos-cement roof sheets are put on so that subsequent work can be carried out under cover. The external wall units are large panels with a rough-textured external surface of any colour.

The plinth is of pre-cast units faced with briquettes or tiles.

The floor consists of deep units complete with timber floor and ceiling. External cladding is of laminated panels of fibre board, cemented wood wool and aluminium foil. Additional insulation is provided by a cavity between the external wall and inside lining. The resulting insulation is greater than that of an 11-in. cavity wall.

## HEATING and Ventilation

### 2166 Domestic Heating

**HEATING APPLIANCES FOR SMALL HOUSES.** (*RIBA Journal*, June, 1945, p. 217.) Three articles by spokesmen of solid fuel, gas and electrical industries on developments in heating of dwellings.

(a) *Space Heating by Solid Fuel:* E. A. C. Chamberlain.

Mr. Chamberlain takes as the essential characteristics of a good solid fuel heating system the following:—The provision of background warmth, simplicity in operation, good efficiency, smoke reduction, availability and flexibility, and the use of a wide range of fuels.

The cost should generally fall within the range 4s. 9d. to 6s. 5d. a week. Estimates of the cost for space heating, space- and water-heating, and for a triple-duty appliance are given.

Attention is drawn to the importance of the wall temperatures, which should be about 2° F. above the air temperature. The surface temperature should thus be not less than about 62° F., and this is best achieved by continuous low-temperature convection heating, just sufficient to make good the heat loss through the walls. For a normal room of 1,450 cu. ft., this amounts to about 160 B.Th.U./hr./° F. (i.e., about 4,000 B.Th.U./hr. in winter). A further 3,000 B.Th.U./hr. for ventilation can be supplied by radiant heat from an open fire. It is obvious that cold rooms cannot be readily warmed by local intense sources of radiant heat, since about half the walls cannot "see" the source.

A convector fire, an openable stove and an open coke fire are illustrated. An efficiency of about 44 per cent. for space heating, plus 18-25 per cent. for water heating is claimed for the openable stove, and 35 per cent. for the coke fire.

(b) *Gas:* D. A. Winter.

Mr. Winter refers to the combination of radiant and convective heat, and believes both are needed to give a complete service. Flexibility is also important, for the sake of convenience. He notes that in an all-gas house the space-heating load amounts to about half the total.

Background heaters are intended to provide a basis on which to "build" the auxiliary heating. Their purpose is to take the chill off the surroundings, by maintain-

ing a minimum temperature of 50-55° F. when it is 30° outside. Flues are said to be rarely necessary with background heaters.

Radiant heaters (gas fires) are the chief form of heating apparatus for habitable rooms, and are invariably fitted to a flue. Full radiant emission is attained in a few moments, and such a heater produces personal comfort more quickly than would be the case with convected heat alone. Ventilation is assured. A comparatively recent development in room heaters is one which emits radiant heat, with about 10-15 per cent. as convection.

The uses of the various types are illustrated by considering the requirements of a house. The various types of water heater are also briefly described. Storage and instantaneous heaters are available.

(c) *Electricity:* E. G. Batt.

Radiation and convection in any desired proportion can be obtained from electrical apparatus, and further, the distribution of radiation can be controlled by the design.

Flues are unnecessary with electrical heaters, but some provision for ventilation must be made.

It is not in general economical to provide background heating in small houses by electrical means, but where this can be done, tubular heaters or low-temperature panels are suitable.

The panel type of electric fire is generally more suitable than the reflector type if a single source of heating is used, as the convection component is greater.

Various types of electric water heater are mentioned, but specific reference is made to the 2-in-1, which gives a small constant supply for normal requirements, plus an extra heater for use when baths, etc., are required.

All the requirements of a small house can be met by considering space-heating and water-heating together, and using solid fuel in combination with electricity. Mr. Batt suggests a solid fuel boiler for water heating in winter with an electric immersion heater for summer use. A well-lagged tank is used, and a towel-rail and radiator are worked from the boiler. Electrical radiant heating is used for topping-up.

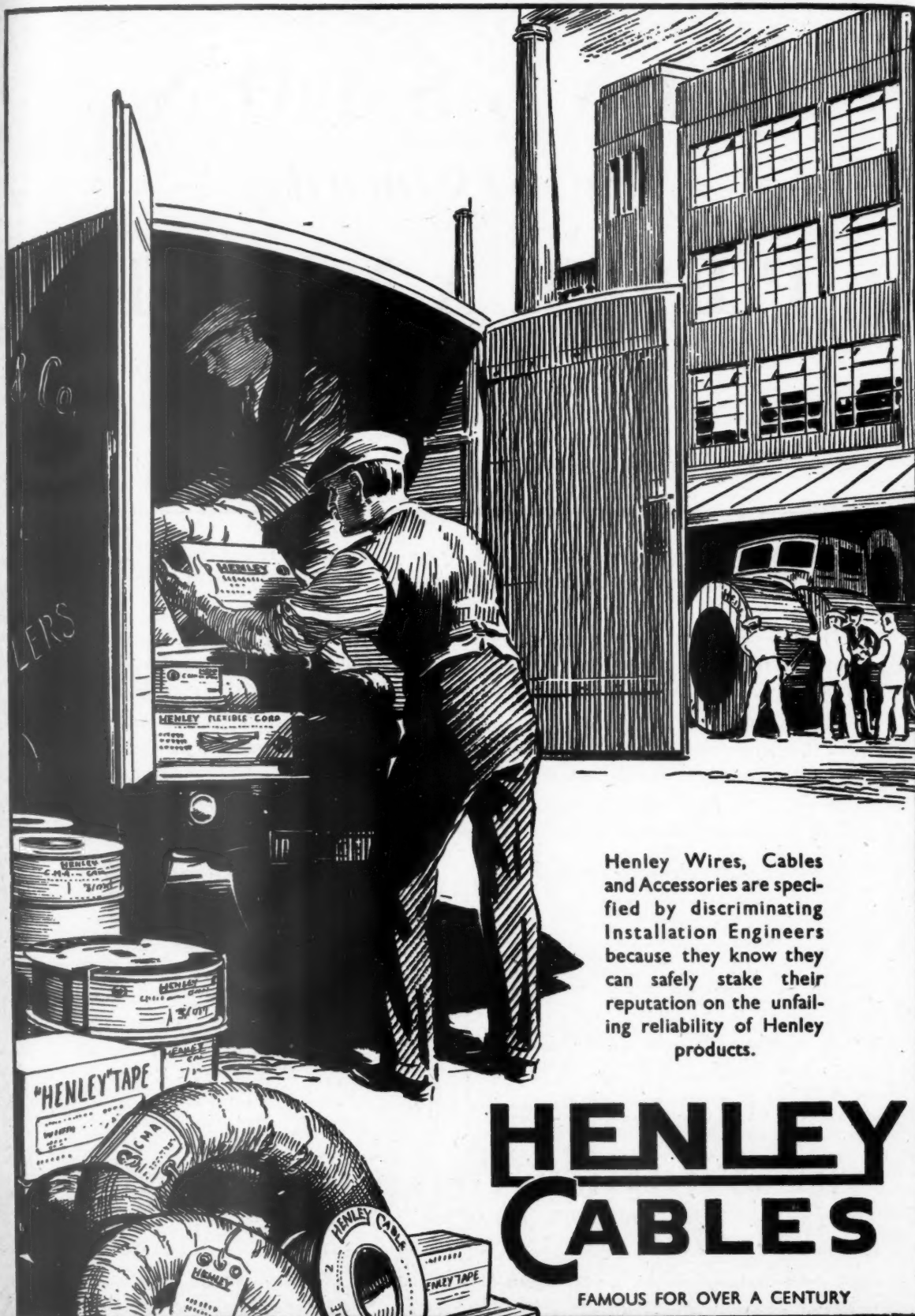
### 2167 Heat Conservation

**HEAT CONSERVATION IN SMALL HOUSES.** A. F. Dufton. (*RIBA Journal*, August, 1945.) General talk on heat conservation. Economy in hot water installation. Basis for calculations for heat loss. Double windows. Wallpaper of little value for fuel saving. Some recent tests at BRS.

Although much of the material in this paper is of a rather general nature there are some interesting and important views expressed on a number of specific points. The author claims that for practical purposes the heat loss in "air-to-air" transmission may be calculated on the basis of the "equivalent temperature" of the room and will then be applicable to any form of heating. This is a simplification over the methods sometimes considered to be necessary for calculating heat losses for radiant heating.

The author also strongly attacks the idea which has been put forward from time to time that by lining a room with wallpaper the heat loss will be greatly reduced. Apparently, however, he does not dispute the value of an insulating lining of low thermal capacity and refers again to his well-known experiment which showed how much more quickly it was possible to warm up a cold room when a wood panel lining was added.

Tests are being carried out at the Building Research Station to determine fuel consumptions in houses of similar plan and type of heating but having varying degrees



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# KINGSTON

*factory-made*

# PERMANENT HOMES

AN ANNOUNCEMENT OF TARRAN INDUSTRIES, LTD.

Kingston Building Industries, Ltd., a subsidiary of Tarran Industries, Ltd., has now completed plans for Kingston factory-made permanent homes and production is about to begin.

The Kingston method of construction, perfected by the Company's technical experts, provides for the complete manufacture of houses, flats and other buildings with a life of at least 60 years, using factory production methods throughout.

Tarran Industries, Ltd. are at present engaged on Ministry of Works contracts for 11,000 temporary houses. Of these, 1,000 houses in the Hull programme will be manufactured by autumn, and erected before the end of the year.

At the same time, the organization of the Company is being extended to accommodate a greatly increased future production of Kingston factory-made permanent homes.

1 The Company at present operates factories at Hull, Thorpe, Middlesbrough and Bellshill, Glasgow.

2 The Company proposes to acquire or erect a further seven factories in carefully chosen districts dividing the country into regions. This makes possible the full utilization of local labour and minimizes transport difficulties.

3 The Kingston method of construction is based on the principle of producing the complete house in the factory and reducing site work to a minimum.

4 The Kingston method of construction is not tied to any one material. Materials are used according to their suitability.

5 Kingston factory-made permanent homes offer a diversity of colour and texture in the outer skin in order that they may be in keeping with varying local traditions and landscapes.

6 Interior equipment is efficient and comprehensive and great care has been given to the planning of the kitchen and bath room. Every home will have constant hot water and an open fire in the living room.

7 Kingston factory-made permanent homes are despatched from regional depots in complete units ready for immediate erection on site. Thus, delay caused by incomplete deliveries is avoided.

8 Using the Kingston method of construction, a complete house can be erected on site within two days.

## PANEL OF TECHNICAL EXPERTS AND CONSULTANTS

• Elizabeth Denby, Hon. A.R.I.B.A. ... Director of Housing.

• A. Kershaw, A.M.I.E.E., M.Inst.W ... Technical Director.

• J. K. Winsor ... Materials.

• David Booth, A.R.I.B.A. ... Architect.

• O. W. Roskill ... Industrial Consultant

• Thomas Sharp, L.R.I.B.A., F.I.L.A. ... President, Town Planning Institute, Civic Design.

• Clough Williams-Ellis, F.R.I.B.A., M.T.P.I ... Landscape Architecture.

Local Authorities desiring further information should write to:

Kingston Building Industries, Ltd., subsidiary of Tarran Industries, Ltd.

Head Office: 32, Duke Street, St. James, S.W.1

Telephone: Whitehall 0321.

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of heat insulation value for walls, floors and roofs. Some preliminary results are given. Perhaps the most significant feature of these, admittedly incomplete, results is the fact that full heating of the living room throughout the 24 hours was only very slightly more expensive in coal than intermittent heating for times of occupation only. The full results of these experiments should be most valuable.

2168

**Domestic Heating**

**DOMESTIC HEATING FOR SMALL HOUSES.** Col. S. F. Newcombe. *Coke and Smokeless Fuel Age*, August, 1945. General article with considerable emphasis upon desirability of intermittent heating and use of low thermal capacity wall linings. Insulation generally and insulation of flues dealt with.

**LIGHTING**

2169

**Gas Home Lighting**

**GAS LIGHTING FOR SINGLE FAMILY DWELLINGS.** *Draft British Standard Code of Practice; General Series Code 34231.* (British Standards Institution, 2s. 0d.) Although gas lighting to new houses not likely, this code valuable. Section dealing with design considerations gives sizes of mantles for recommended illumination values of various rooms.

2170

**Fluorescent Home Lighting**

**AMERICAN SURVEY OF FLUORESCENT HOME LIGHTING.** (*Lighting and Lamps*, May, 1945, p. 25.) Present and future use of Fluorescent lighting in American homes.

This is a report of a commercial survey of the domestic use of fluorescent lighting. It is stated that, of the 29,000,000 wired homes in the USA, nearly 10 per cent. now have some fluorescent lighting, and nearly half of these plan extensions after the war. Among those who do not have fluorescent, yet, about 65 per cent. plan to have a kitchen installation, about 15 per cent. will have living-room fittings, and less than 10 per cent. favour it in the bathroom. About 13 per cent. wish to have installations made very soon.

2171

**Safety**

**LIGHTING AND SAFETY.** H. L. Logan. (*Electrical Engineering*, June, 1945, p. 217.) Physiology of lighting. Relationship between light and accidents.

The first part of Mr. Logan's paper is intended to show the ways in which lighting may be "the cause behind the cause" of an accident. Most of the argument is not physiological, but statistical, to show the need for study rather than to give information.

There is some interesting information about the location of accidents in the home, and the whereabouts of injuries to the body. The majority of domestic accidents take place in the kitchen, on porches and outside stairs, and in the "yard." Most of the injuries occur to fingers, the trunk, and the legs of people.

2172

**Lighting and Children**

**LIGHTING AND CHILD DEVELOPMENT.** D. B. Harman. (*Illuminating Engineering*, April, 1945, p. 199.) Medical con-

dition of school children. Studies to show effect of good lighting.

Mr. Harman describes the medical condition of the school children in his area in Texas. From previous data, it is widely known that the conditions he describes are general throughout much of the world, though in the present case the figures seem somewhat larger than usual. Perhaps the data have been taken with more care. He discusses the relationships between posture and illumination, in so far as they affect child health, and lays emphasis on the close link between all causes and forms of body disturbances and ailments. He traces certain evidence that if a line is drawn from the back-left corner of the room to the front-right, the children lying on the window side of the line show on the whole a greater incidence of deficiencies than the others. This he attributes mainly to sky-glare. Experiments are described in which the seats these children occupy are turned to face slightly away from the windows, the rest remaining much as they were, and it is claimed that this, together with other improvements of decoration and lighting, so reduce glare that the incidence of ailments markedly decreases. The article gives rise to many thoughts, but it is fair to record that in the discussion emphasis was laid on the need to scrutinize the results carefully before accepting all that they imply.

2173

**Swedish Decorative Lighting**

**DECORATIVE LIGHTING DEVELOPMENTS IN SWEDEN.** S. Zimmerman. (*Lighting and Lamps*, May, 1945, p. 34.) Design traditions of Sweden. Effect upon decorative lighting fixtures.

The author describes the changes that have taken place in fitting design since the time when candelabra were imitated. He refers to the hardness of the "functionalist thirties" and the reaction to this in the form of a late 19th century romanticism, now leading towards a fairly simple and pure style. This transition has been aided by developing corrugated glass forms which reduce glare without losing the liveliness of the earlier crystal. The opal diffusers were regarded as dull. There are several illustrations, but not adequate to convey the ideas.

**EQUIPMENT**

2174

**Standard Electric Outlets**

**BRITISH STANDARD PLUG AND SOCKET OUTLETS.** *Statement by BSI on new agreement.* Decision on much debated problem of new all-purpose socket outlet now reached by Electrical Industry Committee of BSI. New BSS to be prepared.

The following statement on this most important matter of detail has now been issued by the British Standards' Institution:—

The standardization of plugs and socket-outlets has been a matter of keen discussion ever since the use of electricity for domestic and industrial purposes first became established. These discussions have passed through many phases, the views held at any particular period being influenced by the prevailing system voltages, forms of tariff and methods of installation. Experience prior to the war had shown that the existing B.S. 546, which provided three standard ratings of 2.5 and 15 amperes, was not wholly satisfactory from the standpoint of the convenience of the consumer. With the wide extension of two-part tariffs a growing need had arisen for a rating intermediate between 5 and 15 amperes, which could be used for all domestic purposes.

The large programme of housebuilding envisaged for the post-war period made it urgent to consider this question so as best to meet post-war conditions; the cessation of housebuilding during the war gave an ideal opportunity for such considerations. With the encouragement of the then Ministers of Reconstruction, Works, and Fuel and Power (Lord Woolton, Lord Portal and Major Lloyd George) the question has been intensively studied during the past two or three years, with the assistance of all those concerned with manufacture, installation and use.

In all these discussions there has been universal agreement that there should be a single all-purpose domestic plug and socket outlet, but there has been a difference of opinion as to whether this could best be achieved by the adaptation of one of the existing standards or by an entirely new design, non-interchangeable with any existing standard.

A final decision has now been reached by the Electrical Industry Committee of the British Standards' Institution who, feeling that on balance the complicated needs of the situation will thus be best met, have decided to standardize an all-purpose domestic plug and socket-outlet of the same dimensions as regards interchangeability as the 5-ampere size in B.S. 546, but rated at 3 kW. (13 amperes at 230 volts). This decision also embraces the decision that a local fuse shall form part of the fixed part of the installation, but that an additional fuse rated at not more than 3 amperes may be fitted in the plug when required for the protection of small-current appliances. Plugs suitable for the accommodation of 3-ampere fuses are already available, and are included in B.S. 546.

Except that the rating of the new plug and socket-outlet is to be 13 amperes instead of 10 amperes, this decision conforms with the majority recommendation made in paragraph 92 of the Main Report of the Electrical Installations (Study) Committee (Post-War Building Studies No. 11), whose other detailed design requirements will be adopted.

This decision reverses a previous decision of the Electrical Industry Committee of the B.S.I., which endorsed the recommendations made by the Electrical Installations (Study) Committee in their supplementary report, which is contained in the Appendix to Post-War Building Studies No. 11.

A new British Standard Specification embodying modifications to the present B.S. 546 will be prepared at an early date. The modifications relate to matters of comparatively small detail, and will leave existing 5-ampere plugs interchangeable with the new plug.

**QUESTIONS****and Answers**

**THE** Information Centre answers any question about architecture, building, or the professions and trades within the building industry. It does so free of charge, and its help is available to any member of the industry. Answers are sent direct to enquirers as soon as they have been prepared. The service is confidential, and in no case is the identity of an enquirer disclosed to a third party. Questions should be sent to: THE ARCHITECTS' JOURNAL, 45, The Avenue, Cheam, Surrey.

2175

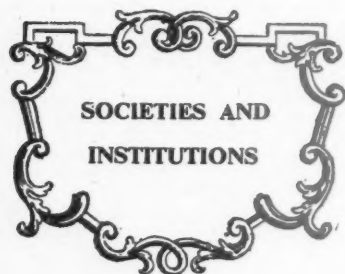
**Repairing Old Maps**

**Q** I have recently purchased eight panels of old maps produced in Holland. The maps are on paper in colour and mounted on canvas and pine stretcher frames rang-

ing in size up to 5 ft. 6 in. by 6 ft. 6 in. They are rather badly damaged and very dirty but still very attractive. I am anxious to find an expert who could undertake to clean and repair these maps and if necessary remount them. Do you know of any likely and reliable firm or person who could undertake such work?

**A** We think that you are very unlikely to find any firm who could undertake this work at the moment, for picture dealers and framers seem nowadays to have no repair facilities of any kind. We suggest that you ask the opinion of one of the officials of the Prints Section of the Victoria and Albert Museum. If you can arouse his interest in the maps themselves, you may possibly be able to persuade him to recommend some repairer who is capable of doing the work, but even so the delay is likely to be considerable.

Incidentally old prints can very often be cleaned by gentle washing in plain water to which a little Milton has been added, but since your maps are coloured such a procedure might be risky.



*Speeches and lectures delivered before societies, as well as reports of their activities, are dealt with under this title, which includes trade associations, Government departments, Parliament and professional societies. To economize space the bodies concerned are represented by their initials, but a glossary of abbreviations will be found on the front cover. Except where inverted commas are used, the reports are summaries, and not verbatim.*

## RIBA

### Memorandum

The Council of the Royal Institute of British Architects has authorized the publication of the memorandum below dealing with questions affecting THE EMPLOYMENT AND STATUS OF ARCHITECTS ENGAGED UPON THE DESIGN AND CONSTRUCTION OF PUBLIC BUILDING WORKS.

"The great tasks of new housing and reconstruction to be carried out in unprecedented circumstances must entail immense activity in the building industry. For many years the Institute has initiated action in a desire to impress upon the public the need for employing qualified architects if the creation of good architecture and sound

building throughout the country is to be assured. The RIBA is continuing to do all in its power to make possible the achievement of this objective and, in an endeavour to utilise, to the utmost, all the available resources of the profession, consideration has been given to the methods adopted by public bodies for dealing with architectural building undertaken by them. A small committee, under the chairmanship of the President, and representing equally the two broad classes of membership of the Institute, viz., architects in private practice and architects holding official appointments, have now completed a memorandum which was submitted to the Council in July, 1945.

"The Council has approved the memorandum and authorised its publication as the policy of the Institute. and in particular as a guide to the President or other honorary officers in advising government and local government authorities in connection with the employment of architects.

"The memorandum follows:—

"The creative work of the architect is essential to the carrying out of any project which concerns the housing or environment of human life and its activities. His architectural and technical training enable him to plan the structure and equipment of his scheme as an economical whole; to select and use appropriate materials with skill in the execution of well-proportioned designs.

"In supervising large projects his wide knowledge of the technique of planning and design place him in an unchallengeable position to co-ordinate the contributions of all who have specialised in one or other of the many technical aspects of the building industry.

"His patrons have changed in successive centuries with the progress of social conditions. Church and State, the aristocrat and wealthy landowner, commerce and industry, the institution and the private individual have now all been overshadowed by the growing patronage of the ordinary man who, collectively, is providing the public funds from which the great works of reconstruction and rehabilitation will be financed.

"In many of the states of America, some parts of the British Commonwealth and in most countries in Europe, the State law provides that a qualified architect is necessary for the supervision of all but the least important structures. This is a recognition of his comprehensive knowledge, not only of structure and design, but of the whole fabric of the building industry and of building procedure. It recognises also his professional concern with the needs and well-being of those who will live and work within the completed building and its surroundings. The professional standing of the architect is at its highest in these circumstances.

"The position in this country lacks legal safeguard, although most public bodies of any importance employ architects for their housing and public enterprise. In many cases the architect is retained as a salaried official; in some cases he is called in as a private practitioner; and in such cases he is regarded as the professional co-ordinator.

"There are, however, some authorities who continue to encourage a divided responsibility amongst their technical experts. Their schemes are thus brought to completion without the wide co-ordinating supervision of the qualified architect whose authority would ensure technical, economic and aesthetic balance in the result. It is not realised that the employment of qualified assistant architects to work under another specialist official cannot take the place of the independent architect who is directly responsible to his employer—the public authority itself. The architect in such conditions still remains to them an exterior decorator with a possibly fortuitous facility for interior planning. The final disposal of such reasoning lies in the world-wide recognition of the social contribution made by earlier English housing schemes, initiated just before and shortly after the turn of the

century and carried out by British architects many years before the more ambitious examples from Europe.

"A further and equally fallacious argument is that which places the architect in the category of an expensive luxury, his fee merely adding to the cost of the scheme. Plans, working drawings, specifications and building supervision must, in any case, be paid for, whether they are undertaken by a private architect or by a department directed by an architect working as a salaried official. In the one case these costs are paid as a percentage on the cost of the work, and in the other as a previously agreed salary with normal overhead charges. It is, however, the quality of the work which governs the ultimate cost, and such cost must be calculated over the life period of the scheme. The cost of competent architectural supervision in all stages of the work is thus more than justified by ultimate saving in maintenance and repair costs.

"The appreciation bestowed upon our housing schemes is known to spring from consideration of two factors: high quality and low cost, both of which have been secured by the professional competence of the architect.

"The discussion, therefore, turns upon the allocation of work amongst qualified architects, as salaried officials or private practitioners.

"The Council is of opinion that the position with regard to employment of private architects or salaried staff under the direction of a qualified architect will depend largely on the convenience and economic circumstances of the employing authority.

(a) For an authority needing the services of an architect intermittently, the reasonable course is to employ private practitioners.

(b) Where the volume of work of a public authority is continuous, it is economically sound policy to employ salaried architectural staff provided it is directed by a properly qualified architect.

(c) In cases where salaried staffs are employed, it is inevitable that there will be periods of great pressure, and it is felt that this position can best be met by calling on the services of the private practitioner rather than by temporary increases of staff.

(d) It is also desirable that official architects should encourage their authorities to employ and consult specialists by the institution of competitions or otherwise, in cases where works and buildings of a specialist character are proposed.

(e) It is essential that when private architects are employed they should be responsible for the contracts they control, but it is desirable also that they should work in the closest collaboration with, and under the general direction of, the principal architect of the authority concerned."

## RIBA

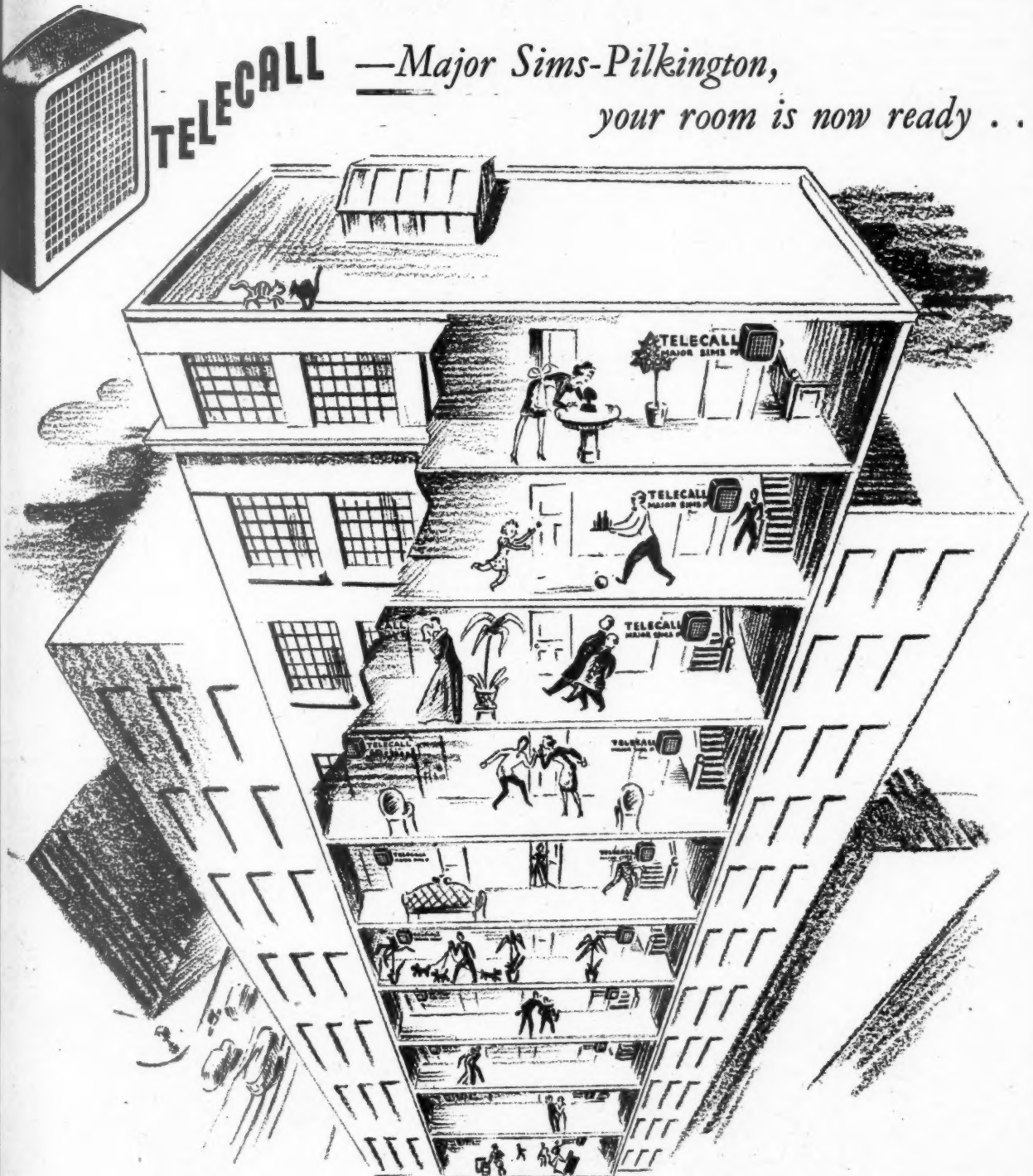
### Released Members

The following members have notified the RIBA that, having been released from the Forces or from other forms of National Service, they are resuming practice, and would like to receive trade catalogues, information sheets, and other data, etc., at the addresses given:—

J. T. Adams (A), 63, Main Road, Kiergrave, Suffolk; Edward Armstrong (F), 19, Manchester Square, London, W.1 (Wel. 3820); J. Barrington-Baker (A), Grove Lodge, Finchley, N.3; Major Charles Blythin (F), 77, Park Lane, Croydon, Surrey; C. D. Boothroyd (L), Old Market Chambers, Yorkshire Street, Rochdale, Lancs; Stanley A. Comben (A), 603/5, Kenton Road, Kenton, Harrow, Middlesex; R. H. Crompton (A), County Architect, County Hall, Kendal, Westmorland; Major Kenneth

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Dalgliesh (F), Messrs. Dalgliesh & Pullen, 9, Victoria Street, Westminster, S.W.1; A. E. Pierce Daniels (L) (as successor to the firm of Messrs. Raymond, Barker & Daniels), 8, Sharon Road, Chiswick, W.4; E. W. Fountain (A), The Vineries, Cosby, Leicester; Captain W. Harkess, R.E. (F), Messrs. Ford & Harkess, 25, Victoria Street (South Block), Westminster, S.W.1; Raymond E. Hawkins (L), 22, Queen Street, Cannock, Staffs; K. Hornsey (L), 24, Clarendon Avenue, Trowbridge, Wilts; W. D. Ironside (A), Water Farm, Stowting, Ashford, Kent; H. T. Jackson (F), The Red House, Staverton, Northants; Major Frank W. Knight, R.E. (F), Fountain Court, Middle Temple, E.C.4; Major Hugh S. Macdonald (A), 18, Princes Street, Thurso, Caithness; Kenneth C. Scarff (L), 21, Abbey Gate Street, Colchester; Frank Scarlett (F), 38, Downshire Hill, N.W.3; Robert H. Shaw (A), 43, Clason Mews, Cadogan Square, S.W.1; Brigadier Gerald Shenstone (F), 34, Bloomsbury Way, W.C.1; Harry Sherwood, O.B.E. (F), 11, West Pallant Chichester, Sussex; Gerald Stanley (F), 100, St. Mary Street, Cardiff; R. Stewart (L), County Square, Ulverston, Lancs.; Raglan Squire (F), ARCON, 81, Piccadilly, W.1; Michael Tapper, M.C., F.S.A. (F), 1, St. Leonards Terrace, S.W.3; Lt.-Col. J. R. Wetherell (L), Tweedholme, Picton Place, Newcastle-upon-Tyne, 1; N. F. Woodroffe, O.B.E. (F), 5, Bedford Row, London, W.C.1.

increase the issued capital to £29,000, out of an authorized capital of £30,000. The whole of the capital is to be subscribed by Messrs. F. McNeill & Co., Ltd., roofing contractors and manufacturers of building materials, including mineral wool, and Messrs. Frederick Jones & Co., Ltd., mineral wool manufacturers. The directors of the company are C. W. R. Pantlin (chairman), F. D. Bisceker, E. Cole, A. M. Mason, R. B. Stewart, W. C. Still (managing). The building and equipment of the new works has received the full approval of the Ministry of Works and the Board of Trade, and it is expected that the plant will be in operation within a few months.

The Board of Trade—in connection with the Government Redistribution of Industry Scheme of taking work to the workers—has allocated one of the standard National factories at Broxburn, near Edinburgh, to Hotric, Ltd., a subsidiary company of H. Webb & Co. (Engineers), Ltd., thus assuring substantial additional employment for that area. This factory is now being equipped for the large scale manufacture of electric water heaters of various types and other domestic appliances required for Government housing schemes throughout the country and also for export. The Head Office and Sales Department of Hotric, Ltd., is remaining at 198, Fore Street, N.18, and in addition to the new factory in Scotland the existing factories at Tottenham and Bishop's Stortford are being retained.

Plans to resume manufacture of Logical Coal Bunkers, stopped in 1940 by war conditions, are well in hand. The bunkers can be built into the wall of any type of house of whatever construction and made to any capacity. Coal is put into the bunker by the coalman from the outside of the house and taken out by the housewife from the inside. Made from British heavy mild steel electrically welded, the bunker can be built into any

desired position. It is supplied in standard sizes of 4, 6, 8 and 10 cwt. capacity or larger sizes as required, with, if necessary, two-compartment units with separate doors for coal and anthracite. The outside lid is weather-proof and a weather bar, extending completely round the bunker, prevents outside damp from creeping through. Inside the house the bunker fits flush and forms part of the wall. All that shows on the inside of the room is the sliding dust-proof door, fitted with bright chromium handle, which can be finished to match the room colour scheme. The bunkers, which are claimed to be weather-proof, damp-proof, dust-proof and fool-proof, are made by Logical Coal Bunkers, Tava Works, Waterloo, Huddersfield.

## Announcements

Messrs. J. W. Walker & Sons, Limited, of Ruislip, are developing their building department as a separate company to trade under the name of Walkers, builders, and would be pleased to receive trade catalogues, etc.

Mr. F. W. Brown, F.I.Q.S., F.V.I., and Mr. S. W. Spencer, P.A.S.I., F.I.Q.S., F.V.I., announce that they recently entered into partnership and are practising as Quantity Surveyors, under the title of Messrs. Brown & Spencer, at Midland Bank House, 26, Cross Street, Manchester 2. Telephone No.: Blackfriars 6925.

Mr. Raymond Pidgeon, L.R.I.B.A., has terminated his association with the firm of Arcon, Chartered Architects, and is now practising on his own account at 37, Great James Street, Bedford Row, London, W.C.1.

The Women's Advisory Committee on Solid Fuel has moved to 18, South Molton Street, London, W.1. Telephone: Mayfair 5358/9/60.

## Trade Notes

A new company, called Mineral Wool Products, Limited, has been formed for the production and sale of mineral wool in fabricated forms for insulating purposes. The company was registered with a nominal capital of £100, but subsequently permission was obtained from the Treasury to

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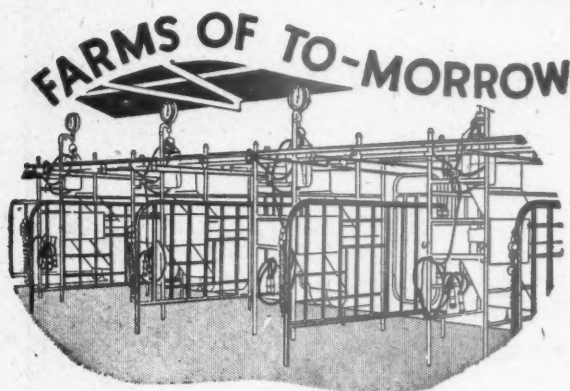
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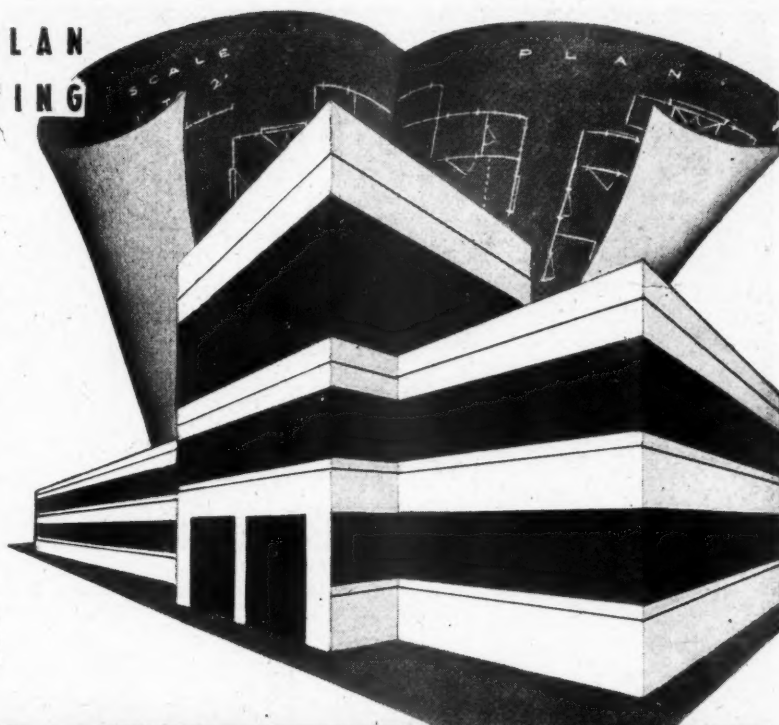
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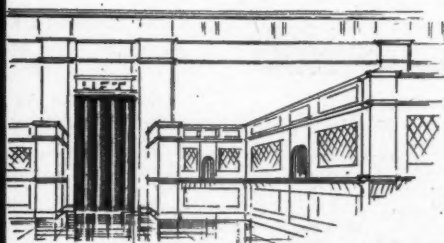
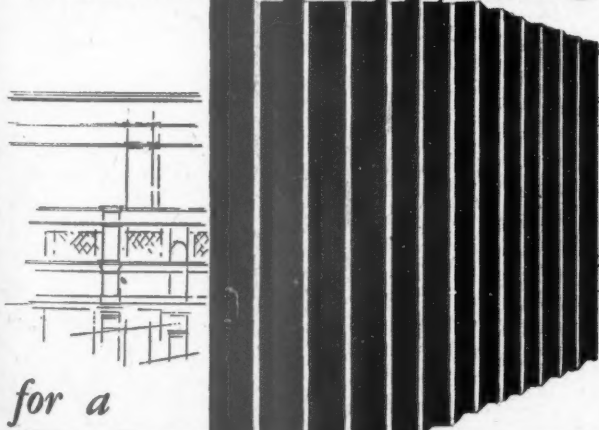
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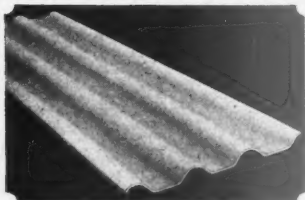
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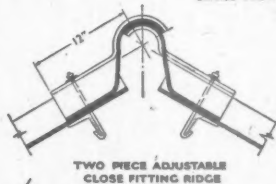
Fix to steel purlins with hook bolts, with special galvanised diamond and bitumen washers, and to timber purlins with 6" mushroom head drive screws.

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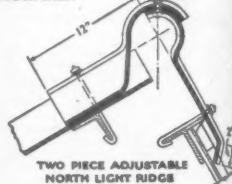
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Plain Wing Ridge Capping.  
North Light Ridge Capping.  
Barge Boards.  
Ridge Finials.  
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Hip Tiles.  
Dormer Ventilators.  
"S" Type Louvre Blades.  
"Z" Type Louvre Blades.  
Apron Flashing Pieces.  
Corner Pieces.  
Soaker Flanges.  
Dead Lights.  
Opening Lights.  
Curved Sheets.  
Window Units, etc.



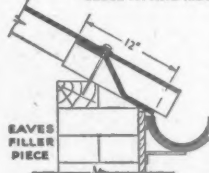
CROSS SECTION THROUGH SHEET



TWO PIECE ADJUSTABLE  
CLOSE FITTING RIDGE



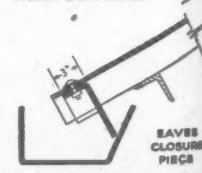
TWO PIECE ADJUSTABLE  
NORTH LIGHT RIDGE



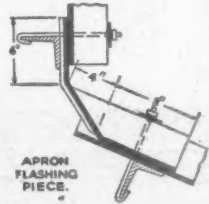
EAVES  
FILLER  
PIECE



BARGE  
BOARD



EAVES  
CLOSURE  
PIECE



APRON  
FLASHING  
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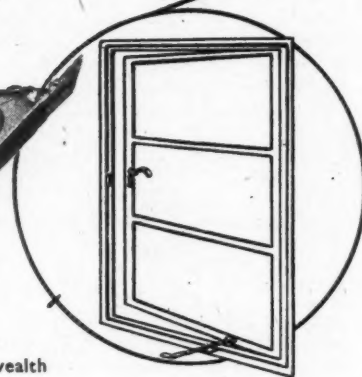
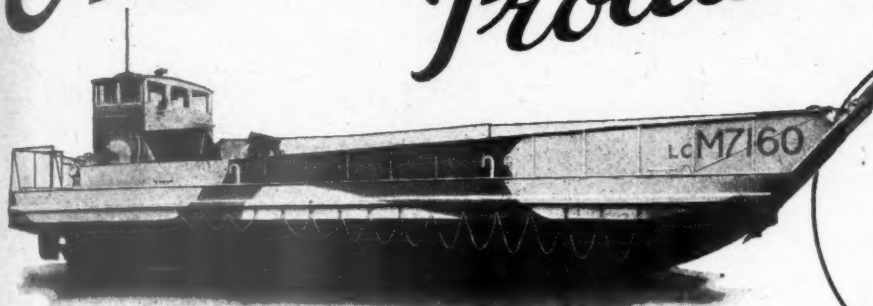
AREA & WEIGHT TABLE			COVERING CAPACITY			
SIZE	AREA IN SQ. YDS.	APPROX. WEIGHT IN LBS.	No. OF SHEETS	COVERING WIDTH	No. OF SHEETS	COVERING WIDTH
10' 0"	4.444	157.87	1	4' 0"	14	52' 0"
9' 6"	4.222	149.98	2	7' 9"	15	56' 6"
9' 0"	4.000	142.08	3	11' 6"	16	60' 3"
8' 6"	3.778	134.19	4	15' 3"	17	64' 0"
8' 0"	3.556	126.30	5	19' 0"	18	67' 6"
7' 6"	3.333	118.40	6	22' 9"	19	71' 3"
7' 0"	3.111	110.51	7	26' 6"	20	75' 0"
6' 6"	2.889	102.62	8	30' 3"	21	78' 6"
6' 0"	2.667	94.72	9	34' 0"	22	82' 3"
5' 6"	2.444	86.83	10	37' 9"	23	86' 0"
5' 0"	2.222	78.94	11	41' 6"	24	89' 6"
4' 6"	2.000	71.04	12	45' 3"	25	93' 3"
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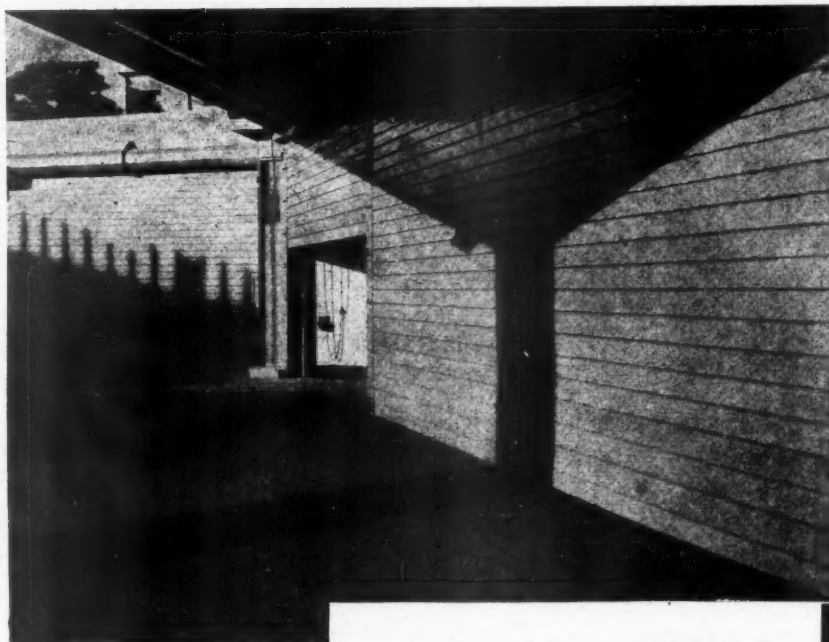
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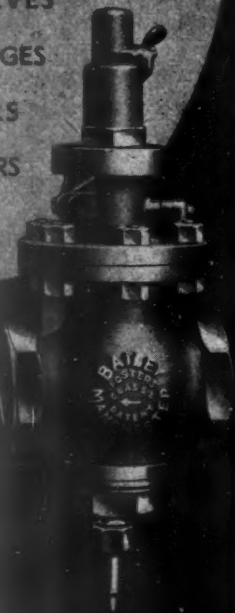
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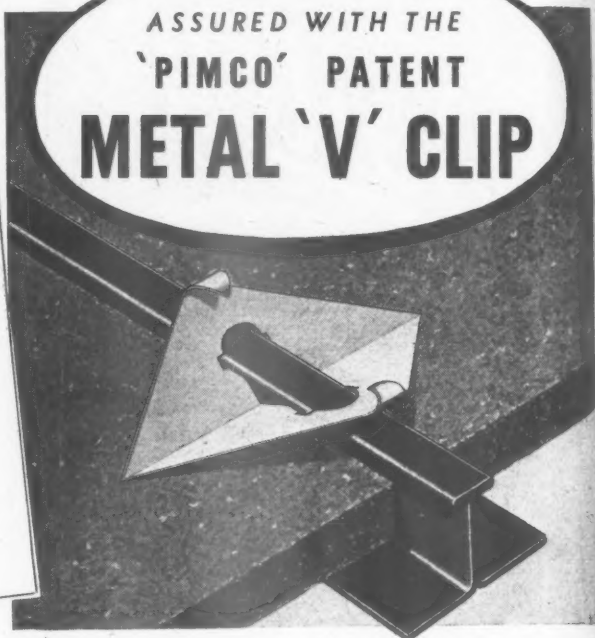
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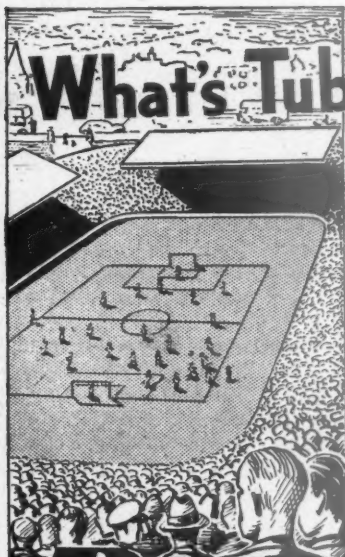


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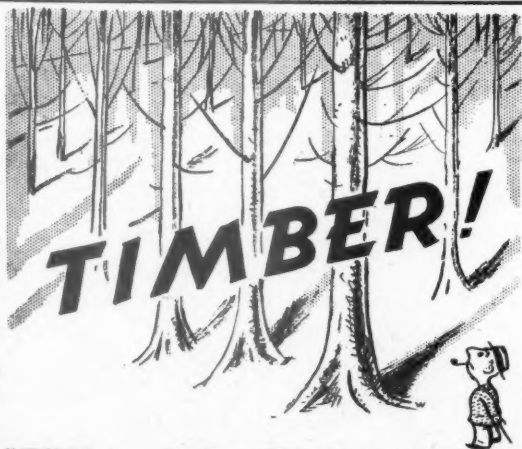
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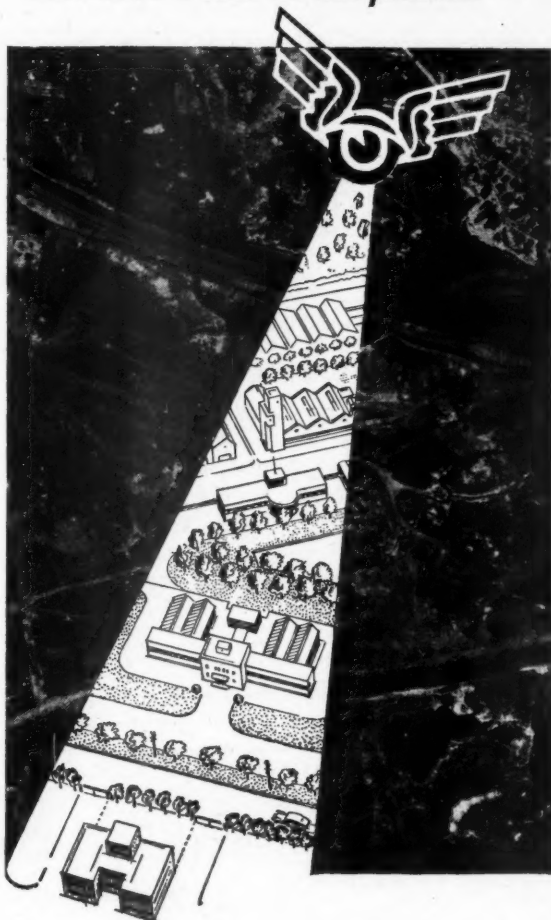
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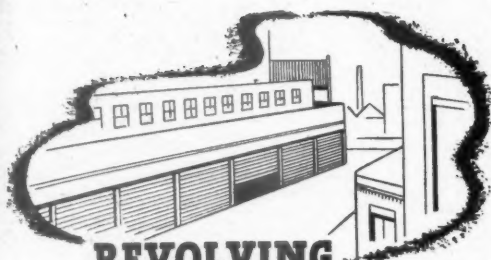
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The appointments are whole time, terminable by one month's notice in writing on either side, and subject to the Local Government Superannuation Acts, 1937/39. Successful candidates will be required to pass a medical examination.

Application forms can be obtained from Thomas E. North, F.R.I.B.A., Borough Architect and Planning Officer, 100, West Ham Lane, E.15, and applicants must state clearly for which post they are applying. Forms to be returned to above not later than 7th November, 1945.

Canvassing members of the Council is prohibited, and will disqualify applicant.

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Applications, giving full personal details, present position, and outline of experience, together with copies of three testimonials and two additional references, to be received by me not later than Saturday, 17th November, 1945.

HERBERT E. NUTTER,  
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(iv) ARCHITECTS (General), two (Ref. E.A.1629XA).

(v) ARCHITECTS (Town Planning), two (Ref. E.A.1683XA).

Applicants should be Associate Members of the R.I.B.A., and for the T.P. posts should be members of the T.P.I.

(i) and (ii) would be in Class III of the S.M. Salary Scheme, salary from \$400 to \$800 a month, rising by annual increments. Point of entry into the salary scale would depend on qualifications and experience. The dollar is equal to 2s. 4d.

Period of service would be for three years in the first instance, with opportunity if service was approved to join the permanent staff. There is a Municipal Provident Fund, but no pension. Press passages and quarters, either free or at a low rental, would be provided.

Write, quoting appropriate reference number, to Ministry of Labour and National Service, Appointments Department, Technical and Scientific Register, Room 670, York House, Kingsway, London, W.C.2, for application form, which must be returned completed by 7th November, 1945. 797

### COUNTY BOROUGH OF BURNLEY.

#### APPOINTMENT OF BUILDING INSPECTOR.

Applications are invited for the appointment of Building Inspector in the Borough Engineer and Surveyor's Department. Salary: administrative grade B, provincial Whitley Council scale (£281 per annum, rising to £315 per annum, plus £59 16s. per annum bonus).

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination.

Forms of application and conditions of appointment may be obtained from the Borough Engineer and Surveyor, Town Hall, Burnley, to whom applications must be returned not later than Monday, the 5th November, 1945.

J. C. NELSON,  
Acting Town Clerk.

Town Hall, Burnley.  
3rd October, 1945. 793

### GLAMORGAN COUNTY COUNCIL.

#### COUNTY PLANNING DEPARTMENT.

Applications are invited for the following appointments:

(a) PRINCIPAL PLANNING ASSISTANT, at a commencing salary of £525 per annum, rising by annual increments of £25 to £600 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

(b) Grade I PLANNING ASSISTANT, at a commencing salary of £425 per annum, rising by annual increments of £25 to £500 per annum, plus cost-of-living bonus, at present £59 16s. per annum.

Applicants should have had extensive experience in County Planning, and should have passed the final examination of the Town Planning Joint Examination Board, and, in addition, they should have obtained a B.Sc.(Eng.) degree or have passed the final examination of either:—

(1) Institution of Civil Engineers.  
(2) Institution of Municipal and County Engineers.

(3) The Royal Institute of British Architects.  
(4) The Chartered Surveyors' Institution.

Applicants must not be over 45 years of age on the 1st day of December, 1945, unless they have exceptional qualifications, and are already in the permanent employment of a Local Authority.

Both appointments are subject to the Local Government Superannuation Act, and the successful candidate will have to pass a medical examination. The appointments will be subject to the County Council's general conditions of service, and will be determinable by one month's notice on either side.

Applications, accompanied by three recent testimonials, in a sealed envelope endorsed "County Planning Appointments," should be delivered to the County Planning Officer, Glamorgan County Hall, Cardiff, not later than 12th November, 1945.

Canvassing, either directly or indirectly, will be a disqualification.

Applicants who are members of H.M. Forces and serving abroad are requested to cable the date of the despatch of their application. Telegraphic address: "Morganwg, Cardiff."

D. J. PARRY,  
Clerk of the County Council. 79

### URBAN DISTRICT COUNCIL OF FELTHAM.

#### APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Architectural Assistant in the Engineer and Surveyor's Department, at a salary of £500—£550 per annum, plus cost-of-living bonus (at present £59 16s. per annum).

Applicants should be qualified architects, and have had experience in the preparation of plans, specifications, and quantities for public and domestic buildings, and preference will be given to persons with experience in the preparation of housing schemes.

The appointment will be subject to one month's notice on either side.

Forms of application may be obtained from the undersigned, and should be returned, accompanied by copies of not more than three testimonials, not later than 5th November, 1945.

Canvassing is prohibited, and applicants must disclose in writing whether to their knowledge they are related to any member of or the holder of any senior office under the Council.

J. S. STRETT,  
Clerk of the Council.

Council Offices, Feltham, Middlesex.  
15th October, 1945.

### NEWCASTLE-UPON-TYNE EDUCATION COMMITTEE.

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THOS. W. LILLING,  
Director of Education.

City Education Office, Northumberland Road, Newcastle-upon-Tyne, 1.

## COUNTY COUNCIL OF FIFE.

Applications are invited from Qualified Architects for the post of COUNTY HOUSING ARCHITECT for the County of Fife. Applicants should have had experience in Local Government Housing, and the successful applicant will be responsible for the various housing schemes to be erected and in course of erection throughout the county.

Salary will be at the rate of £800, rising to £1,000 by annual increments of £25.

Applications, with copies of three recent testimonials, to be lodged with the Subscriber not later than 8th November.

Particulars of the appointment may be obtained on application from the Subscriber.

J. M. MITCHELL,

County Clerk.

County Buildings, Cupar.

18th October, 1945.

786

## Financial

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## Architectural Appointments Vacant

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EXPERIENCED Architectural Draftsman required by Head Office of Midland Brewing Co.; permanent position; state age, experience, salary required, and qualifications (if any). Box 763.

SENIOR ARCHITECTURAL and Surveying Assistant required by London Property Company; good general London experience essential; prospects of permanency; commencing salary about £450 per annum. Full particulars of experience, age, etc., to Box 787.

ARCHITECTURAL ASSISTANT required, aged about 25, capable of preparing working drawings, etc., under supervision for high priority housing. State experience, salary required, and position regarding National Service, to D. C. Denton-Smith, L.R.I.B.A., 40, Regent Street, Cambridge. 790

ARCHITECTURAL ASSISTANT, interested in contemporary design, required for Modern Industrial, Business, and Domestic work; competent draughtsman, with good experience, to take charge of drawing office. Write Box 798.

SENIOR ASSISTANT required by Architect with London and provincial offices; hard worker essential; salary according to age and experience; good prospects. Box 799.

ASSISTANT required, who must have interest in contemporary design, and is an experienced draughtsman; progressive position is offered in recently formed practice in London area. Box 784.

SENIOR and JUNIOR ASSISTANTS required in Architect's office, near Kingston, for work connected with war damage rebuilding. Box 785.

ASSISTANT, inter. R.I.B.A. or C.S.I. standard, required by Architects and Surveyors with general practice; responsible and progressive position. Write or phone R. C. & C., 40, Great James Street, W.C.1. Holborn 4626. 783

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JUNIOR ARCHITECTURAL ASSISTANT, over 20, required for Birmingham's Architect's office; state experience and salary required. Apply telephone, Birmingham Central 3628, or write Box 788.

SENIOR ARCHITECTURAL ASSISTANT required for Birmingham Architect's office; state experience and salary required. Apply telephone, Birmingham Central 3628, or write Box 789.

## Architectural Appointments Wanted

Advertisements from Architectural Assistants and Students seeking positions in Architects' offices will be printed in "The Architects' Journal" free of charge until further notice.

ARCHITECT (34), L.R.I.B.A., 15 years' experience all types of architecture and surveying; good organiser, used to control of staff and workmen, and lecturing on building subjects, seeks permanent position, preferably administrative; willing to go anywhere; salary £700. Box 148.

CLERK-OF-WORKS, Works and Buildings Superintendent, etc., seeks responsible position; over 25 years' practical and theoretical experience, and qualifications in all branches of the building trades and the profession with large Corporations, etc.; experience includes war damage, property management, property repairs, and general maintenance, and new works, and sound knowledge of country estate work; not liable for National Service, etc.; rendered war service during the 1914-18, and A.R.P. services during the 1939-45 war; Midlands, South and West of England preferred. Box 154.

R.I.B.A. (31), with 13 years' experience, open to undertake part-time work of all types. Box 155.

ARCHITECT'S ASSISTANT, carrying out large factory, housing and general work, requires part-time position in central London (max. 45 days). Box 151.

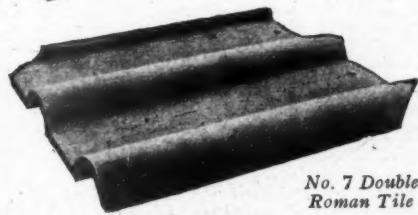
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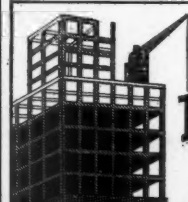
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