

# THE ARCHITECTS' JOURNAL



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every issue does not necessarily contain all these contents, but they are the regular features which continually recur.

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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to I one week, I to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

AA	Architectural Association, 34/6, Bedford Square, W.C.1.	Museum 0974
AAI	Association of Art Institutions. Secy.: W. Marlborough Whitehead, "Dyneley," Castle Hill Avenue, Berkhamstead, Herts.	
ABS	Architects' Benevolent Society. 66, Portland Place, W.1.	Welbeck 5721
ABT	Association of Building Technicians. 5, Ashley Place, S.W.1.	Victoria 0447-8
ACGB	Arts Council of Great Britain. 4, St. James' Square, S.W.1.	Whitehall 9737
ADA	Aluminium Development Association. 33, Grosvenor Street, W.1.	Mayfair 7501/8
APRR	Association for Planning and Regional Reconstruction. 34, Gordon Square, W.C.1.	Euston 2158-9
ArchSA	Architectural Students' Association. Department of Architecture, School of Building, Ferndale Road, Brixton, S.W.4.	Brixton 7048
ARCUK	Architects' Registration Council. 68, Portland Place, W.1.	Welbeck 9738
ASB	Architectural Science Board of the Royal Institute of British Architects. 66, Portland Place, W.1.	Welbeck 5721
AScW	Association of Scientific Workers. 15, Half Moon Street, Piccadilly, W.1.	
BAE	Board of Architectural Education. 66, Portland Place, W.1.	Grosvenor 4761
BATC	Building Apprenticeship and Training Council. Lambeth Bridge House, S.E.1.	Welbeck 5721
BC	Building Centre. 9, Conduit Street, W.1.	Reliance 7611, Ext. 1706
BCC	British Colour Council. 13, Portman Square, W.1.	Mayfair 8641/6
BCCF	British Cast Concrete Federation. 17, Amherst Road, Ealing, W.13.	Welbeck 4185
BCIRA	British Cast Iron Research Association. Alvechurch, Birmingham.	Perivale 6869
BDA	British Door Association. 10, The Boltons S.W.10.	Redditch 716
BEDA	British Electrical Development Association. 2, Savoy Hill, W.C.2.	Flaxman 7766
BGF	British Gas Federation. 1, Grosvenor Place, S.W.1.	Temple Bar 9434
BIA	British Ironfounders' Association. 145, Vincent Street, Glasgow, C.2.	Sloane 8266
BIAE	British Institute of Adult Education. 29, Tavistock Square, W.C.1.	Glasgow Central 2891
BID	Building Industries Distributors. 52, High Holborn W.C.1.	Euston 5385
BINC	Building Industries National Council. 11, Weymouth Street, W.1.	Chancery 7772
BOT	Board of Trade. Millbank, S.W.1.	Langham 2785
BRS	Building Research Station. Bucknalls Lane, Watford.	Whitehall 5140
BSA	Building Societies Association. 14, Park Street, W.1.	Garston 2246
BSI	British Standards Institution. 28, Victoria Street, S.W.1.	Mayfair 0515
BTE	Building Trades Exhibition. 4, Vernon Place, W.C.1.	Abbey 3333
CABAS	City and Borough Architects Society. C/o Johnson Blackett, F.R.I.B.A., Borough Architect, Town Hall, Newport, Mon.	Holborn 8146/7
CAS	County Architects Society. C/o A. Guy Chant, F.R.I.B.A., Salop County Council, 5, Belmont, Shrewsbury.	Newport 3111
CCA	Cement and Concrete Association. 52, Grosvenor Gardens, S.W.1.	Shrewsbury 3031
CDA	Copper Development Association. Kendals Hall, Radlett, Herts.	Sloane 5255
CIAD	Central Institute of Art and Design. 41, 42, Dover Street, W.1.	Radlett 5616
CIAM	Congrès Internationaux d'Architecture Moderne. Dolderal, 7, Zurich, Switzerland.	Regent 3074
CID	Council of Industrial Design. Tilbury House, Petty France, S.W.1.	Whitehall 6322
CPC	Codes of Practice Committee. MOW, 42, Onslow Gardens, S.W.7.	
CPRE	Council for the Preservation of Rural England. 4, Hobart Place, S.W.	Kensington 8161
CUJC	Coal Utilization Joint Council. 13, Grosvenor Gardens, London, S.W.1.	Sloane 4280
DGW	Directorate General of Works, Ministry of Works, Lambeth Bridge House, S.E.1.	Victoria 1534
DIA	Design and Industries Association. 13, Suffolk Street, S.W.1.	Reliance 1761
DOT	Department of Overseas Trade. 35, Old Queen Street, S.W.1.	Whitehall 0540
EC	Electricity Commission. Savoy Court, Strand, W.C.2.	Victoria 9040
EJMA	English Joinery Manufacturers' Association (Incorporated). Sackville House, 40, Piccadilly, W.1.	Temple Bar 7565
EPNS	English Place-Name Society. 7, Selwyn Gardens, Cambridge.	Regent 4448
FAS	Faculty of Architects and Surveyors. 8, Buckingham Palace Gdns., S.W.1.	
FB 1951	Festival of Britain 1951. 2, Savoy Court, Strand, W.C.2.	Sloane 2837
FASSC	Federation of Association of Specialists and Sub-Contractors. 21, Tothill Street, S.W.1.	Waterloo 1951
FBI	Federation of British Industries. 21, Tothill Street, S.W.1.	Whitehall 9606
FC	Forestry Commission. 25, Savile Row, W.1.	Whitehall 6711
FCMI	Federation of Coated Macadam Industries. 37, Chester Square, S.W.1.	
FDMA	The Flush Door Manufacturers Association Ltd. Trowell, Nottingham.	Sloane 1002
FLD	Friends of the Lake District. Pennington House, nr. Ulverston, Lancs.	Ilkeston 623
FMB	Federation of Master Builders. 26, Great Ormond Street, Holborn, W.C.1.	Ulverston 201
FRHB	Federation of Registered House Builders. 82, New Cavendish Street, W.1.	Chancery 7583
FS (Eng.)	Faculty of Surveyors of England. 8, Buckingham Palace Gdns., S.W.1.	Langham 4041
GG	Georgian Group. 27, Grosvenor Place, S.W.1.	Sloane 2837
HC	Housing Centre. 13, Suffolk Street, Pall Mall, S.W.1.	Sloane 2844
IAAS	Incorporated Association of Architects and Surveyors. 75, Eaton Place, S.W.1.	Whitehall 2881
ICE	Institution of Civil Engineers. Great George Street, S.W.1.	Sloane 5615

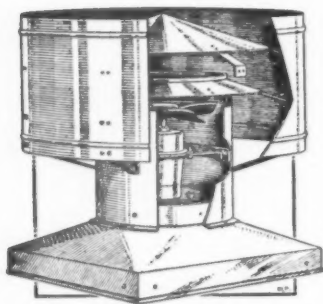
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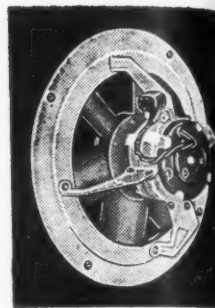
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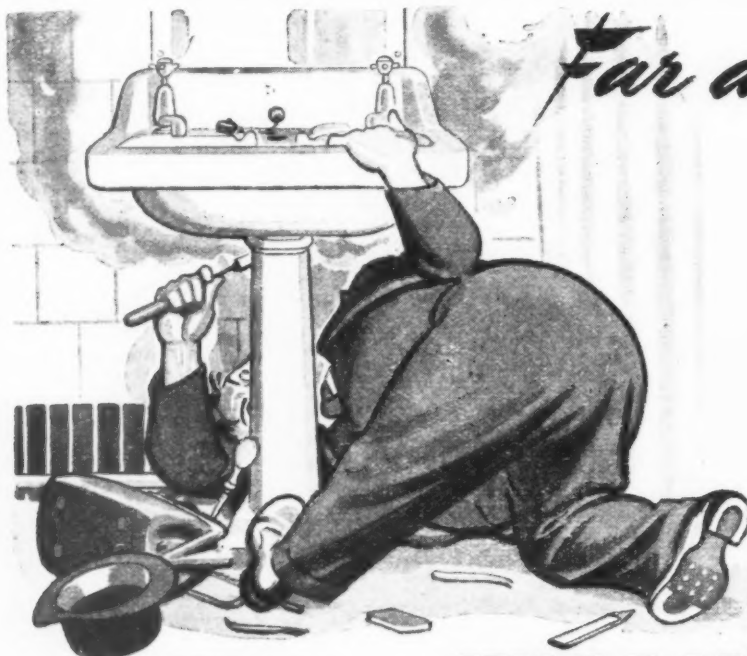
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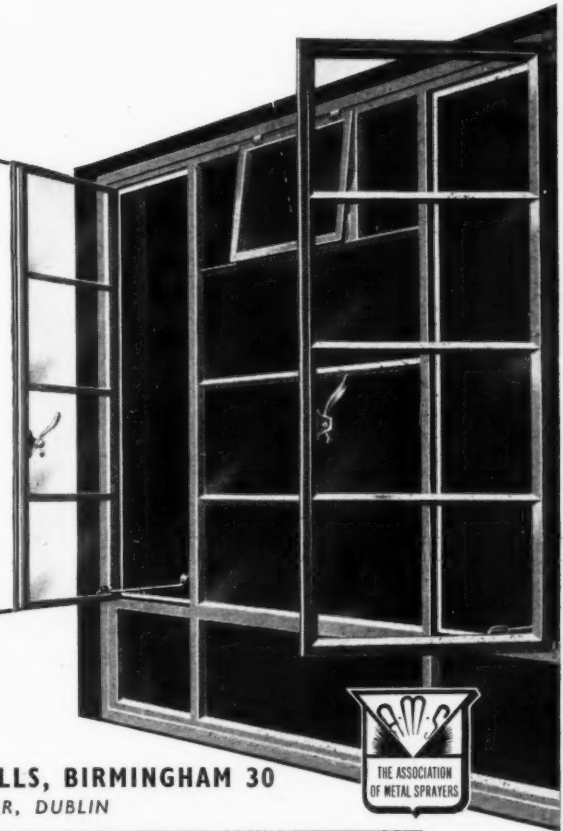
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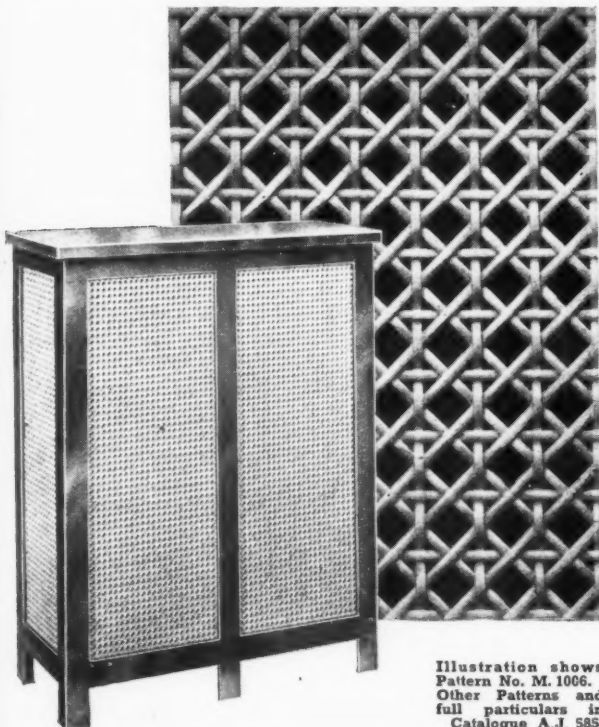


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Other Patterns and  
full particulars in  
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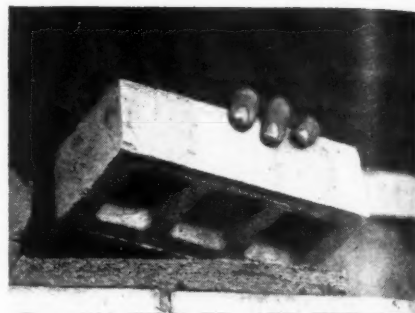
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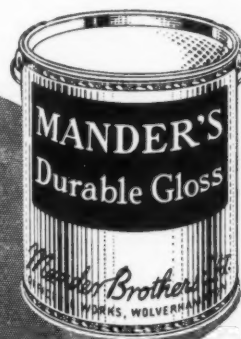


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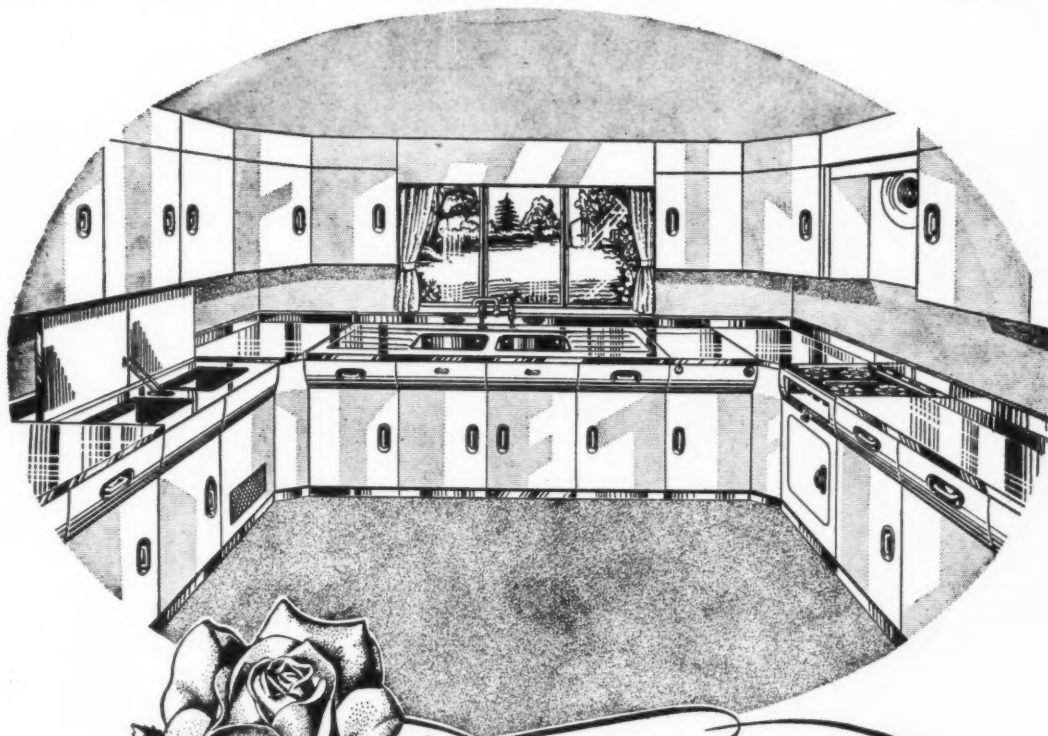
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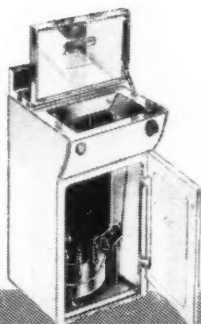




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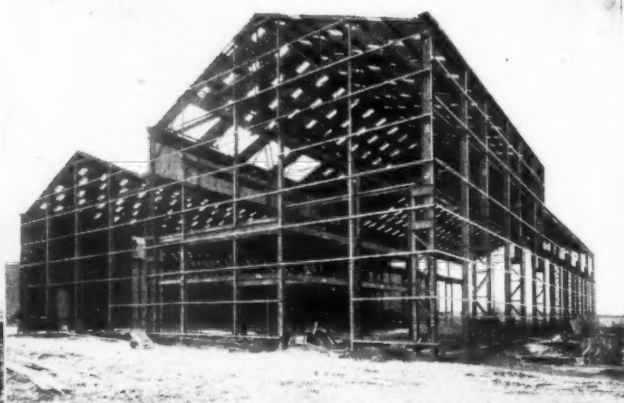
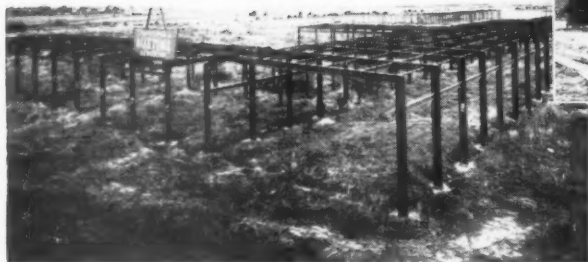
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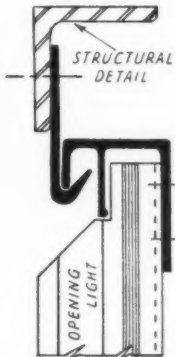
A  COMPANY



# Two revolutionary inventions affecting opening lights in ALUMINEX patent glazing

It has been said that one test of a good invention is whether the laymen will say — after it has been invented — that it is obvious. Here is a brief account of two such deceptively simple inventions that put Aluminex Patent Glazing opening lights in a class on their own for operational efficiency.

An opening light in Aluminex Patent Glazing is hung on a single hinge: a continuous hook hinge that extends the whole length of the window. The hinge is shown in the accompanying sketch. It will be seen from its simple shape that it cannot bind as ordinary knuckle hinges often do, nor does it suffer from other limitations of the ordinary hinge. The Aluminex hook hinge, being continuous, gives uniform support to the frame along its entire length. This means that the framework of the lights hung on these hinges may be constructed throughout of much lighter than normal metal sections.



This drawing shows the design of the continuous hinge used on the Aluminex opening lights. The head weathering makes flashings unnecessary.

It will immediately be seen how materially the invention of this hinge affected the progress of patent glazing. The hinge formed a natural addition to the other Aluminex components because these elements — the glazing bar, the continuous glazing cover strip, the zed weathering detail and the shoe — were all of similarly simple and functional design. (They were indeed the results of a basic re-thinking of patent glazing.)

## Three advantages of the continuous hinge

The exact form in which the continuous hinge was incorporated in the Aluminex system (again, as the diagram shows) brought three additional advantages. First, the hinge solved the problem of mounting long and continuous lights without hinges or hinge pins. Second, in the form adopted it provided an integral and draughtproof head weathering which made flashings unnecessary. Third, the hinge also provided, by reason of its open and simple form, a means of accommodating without strain or loss of alignment, the small structural variations which occur in practice, but which always tend to impair the free action of ordinary hinges.



Teleflex gearing here operates continuous, top-hung Aluminex ventilators in vertical sidewall glazing at a factory in Essex.

The continuous hinge allowed Aluminex engineers to build opening lights of 200 ft. length as a matter of course, and even greater lengths where circumstances demanded it, or where the opening gear could be power-operated.

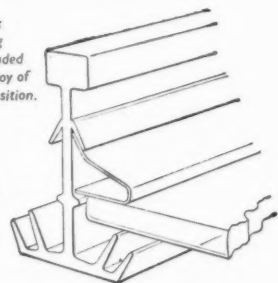
## New operating gear

At this point we must take into account operating gear. And it is precisely in this field that Aluminex was again fortunate in adding to itself a product of new thinking similar to itself in intelligent simplicity. This was the Teleflex opening gear. It first came into its own in the late war. At one time it was performing such diverse tasks as moving the tail fins of R.A.F. aircraft and swinging the control turrets of naval guns. Today its essential characteristics are the same as those which won acceptance for it during the war, although since then, it has been refined and improved in most particulars. Teleflex is a threaded cable which operates through small, well-designed gear boxes and is capable of transmitting movement over great distances by almost any route. It can be mounted on lighter metal sections than is the case with tension rod gearing and its mechanical efficiency is such that opening lights 200 ft. in length may be operated with very little effort. In addition, the costs of manufacture and erection are lower than with tension rod gearing. As a whole, therefore, the Teleflex opening light operating gear is a natural counter-

part of the Aluminex opening light hung on the continuous hook hinge.

has high insulating properties. The appearance of the glazing is neat and light, according well with contemporary styles of industrial architecture.

This Aluminex patent glazing bar is of extruded aluminium alloy of special composition. Here is seen one glazing cover strip holding a pane of glass in position on the bar.

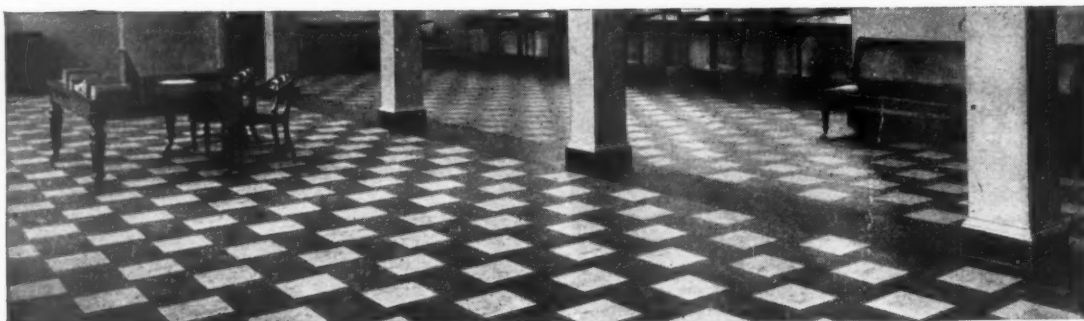


The Architect who turns to Aluminex Patent Glazing has at his service a method of architectural cladding capable of versatile applications. It is an accepted system yet remains susceptible to imaginative development. The Company extends its fullest co-operation to all Architects who wish to discuss new applications of Aluminex.

For further information please communicate with the **Aluminex Division of Williams & Williams Limited, Reliance Works, Chester. Telephone: Chester 3600 (7 lines). Telegrams: Reliance, Chester. And at Victoria House, Southampton Row, London, W.C.1. Telephone: H0Lborn 9861.**

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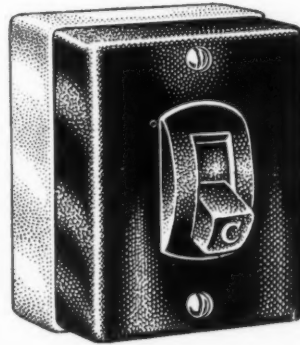
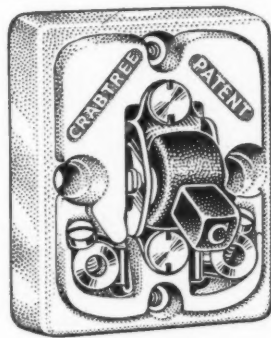
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This accessory was introduced in 1938 and is a true companion of the "Lincoln" Circular Switch. It embodies the same type of mechanism

and is made to the same high standards of efficiency. It is available in brown and white finishes in both surface or semi-recessed patterns.

The "Lincoln" Rectangular Switch—already widely popular—continues to win new friends among those who feel a quality switch is the best type of switch to install on a competitive installation.

# CRABTREE

*A name synonymous with Progress in Accessories and Switchgear*

# Super Purity Aluminium

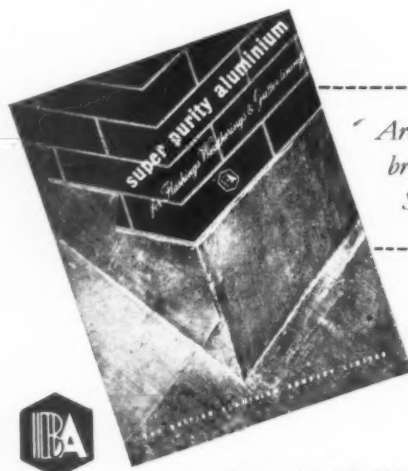
*now freely available for*

*Flashing . . . Weatherings . . . Gutter linings*

**DUCTILITY . . .** Super purity aluminium offers the builder a ductility and ease of working not obtainable from lower purities of aluminium, and compares very favourably in this respect with other flashing metals.

**DURABILITY . . .** Super purity is even more durable than commercial purity aluminium which has a proved record as a building material.

**ECONOMY . . .** Super purity aluminium is considerably cheaper than other flashing metals.



*Architects and Builders are invited to write for the brochure illustrating applications and a sample of Super Purity Metal.*



## British Aluminium

THE BRITISH ALUMINIUM COMPANY LIMITED SALISBURY HOUSE LONDON EC2



# SAFETY...

## with good appearance and **EXTREME** durability

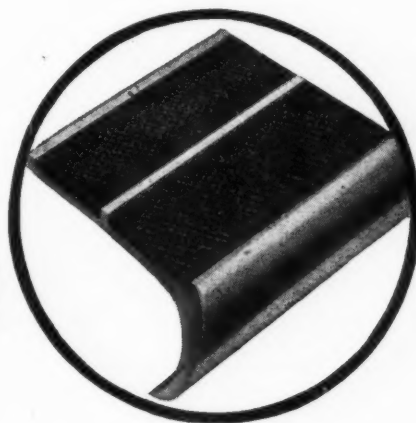
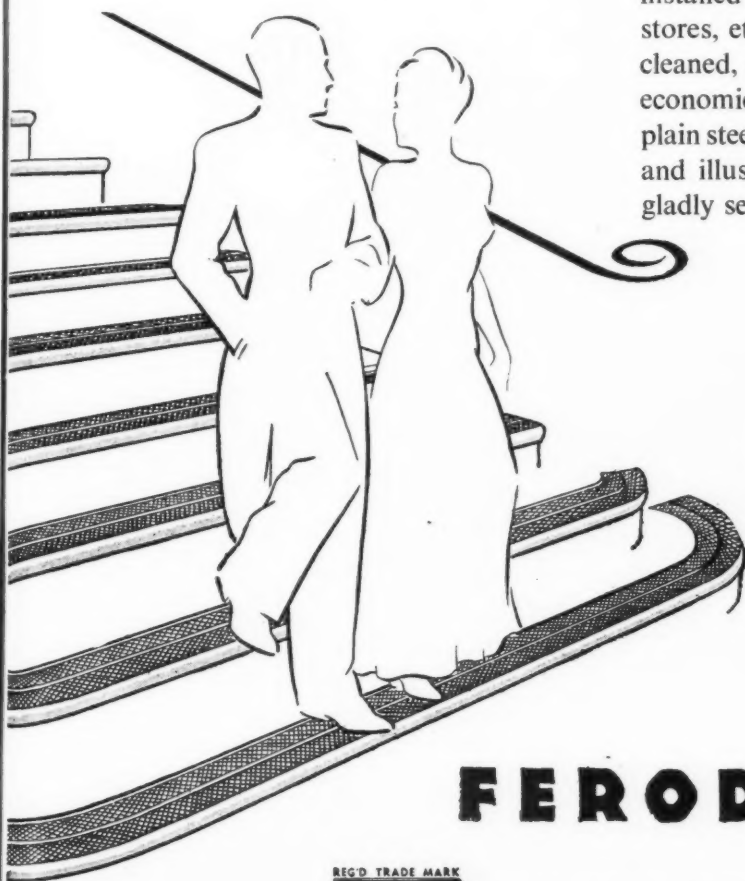
**In fitting stairs** for hard use by the public, it is no longer necessary to sacrifice appearance to long wear, or safety to either.

Ferodo Stairtreads combine all these qualities. The handsome aluminium nosing clearly outlines each step, while inlaid strips of Ferodo fabric or composition give a comfortable, quiet, firm-gripping tread which

absorbs wear without itself wearing appreciably, even under heavy traffic.

Single and double channel types are made. Both channels may carry Ferodo fabric, or may be of Ferodo composition, giving a smoother yet non-slip surface in red, white, or grey.

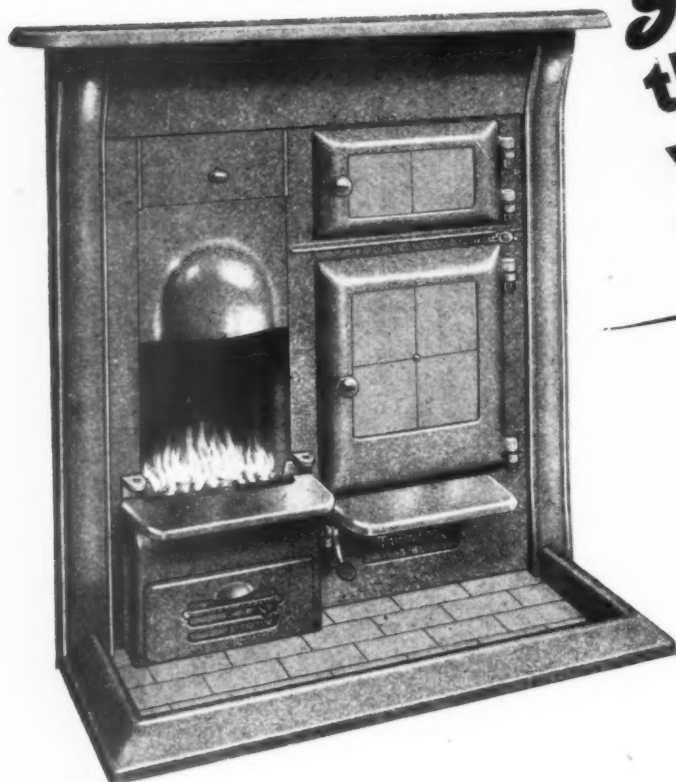
Ferodo Stairtreads are being increasingly installed in new and existing public buildings, stores, etc. They are easily fitted and easily cleaned, and their long life makes them very economical. The various models, including a plain steel-backed industrial type, are described and illustrated in our catalogue No. 732KK, gladly sent on request.



## **FERODO** STAIRTREADS



FERODO LIMITED, CHAPEL-EN-LE-FRITH. A Member of the Turner & Newall Organization



You may  
**SPECIFY**  
this grate  
with  
confidence

- 3 ESSENTIAL SERVICES FROM ONE SOURCE
- CONTINUOUS BURNING DAY & NIGHT.
- HOT WATER IN CONSTANT SUPPLY.
- SPACIOUS EVENLY HEATED OVENS.
- APPROVED BY THE MINISTRY OF HEALTH.

Burning night and day continuously if required the Triples 38 C.F. grate will give reliable service and is strongly recommended for Housing Schemes. All front castings are finished in best quality Black, Shaded Green or Biscuit mottle Porcelain Enamel for ease of cleaning.

*The*  
**TRIPLEX**  
**38 C.F. GRATE**

Write for full details.

**TRIPLEX FOUNDRY LTD**  
**GREAT BRIDGE · STAFFS**

# A NEW LOOK AT HOT WATER COSTS

LET US TAKE a new look at the cost of water heating at today's prices. Basing the comparisons on a family consumption of 200 gallons of hot water a week, the costs are:—



GAS  
at 1/4d. therm  
in an Ascot  
**2/11d.**



ELECTRICITY  
at 1d. unit  
**4/3d.**



Additional ASCOT  
advantages

**NO  
WAITING**

- Inexhaustible supply
- Always Available



**NO WORK**

- Completely Automatic
- No dust
- No waste
- No ashes

Gas is the cheapest *laid-on* fuel and, when burnt in an Ascot Water Heater, it automatically provides *instant* hot water in unlimited quantities with no dirt, no waste, no storage, no worry and no work. Moreover, an Ascot never runs cold whereas with some other heaters, and boiler systems, there are often delays while the water is heated or re-heated.

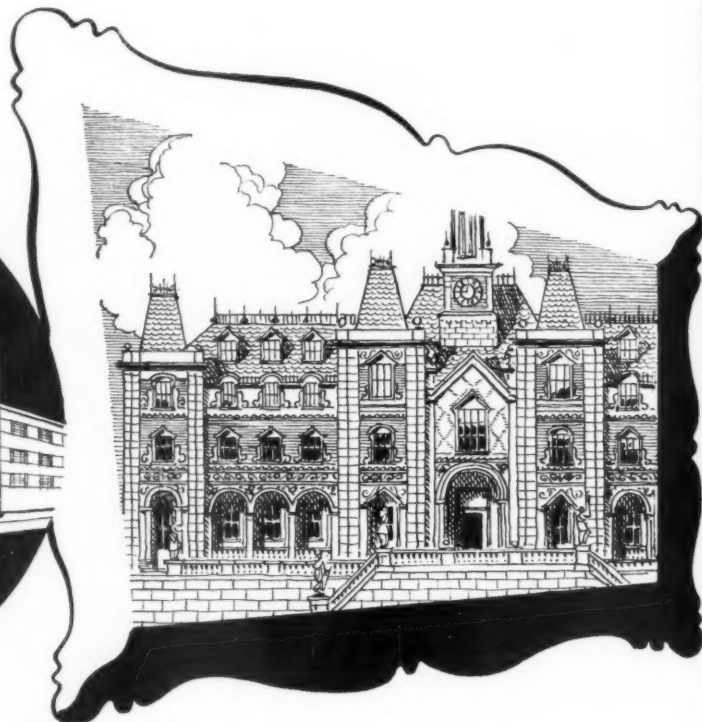
*ask*

The Ascot technical department possesses wide experience of hot-water planning. Its officers are freely available for consultation.

**ASCOT**

**ASCOT GAS WATER HEATERS, LTD., 43, PARK STREET, LONDON, W.1**

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## or Fanciful

Function and fancy are both satisfied by a Docker finish—the first by its protective strength, and the second by its pleasing shade. Whatever the scheme there is always a Docker Finish that has been “made for the job.”



## PERMATOR

Super Gloss Paint decorates, protects and preserves under the most arduous conditions. For interior decoration of the highest quality specify MUROLEUM Flat Oil Paint.



**DOCKER BROTHERS**  
*Makers of Paints, Lacquers and Varnishes for every purpose*

LADYWOOD · BIRMINGHAM · 16



# Supplied and fixed by **MARLEY** means

*free maintenance in good condition for* **10 YEARS**

*guaranteed against lamination and decay for* **50 YEARS**

*Whatever tiles you specify insist  
on these guarantees backed by a  
Company of standing.*



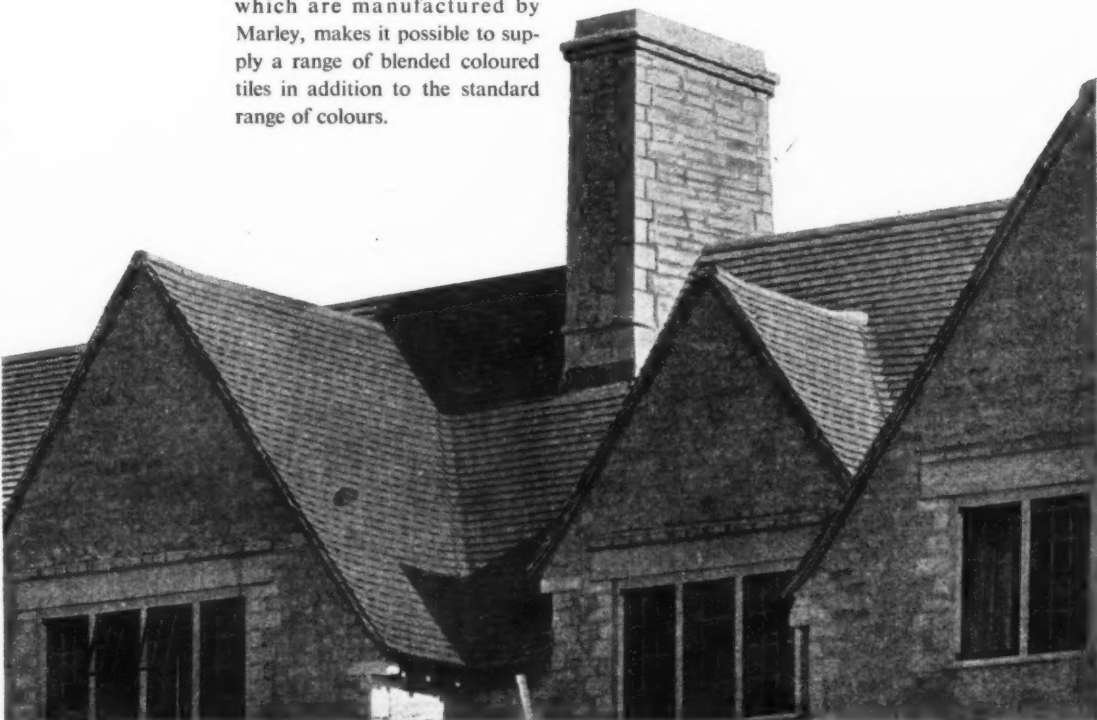
*"Not for an age—but for all time"*

THE MARLEY TILE CO · LTD · RIVERHEAD · SEVENOAKS · KENT

Telephone : Sevenoaks 2251

## PERMANENT COLOUR

All Marley roofing tiles are now surfaced with permanently coloured granules which cannot fade, but give a distinctive texture to the tiles and assist the weathering process. The use of these granules, which are manufactured by Marley, makes it possible to supply a range of blended coloured tiles in addition to the standard range of colours.



## MODERN HOUSING ESTATE



PETERBOROUGH CORPORATION HOUSING SCHEME, PETERBOROUGH, NORTHANTS.  
(BY KIND PERMISSION OF F. J. SMITH, ESQ., CITY ENGINEER AND SURVEYOR)

Some 400 houses on this modern estate are each fitted with a pair of sliding doors dividing the dining room and lounge, enabling these two rooms to be opened up into one large room for entertaining, etc., and allowing sunshine into opposite aspects of the houses simultaneously.

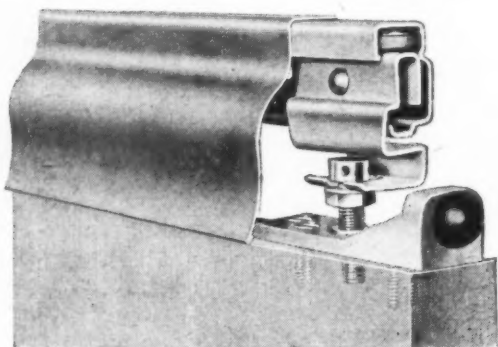
After comparison and trial, the fittings chosen for this scheme were :—

## “ESTATE”

### SLIDING DOOR GEAR

(Supplied through Messrs. Hayward & Tourell, Ltd., Wholesale Ironmongers, North Street, Peterborough)

The salient features governing this choice are summarized thus :—



- |                    |                    |
|--------------------|--------------------|
| ★ Silent operation | ★ Neat appearance  |
| ★ Inexpensive      | ★ No maintenance   |
| ★ Clear threshold  | ★ Speedy fixing    |
| ★ Rustproof finish | ★ Full adjustments |

“Estate” sliding door gear is used extensively in blocks of flats where kitchenettes and other small rooms necessitate space economy.

An exclusive “snap-on” pelmet conceals all fittings and will harmonize with picture rail or panelled effect.

“Estate” gear is stocked by hardware firms throughout the British Isles, also in many countries overseas, and supplies are quickly available from your local merchants.

MAY WE SEND YOU DESCRIPTIVE LITERATURE AND ERECTION DATA ?

**Clarke Ellard Engineering Co. Ltd.**

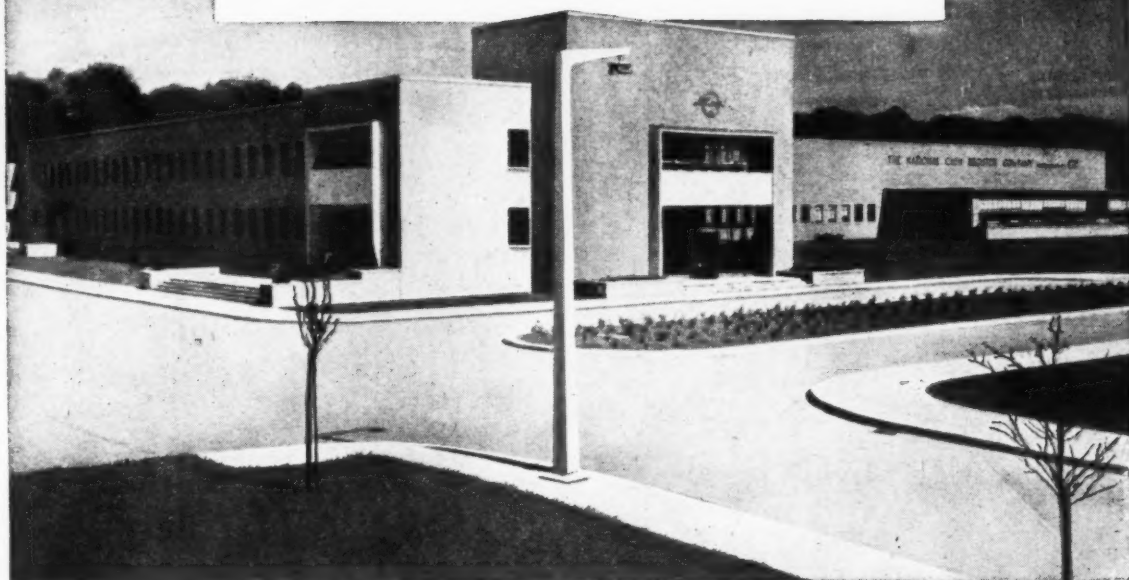
**WORKS ROAD**

**LETCHWORTH, HERTS**

Telephone : Letchworth 979

SEE OUR EXHIBITS AT THE BUILDING CENTRE, 9, CONDUIT STREET, LONDON, W.1  
& THE SCOTTISH BUILDING CENTRE, 425-427, SAUCHIEHALL STREET, GLASGOW, C.2.

## ABOVE ALL . . . SPECIFY BRIGGS



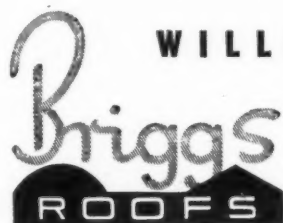
THE NATIONAL CASH REGISTER FACTORY, DUNDEE.  
*Designed by Messrs. Stanley Beard & Bennett,  
F.F.R.I.B.A., London.*

Another important modern factory where a  
BRIGGS ROOF is responsible for the protection of  
valuable plant and machinery.

Factory efficiency and production can only be

maintained if the roof is sound and secure—it is  
wise therefore to specify BRIGGS. Since BRIGGS  
ROOFS were laid many years ago there has been  
adequate experience for their durability and  
economy to be proved.

Staffs are maintained throughout the country  
for estimating and laying BRIGGS ROOFS and for  
giving technical information when required.



**WILLIAM BRIGGS & SONS LIMITED**

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OFFICES & DEPOTS AT: ABERDEEN, EDINBURGH  
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# Fleetwood big 5

The finest oil-bound, ready-mixed plastic paint in the world, washable, simple to texture and hard wearing.



Something more than a good hard gloss paint! A superb hard gloss enamel paint, for inside and outside work.



Amazing new flat wall paint which may be applied direct to new Plaster, Concrete, Cement, Asbestos, etc.



The lovely new Satin Wall finish which may also be used on interior woodwork.



A superfine synthetic enamel giving a lasting finish of extreme brilliance. All shades style-toned to harmonize with Durasheen and Duramatt.

... Plastex, Chinagloss, Duramatt, Durasheen and Duramel are but five of the wide range of Fleetwood Paints—a range decorators can rely on for quality, durability, easy working and economy in use.

Write for trade prices and shade cards to:—

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## **Fleetwood**

PAINTS LIMITED

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# DOW-MAC

FOR

## PRESTRESSED CONCRETE

PRESTRESSED  
CONCRETE  
FACTS

### THE CONCRETE STRENGTH

Concrete used by Dow-Mac for prestressing must attain a minimum compressive strength of 4500 lb. per sq. in. before the tensioned wires are released and the prestressing forces applied. Seven days after casting this strength will increase to more than 6000 lb. per sq. in.

The wire used is high tensile steel, having an ultimate strength of 100-110 tons per sq. in. and a 0.1 per cent. proof stress of at least 70 tons per sq. in. The initial tension applied to each 0.2 in. diameter wire is 2.2 tons, while the elongation in stretching is approximately 1 ft. per 200 feet length.

### PROCESS CONTROL

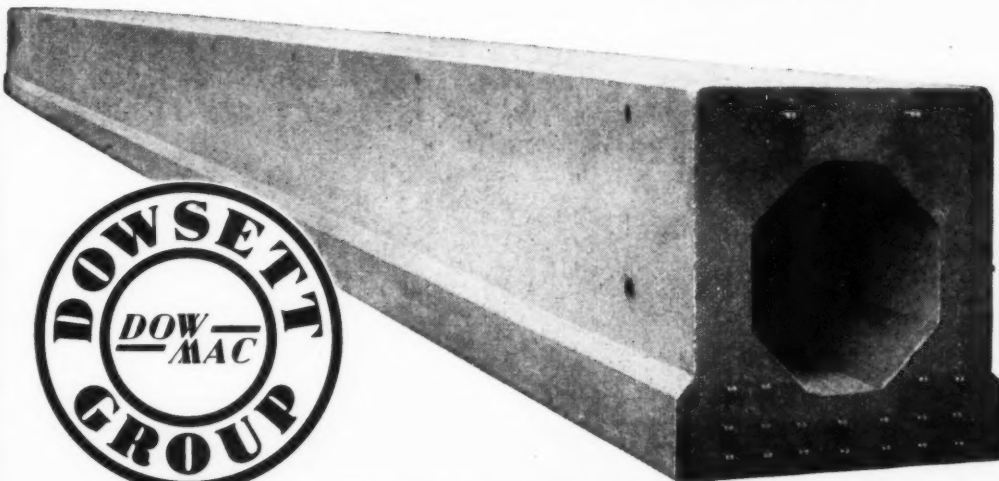
Close control is exercised during each stage of manufacture. Sand and gravel are carefully graded. Cement complies with the relevant B.S.S. All materials are proportioned by weight and the water content in the mix is most carefully controlled.

### ROUTINE TESTS

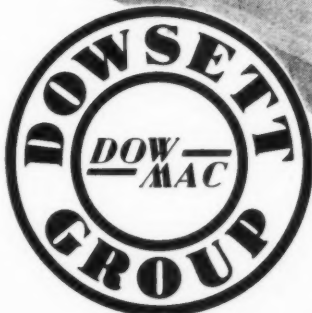
Compression test cubes are made from each mix and no wires are detensioned until the tests show that the concrete has attained the requisite strength. Tests are also made on the finished products to conform with the requirements of their ultimate use.

### APPLICATIONS

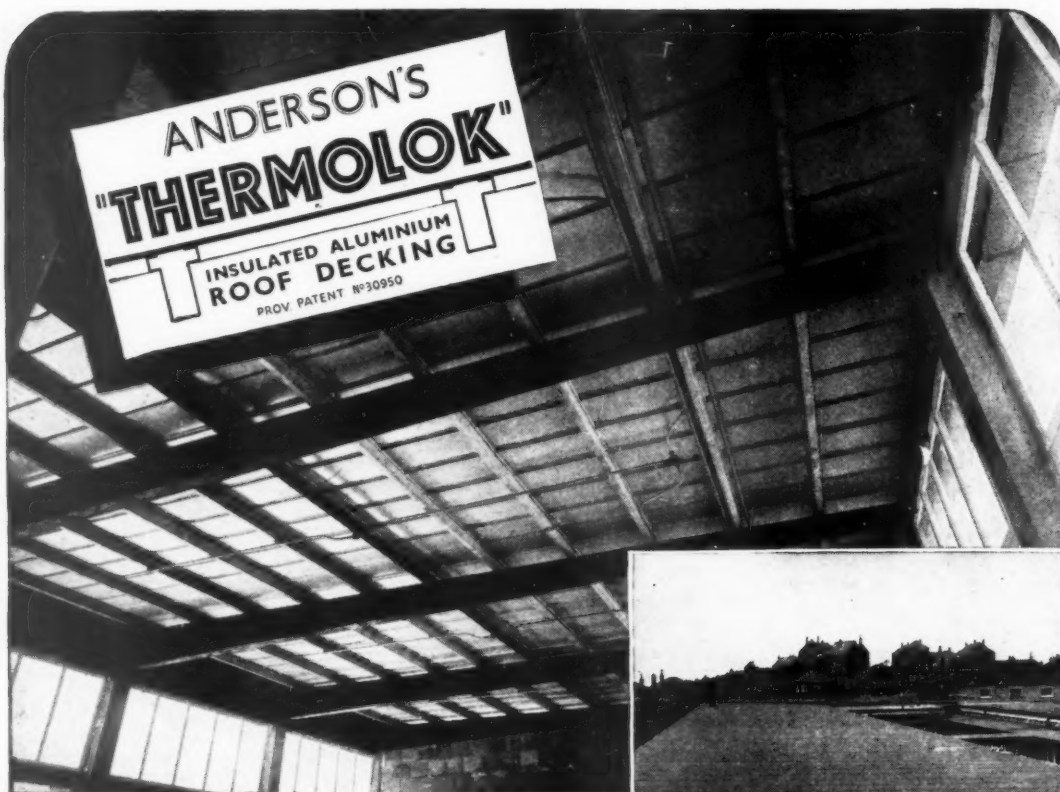
Prestressed concrete in pre-cast form is now used for railway sleepers, roof and floor beams, bridge beams, piles and walings, electric transmission poles and for many other purposes. Dow-Mac, who made their first railway sleeper nearly 10 years ago are now utilising their experience in these fields.



*Typical road bridge beam as manufactured for the Holland C. C.*



DOW-MAC (PRODUCTS) LIMITED, TALLINGTON, STAMFORD, LINCOLNSHIRE  
TELEPHONE: PETERBOROUGH 4501 (8 lines)



"THERMOLOK" is a modern aluminium decking of exceptional strength and rigidity, and is suitable for all types of roof structures.

The design is exclusive and embodies features which mark a big advance in roof construction.

The system is flexible and can be adapted to suit special requirements. "THERMOLOK" can be supplied in several gauges, and the bar sections increased to take spans greater than 10 feet.

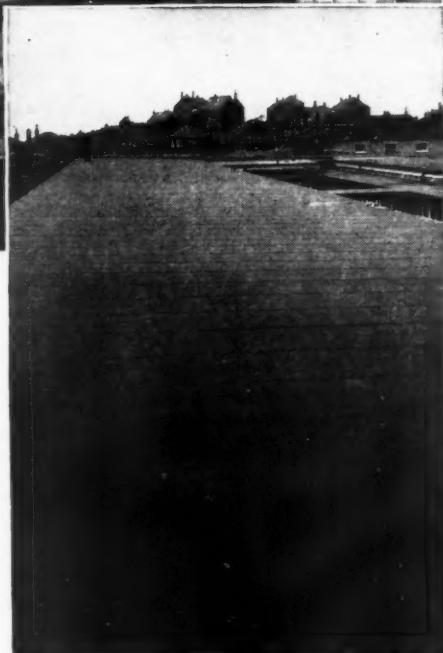
A high insulation value can be obtained resulting in fuel economy and more comfortable interior conditions; condensation risk is reduced to a minimum.

The interior appearance of "THERMOLOK" with its pleasing design and light aluminium colour eliminates the necessity for a separate ceiling.

The light weight and strength of "THERMOLOK" enable economy in design of the sub-structure to be obtained to the maximum extent.

No scaffolding is necessary and a speedy erection is assured. Fastenings are reduced to a minimum by means of the patent locking device.

Durable waterproofing is provided by Anderson's "DUROK" Roofing System, and a variety of finishes can be given, if desired, to secure a pleasing appearance and to harmonize with surroundings.



## D. ANDERSON & SON LTD

"THERMOSTEEL" DIVISION

STRET FORD, MANCHESTER  
ROACH ROAD, OLD FORD, LONDON E.3

also at

Belfast · Birmingham · Glasgow · Leeds · Nottingham

FLEXIBLE DESIGN

SPEEDY ERECTION

LIGHT WEIGHT

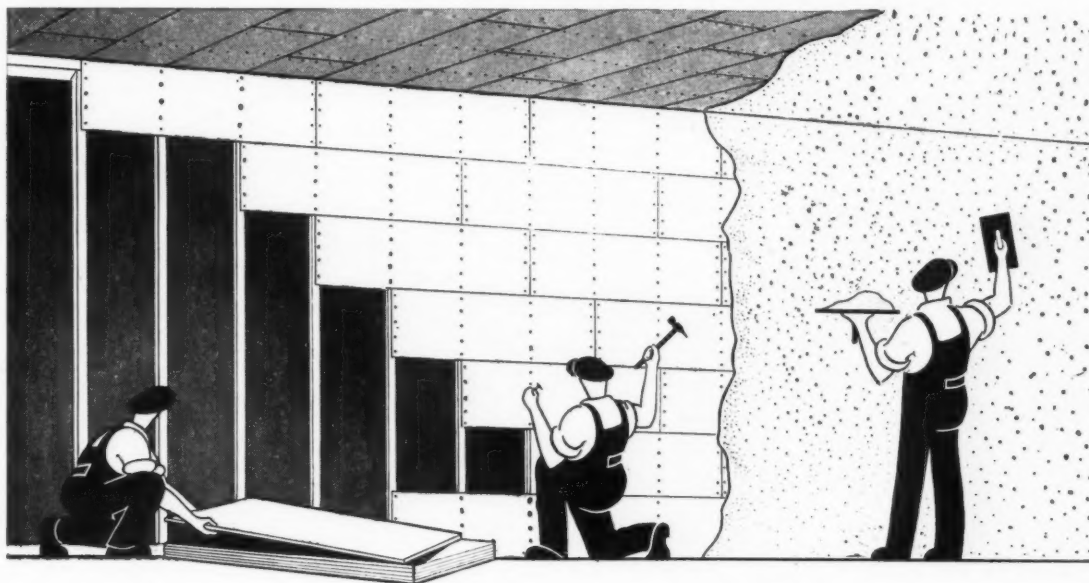
INSULATION THERMAL

GOOD APPEARANCE

# "GYPROC" LATH

REGD. TRADE MARK

the popular pre-war plastering base  
*is freely available again*



"Gyproc" Lath is an ideal plastering base for "Gyproc" Gypsum Plasters—their combined use minimises the incidence of cracking in finished plasterwork.

"Gyproc" Lath is 3d. per yard cheaper than Gypsum wallboard and, in addition, because it is not necessary to scrim the joints of "Gyproc" Lath and because it is more easily handled, thus reducing waste, the use of "Gyproc" Lath provides for an even greater saving in cost per square yard of plastering work.

## FIRE PROTECTION

"Gyproc" Lath is composed of Gypsum and is, therefore, a natural barrier against fire.

## GYPROC PRODUCTS LIMITED

HEAD OFFICE: Westfield, Upper Singlewell Road, Gravesend, Kent.  
Telephone: Gravesend 4251-4. Telegrams: Gyproc, Gravesend.

GLASGOW OFFICE: Gyproc Wharf, Shieldhall, Glasgow, S.W.1.  
Telephone: Govan 2141-3. Telegrams: Gyproc, Glasgow.

LONDON OFFICE: Morris House, 1-5 Jermyn Street, London, S.W.1.  
Telephone: Whitehall 9821-5.

Makers of "GYPKLITH" Light-weight Building Slabs,  
"GYPSTELE" Partitions and Ceilings,  
"PLAXSTELE" and "ACOUSTELE" Ceilings,  
"GYPROC" 2-inch Solid Partitions.

GL. I

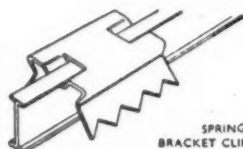
# SPECIFY 'Rufflette' CURTAIN SUSPENSION SYSTEMS

BRAND

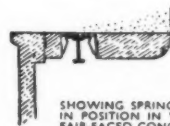
## 'Rufflette' brand RECESSED CURTAIN RUNWAY

'Rufflette' brand Recessed Curtain Runway is a permanent and integral part of building construction. It is inexpensive and simple to fit into wood, plastered or fair-faced concrete lintels. The runway is held rigidly in position by a patent spring clip without screws and is a concealed and a permanent fitting.

FOR WOOD OR FAIR-FACED CONCRETE

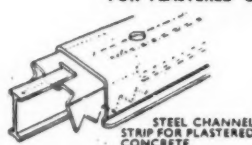


SPRING  
BRACKET CLIP

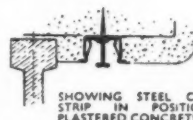


SHOWING SPRING BRACKET  
IN POSITION IN WOOD OR  
FAIR-FACED CONCRETE

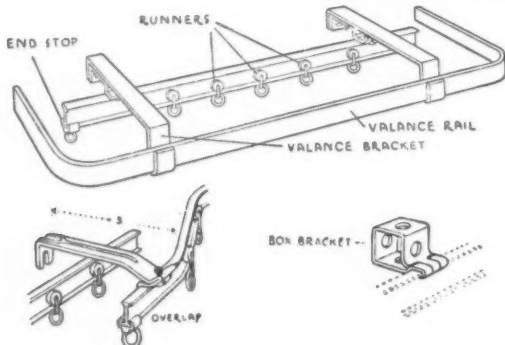
FOR PLASTERED CONCRETE LINTELS



STEEL CHANNEL  
STRIP FOR PLASTERED  
CONCRETE



SHOWING STEEL CHANNEL  
STRIP IN POSITION IN  
PLASTERED CONCRETE LINTEL



## 'Rufflette' brand

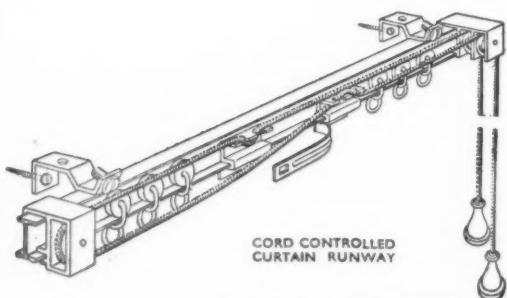
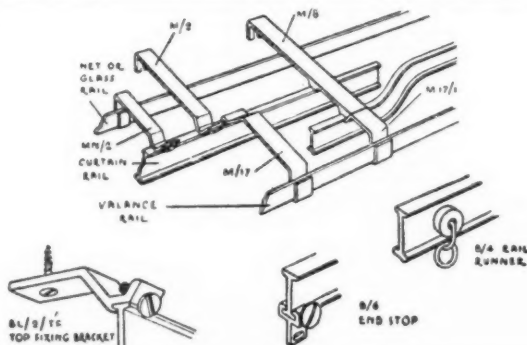
### B/L CURTAIN RUNWAY

This runway has been specially designed for wood frame windows. The construction is of heavy extruded brass, with top or face fixing brackets made specially for quick fitting and is therefore a valuable time-saving device. For strength, durability and easy running specify 'Rufflette' brand B/L Curtain Runway.

## 'Rufflette' brand

### M SERIES RUNWAY FOR METAL WINDOWS

The special feature of this runway is the use of extension supports from the main runway for the valance and net curtain rails; this reduces the number of main supports needed and minimises drilling. 'Rufflette' brand M Series Curtain Runway can be fitted to any shape window straight or curved. The 'Rufflette' M Series Curtain Runway is specially designed for quick and easy fitting to metal windows.



CORD CONTROLLED  
CURTAIN RUNWAY

## 'Rufflette' brand

### CORD CONTROLLED CURTAIN RUNWAY

For smooth and trouble-free operation the 'Rufflette' brand Cord Controlled Curtain Runway is recommended for use in large establishments such as hotels, residences and offices where curtains receive constant usage. It is of simple construction and quickly fitted without dismantling. 'Rufflette' brand Cord Controlled Curtain Runway will fit all straight windows.

Architect's Journals the following Information Sheets are available and will be sent on request to manufacturers.  
SHEET 44 D.1. ('RUFFLETTE' RECESSED RUNWAY). SHEET 44 D.2. ('RUFFLETTE' B/L and M Type Runways).

# 'Rufflette' BRAND

MANUFACTURED BY THOMAS FRENCH & SONS LTD., CHESTER ROAD, MANCHESTER 15  
 FACTORIES: Manchester, Wythenshawe, Fall River, Mass., U.S.A. LONDON OFFICE: 156-162 Oxford Street, W.1  
 Also at BRITISH EMPIRE BUILDING, NEW YORK CITY, and 751, VICTORIA SQUARE, MONTREAL



# Policy & Purpose

Broken down into its constituent parts, all switchgear is basically the same, but in its completed form, the variety is legion.

The abiding principle behind the manufacture of Sanders Switchgear is functional efficiency. Years of experience have identified the points at which additional features—mechanical, electrical or manipulative—are desirable and no additional operation thus involved is either shirked or avoided.



**SANDERS**  
WEDNESBURY

**MAKERS OF GOOD SWITCHGEAR FOR OVER FIFTY YEARS**

*Comprehensive stocks are  
carried by selected wholesalers  
in all large centres of population*

**WM. SANDERS & CO. (WEDNESBURY) LTD., WEDNESBURY, STAFFS.**

For producing  
the ideal mortar  
for brickwork &  
masonry and  
internal plastering

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*Recommended mixes incorporating the use of*

**HYDRALIME**

THE SCIENTIFICALLY HYDRATED LIME

*and*

**BLUE CIRCLE  
PORTLAND CEMENT**

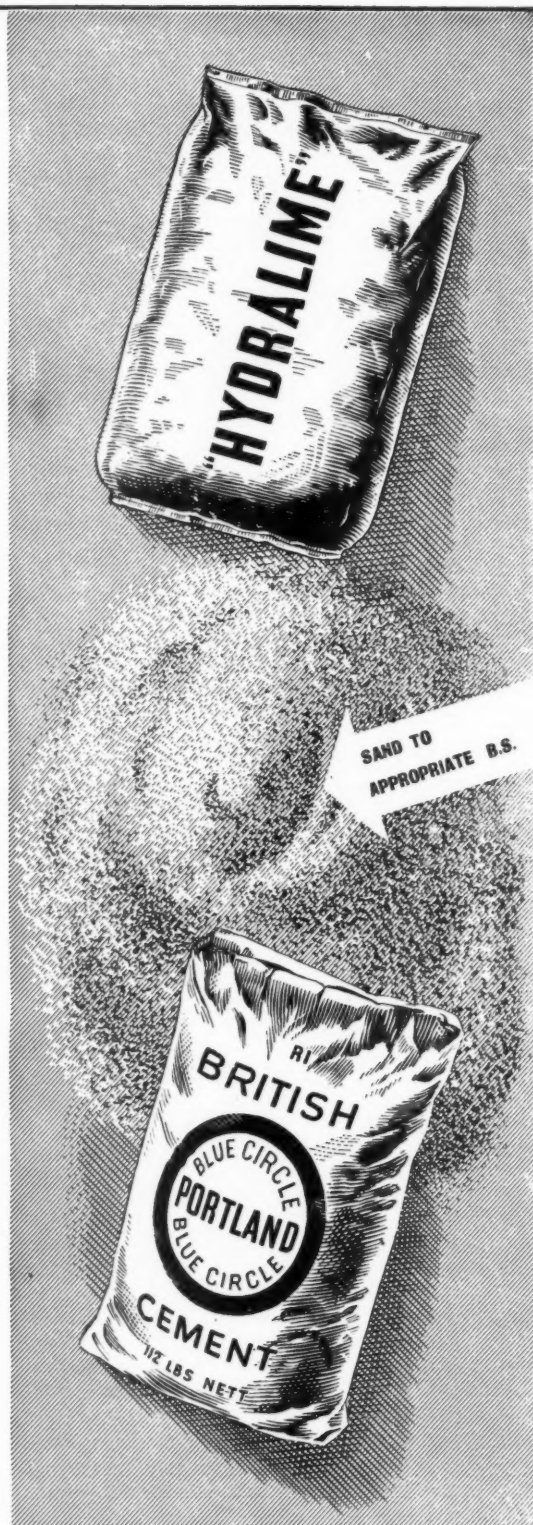
*based on the Draft Codes of Practice will be  
forwarded on application to :*

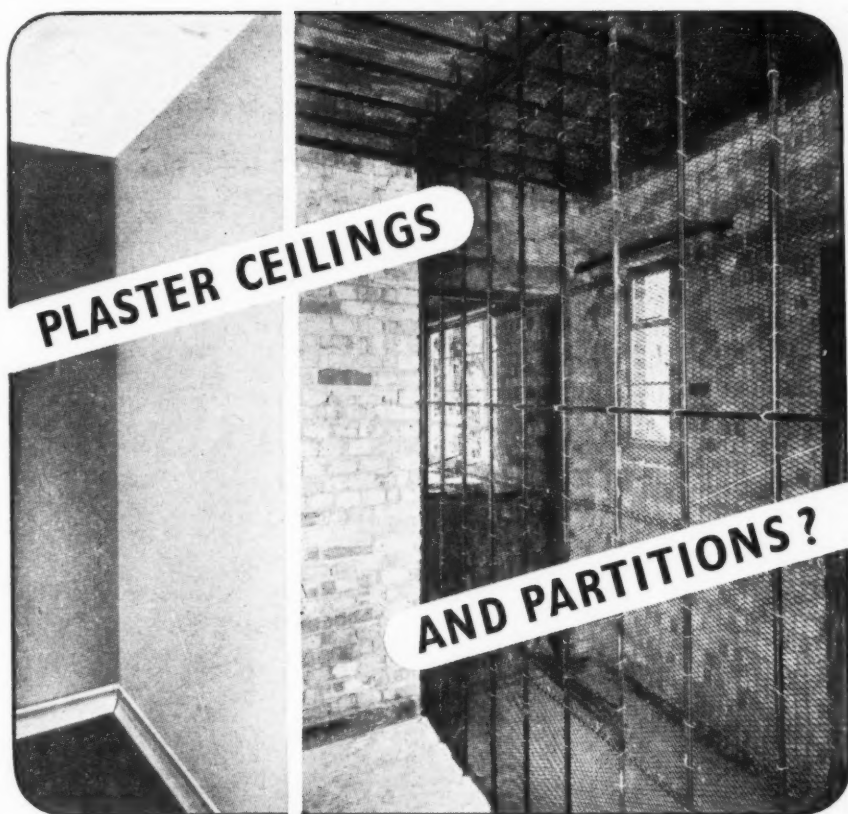


**THE CEMENT MARKETING COMPANY LTD**

Portland House, Tothill Street, London, S.W.1.

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**'B B'**  
**EXPANDED  
METAL LATHING**

Supplied and fixed for suspended ceilings and solid partitions in the new offices for Messrs. Grant & Jeffries Ltd., Acton. Architect: Mr. John W. Scott, M.Inst.R.A. Caterham.



Highly attractive appearance of the finished work — combined with strength and durability, as well as high fire-resistant qualities — are some of the advantages of 'B B' Expanded Metal Lathing and Plaster Construction for Ceilings and Partitions. The cost will bear comparison with any other form of construction of equal performance.

A complete Technical Service is at your disposal if required.

## **Expanded Metal Products**

**'EXPAMET'**

**The Expanded Metal Company, Ltd.,**

Burwood House, Caxton Street, S.W.1. WHITEHALL 1736.

STRANTON WORKS, WEST HARTLEPOOL, HARTLEPOOLS 2194.

ALSO AT: ABERDEEN, BELFAST, BIRMINGHAM, CAMBRIDGE, CARDIFF, EXETER, GLASGOW, LEEDS, MANCHESTER

# The Permanent Finish

*for Walls,  
Ceilings,  
etc.*



Toilets at the Great Eastern Hotel, E.C.

To interior surfaces exposed to moisture, grease and grime, Glass Facing imparts a *permanent* lustrous and colourful finish. It needs no maintenance apart from an occasional wipe with a damp cloth, is unaffected by disinfectants and other chemicals, cannot be disfigured with pen or pencil, and will not craze.

Glass is very adaptable to design, and may be fixed in large or small panels.

Materials used :—

## 'VITROLITE'

This material is most widely used for Glass Facing; it has a hard and, brilliant fire-finished surface.

Standard Thickness— $\frac{5}{16}$  in.

Colours.—At present available in BLACK, WHITE, GREEN, GREEN AGATE, PRIMROSE, TURQUOISE, SHELL PINK and PEARL GREY, Eggshell is scheduled for early production.

Standard Ashlar Panels.—“Vitrolite” can be used in large sizes, but for simplicity, convenience and economy, standard panels are available in the following sizes: 15 in. by 10 in., 18 in. by 12 in. (most popular), 15 in. by 15 in., 21 in. by 14 in.

Thicker Substance.—“Vitrolite” is also manufactured in  $\frac{7}{16}$  in. thickness, BLACK and WHITE only. This is used in positions where greater strength is needed—Counter Tops, Table Tops, Bar Fronts, Stallboards, etc.

## WHITE POT OPAL SHEET

This material is white right through, and is suitable for Ceiling Facing.

Substances available.—15 oz. and 21 oz.

Sizes.—Standard is 24 in. by 24 in., but where the area to be covered is better suited by other sizes, glass can be cut accordingly.

## NOTE

Colours now available in “Vitrolite” include  
**PEARL GREY**

## APPLICATIONS

BATHROOMS	FOOD STORES	HOSPITALS
BATH PANELS	FISH SHOPS	FIRST AID ROOMS
SPLASHBACKS	DAIRIES	OPERATING THEATRES
TOILETS	BUTCHERS' SHOPS	DENTAL SURGERIES
CLOAKROOMS	MILK BARS	LIFT INTERIORS
KITCHENS	SNACK BARS	TELEPHONE KIOSKS
STAIRCASES	COUNTER FRONTS	SUBWAYS
CORRIDORS	COUNTER TOPS	HAIRDRESSING CUBICLES

CEILING TREATMENTS to most of the above.

As Specialist Fixers, Clark-Eaton offer the fullest co-operation on planning and installation.

A COMPREHENSIVE BOOKLET giving suggested colour schemes, hints on design and data regarding Joints, Edge Finishes, etc., will gladly be sent upon request.

TECHNICAL SERVICE. An experienced representative will call for consultation by appointment.

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(Amalgamating James Clark & Son Ltd., and Eaton, Parr & Gibson Ltd.)

GLASS FOR ALL STRUCTURAL AND DECORATIVE PURPOSES

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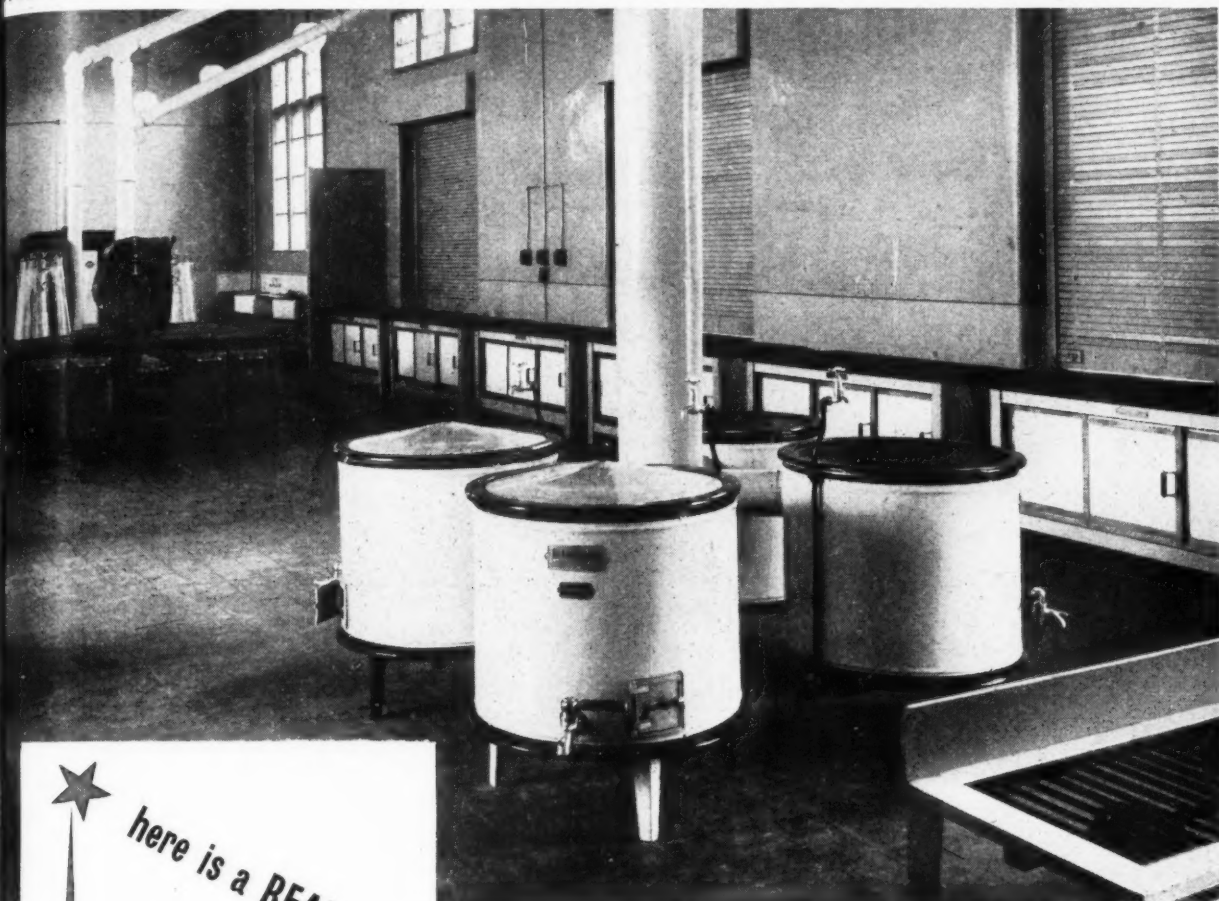
CANTERBURY  
BOURNEMOUTH



EASTBOURNE  
READING



Architect: H. R. HUDSON, L.R.I.B.A., M.R.San.I. Director of Works, City of Leeds.



here is a REAL  
SERVICE TO ARCHITECTS

*Architects are invited to consult the Rowe organisation which has at each branch a fully qualified technical staff, who, with their specialist knowledge in kitchen planning, will be pleased to assist with layouts and plans or act in an advisory capacity in kitchen remodelling. The illustration is of the kitchen for the City of Leeds Civic Restaurant—a typical installation provided by this service.*

*A wide range of catering equipment is displayed in extensive Showrooms at each branch.*

Rowe

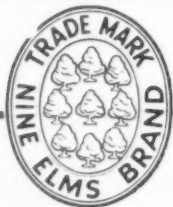
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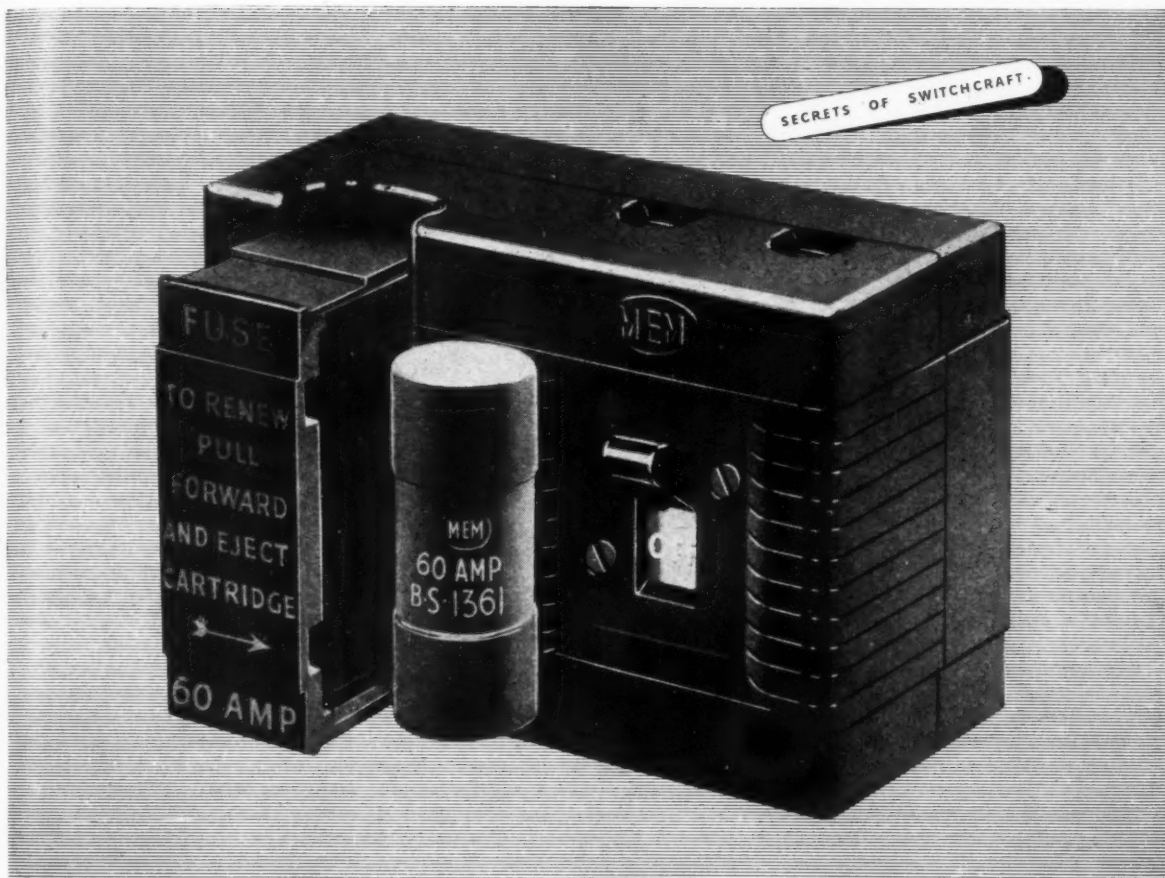
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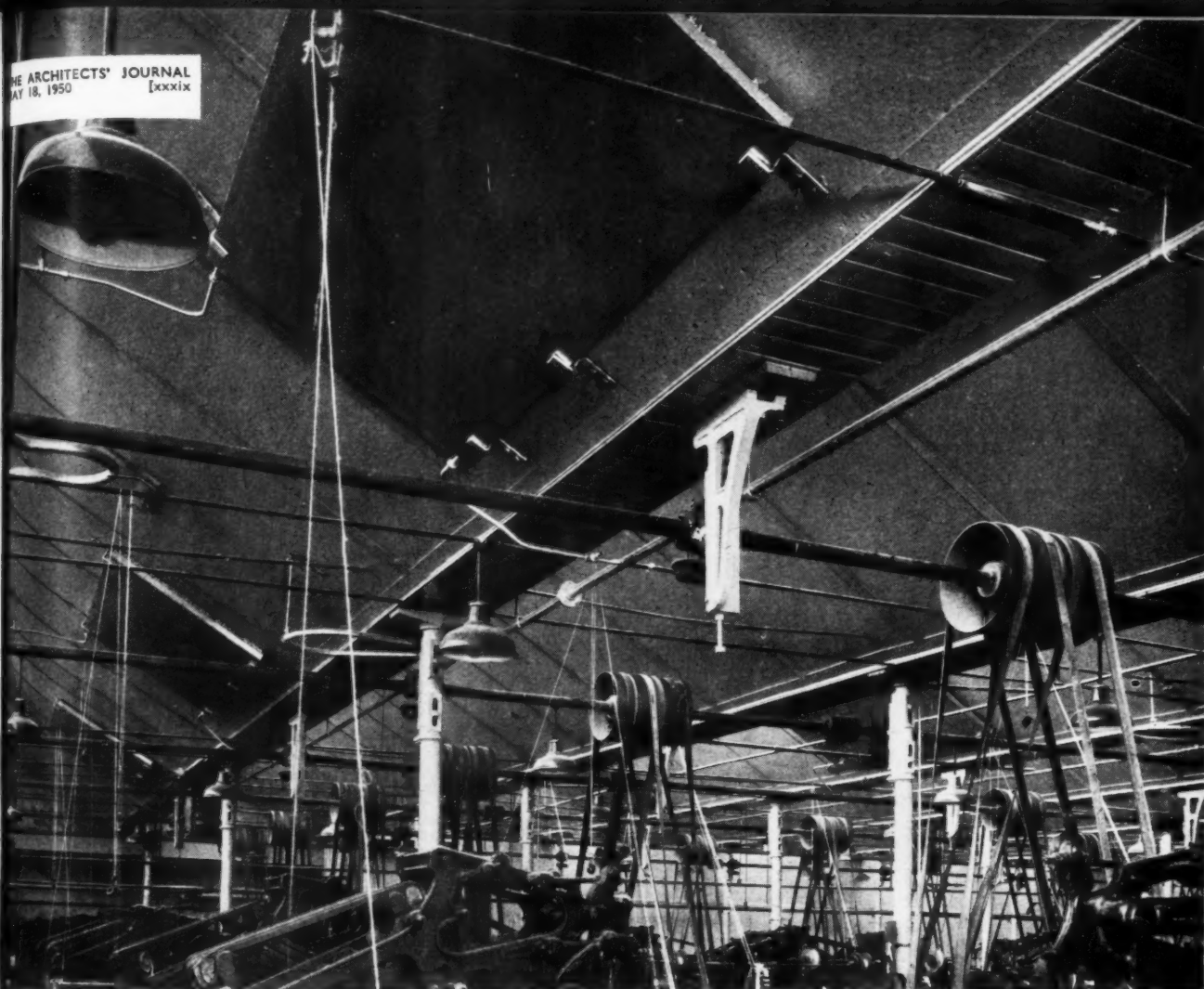
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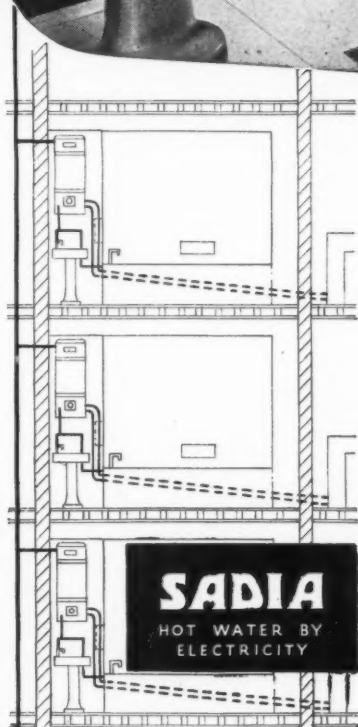


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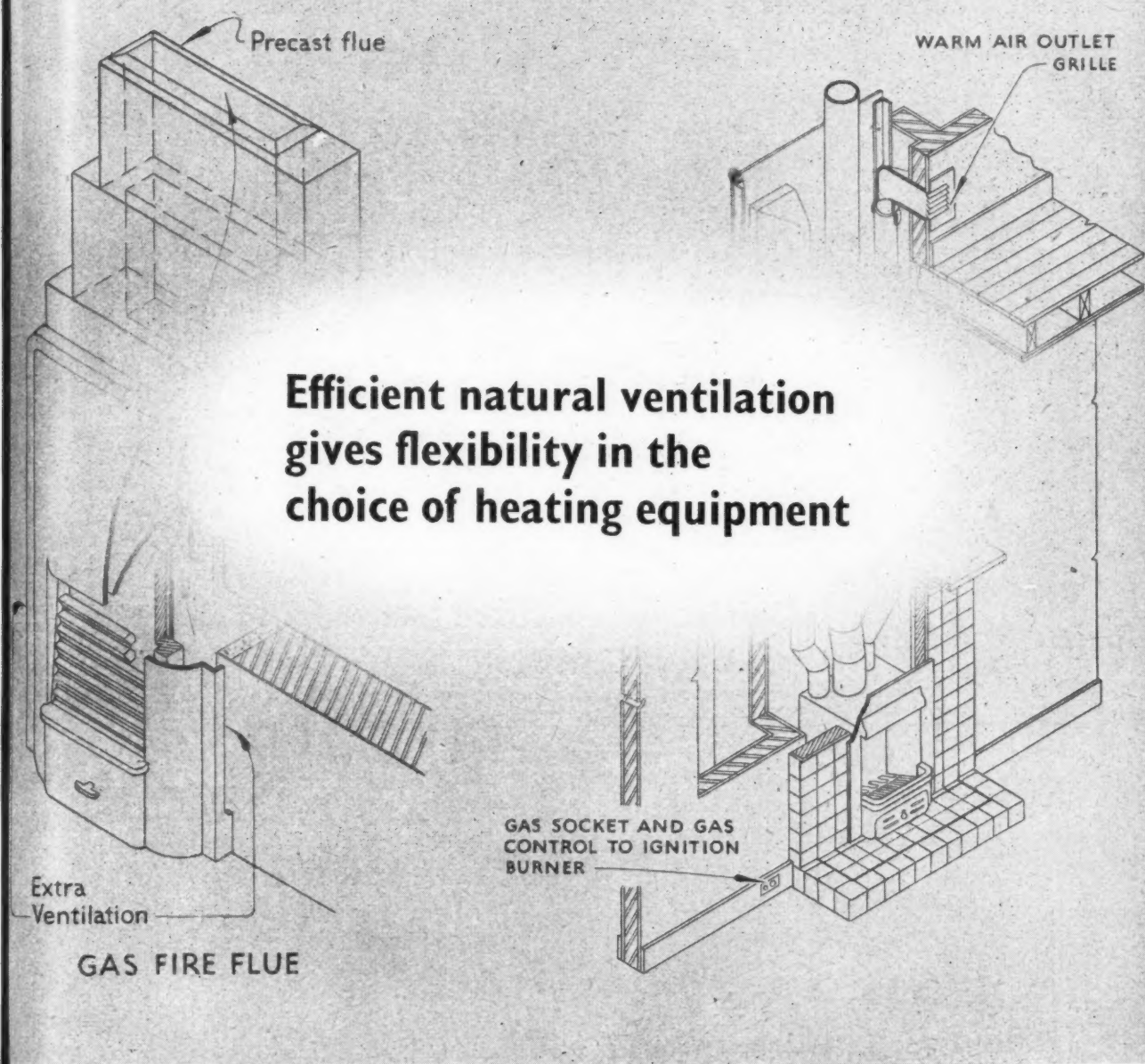
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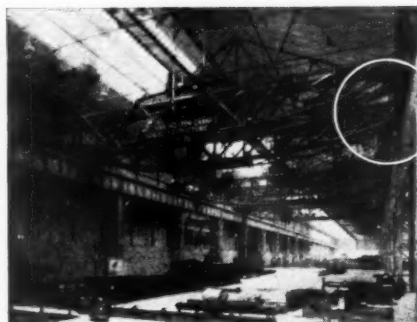
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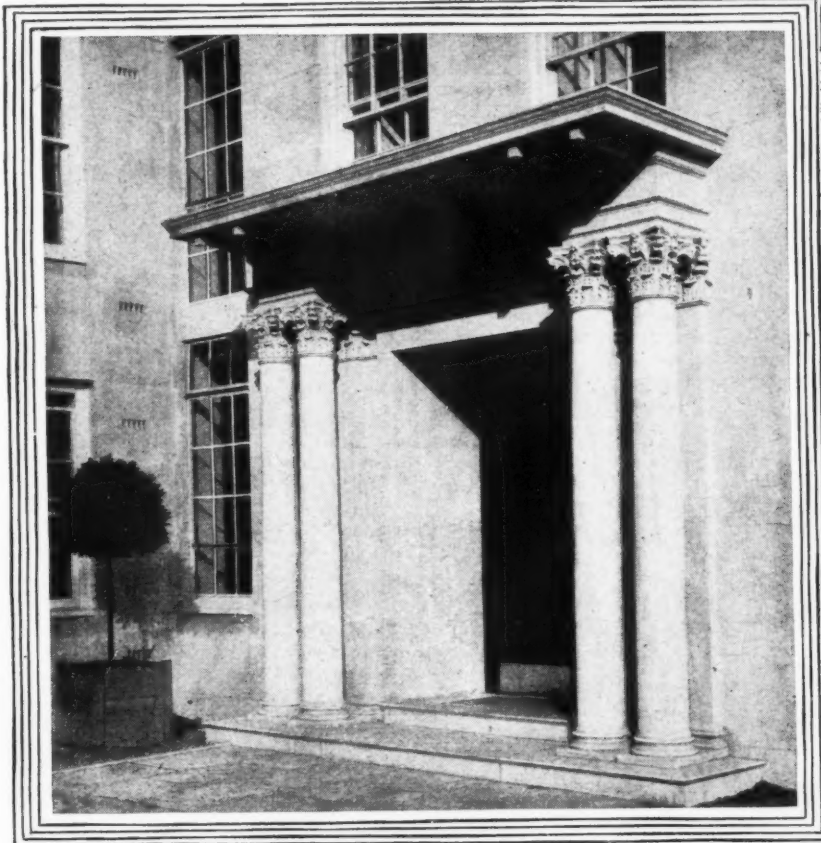
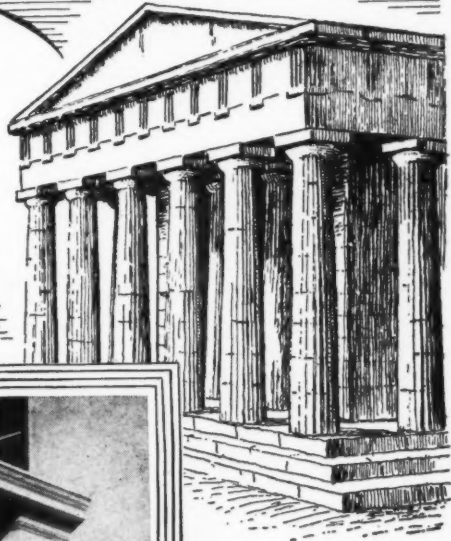
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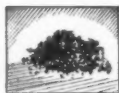
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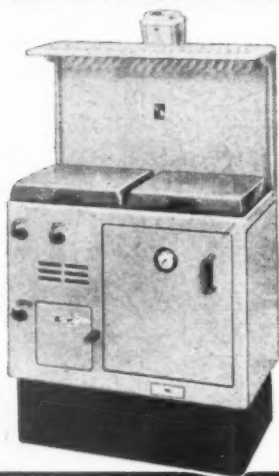


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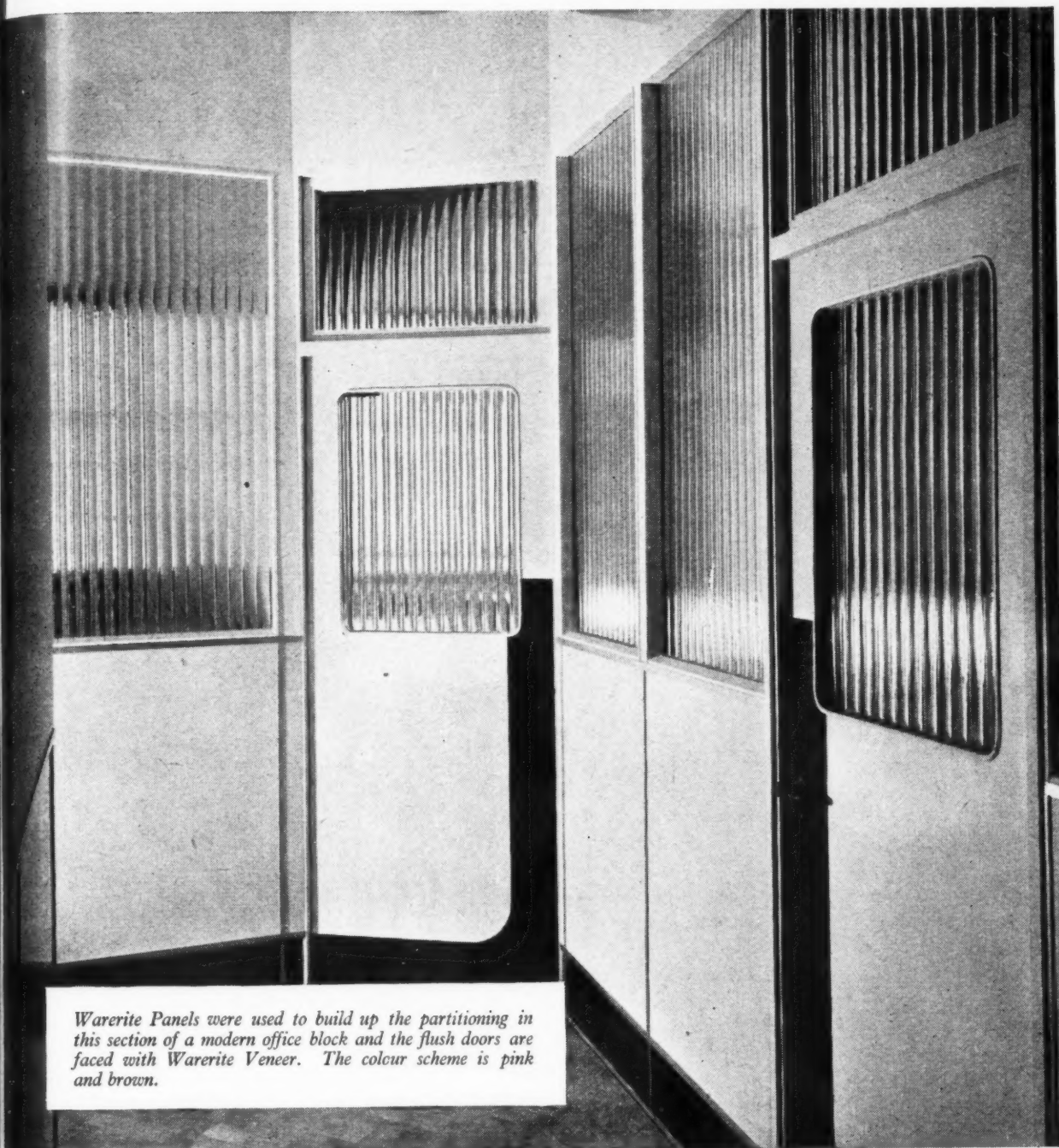


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And so on . . . If you wish, narrower sub-files could be opened up for each contractor, where the project is sufficiently large to warrant this. A slotted-in record card (on the front of each file) provides room for detailed data, thus eliminating cross-reference.

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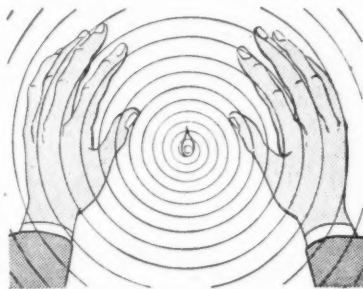
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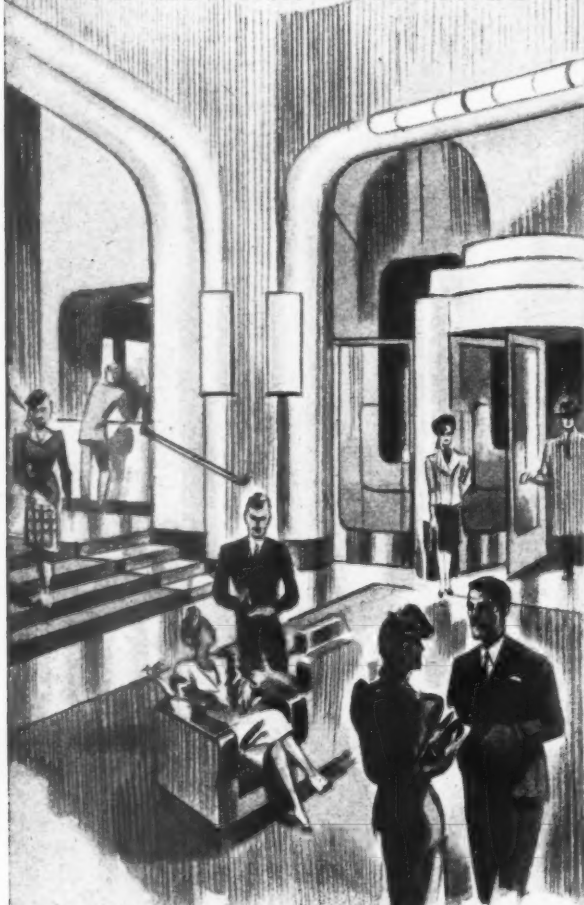
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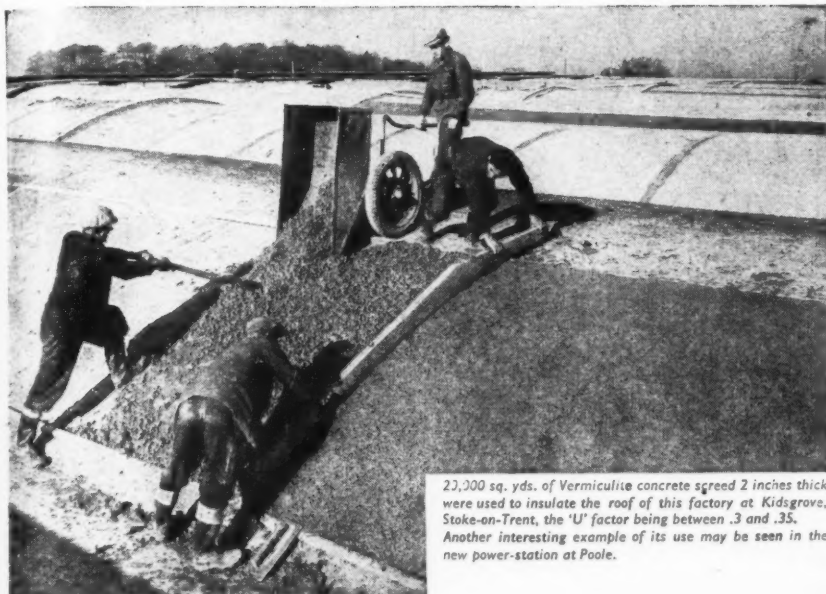
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**24 lb. per cubic foot**

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of the properties of

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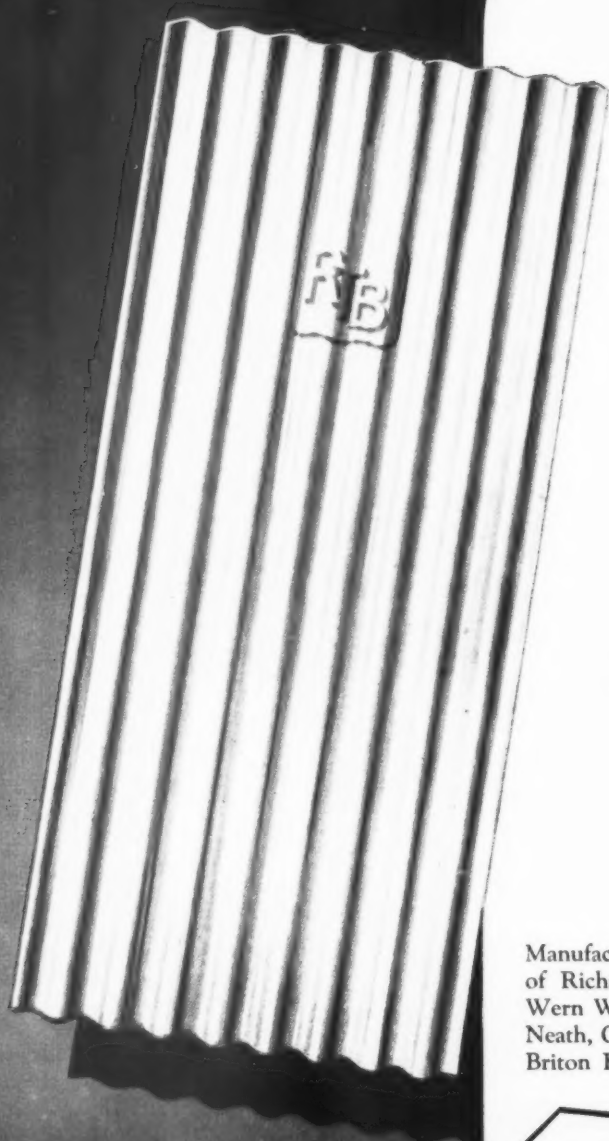
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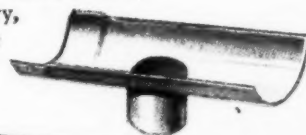
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THE ARCHITECTS' JOURNAL

No 2884 18 May 1950 VOL 111

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## MOHOLY-NAGY

There should be a full house at the RIBA on Wednesday to hear Sybil Moholy-Nagy talk about her husband and his work. She is on a brief visit from Chicago, where she still works with Serge Chermayeff at the Institute of Design, which was founded by Moholy himself. No one more deserves to have a tribute (however belated) paid to him within the walls of the RIBA, both as teacher and designer.

The talk has been organized jointly by the RIBA and the Institute of Contemporary Arts. The last enterprising body should now go from strength to strength, because it has acquired what it has needed since its formation—a home of its own. The premises in Dover Street will be opened as soon

as alterations are complete. These alterations, which will provide a large exhibition gallery, suitable also for meetings and small recitals, and a reading room and offices, will be carried out by Maxwell Fry and Jane Drew.

## THE RED HOUSE

No house was ever so aptly named as the Red House, Bexley Heath, the house William Morris built for himself in 1859, for it stood alone in the honest simplicity of red brick walls and red tiled roof, among the stucco and slate that prevailed everywhere at the time. Nor does any house in history provide a better memorial to a great man and an era he influenced profoundly.

\*

Morris built the house immediately after his marriage, and it therefore coincides with the end of the Oxford life of the Pre-Raphaelite Brotherhood and the beginning of many new activities on his part, notably the formation of the firm of Morris and Company. It was when he began to look about for furniture for the new house that he realized how little furniture there was of which he could approve, and he conceived the idea of organizing workshops of his own.

\*

The question of the value of the Red House as a memorial to William Morris and the ideas he stood for arises because it is reported to be for sale. It is a unique building, and whether it now passes into private or public ownership it is important that it should be properly appreciated and cared for. I trust it is already on the MOTCP list of buildings of historic importance. If not, it should be added at once.

Those interested in nineteenth-century architectural history have another reason for regarding the Red House as a landmark; it provides a link with the careers of many great men of the period. The architect of the house was, of course, Morris's friend Philip Webb (though the conception was as much Morris's as Webb's). It was Webb's first job in private practice—he had just left Street's office to set up on his own. Morris himself had been in Street's office a short while before (when he was intending to become an architect) and Webb's successor in Street's office was none other than Norman Shaw.

## WHAT THE DOCTOR ORDERED

Whether or not one believes that Dr. Dalton's recent concessions about small scale developments are the thin end of a potentially large wedge, one further concession (largely missed by the dailies) seems likely to be a considerable help. Provisional planning permission can now be obtained with the submission of little more than a block plan, though, of course, it will still be necessary for the complete drawings to be submitted for final approval. This means that no developer need now suffer the expense of having completed drawings made; his scheme may be turned down at once on general principles. It should also save architects the embarrassment of having to ask for fees for work which the local planning board has rejected.

## CRITICISM

"I know you will be able to make some interesting comments," writes a kind reader, "on the attached brochure illustrating the new engineering extensions to the University of Sheffield . . . I cannot trust myself to comment." (See my illustration.)



HINGES have loose pins, making it easy for carpenter to hang doors.

# HOPE'S

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As a columnist who regularly reads the paper in which he writes, I am well aware that there is a current urge for architectural criticism. When, therefore, someone appeals to me to criticize, I'm quite prepared to have a real crack at the design myself. Now, what can be said about the design at the bottom of this page? I should say that there is something just a little disturbing about the fenestration. Or is that too harsh?

\*

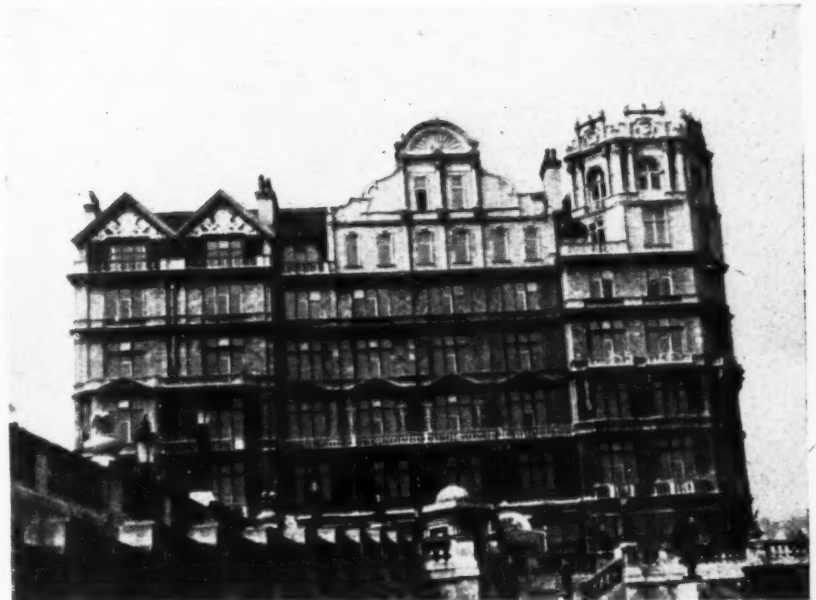
Perhaps, on second thoughts, a sketch done from farther down the hill would clarify the point.

#### BATH ROOMS IN HOT WATER

Bath seems to me an ideal centre for a festival of art. And yet its annual festival, which is being held for the third time at the moment, attracts very few people other than residents and Bristolians. Why is this? As far as I am concerned, the festival programme fails to attract me because it offers nothing I cannot find in London. But colleagues who recently spent a week-end in the city, with the Georgian Group, remind me that the directors of the festival would be taking a considerable risk if they planned an elaborate and expensive programme. In the first place, Bath is short of hotels. The Spa is still used as a nursing home and the Empire (illustrated on this page) is occupied by the Admiralty. But a second, and equally important reason for the unambitious festival programme is the fact that the main concert hall resembles a seaside pavilion. One conductor is said to have had a nervous breakdown after trying to compete with the bombardment of raindrops on the corrugated iron roof, and the unsophisticated habits of residents who were placing nickels in nearby nickelodeons.

\*

I am sure that if Bath had a musical centre it would have a greater chance of establishing itself as a national festival city. No doubt the city council is well aware of this. As a matter of fact, it has the money necessary to build a hall but is temporarily held up by a controversy as to where it should be sited. One school of thought considers that it should be constructed within the shell of the Assembly Rooms, which were damaged during the war. But many people, including Professor A. E. Richardson, want the Assembly Rooms



*Many visitors will have been distressed by the sight of this building, the Empire Hotel, now used by the Admiralty, which dominates a central area in Bath. But how many of them know the story that is told of the origin of its design? It is said that as the hotel was to be called the Empire it should represent the buildings of which the Empire is composed: the castle, the mansion and the cottage.*

to be reconstructed in their original form.

\*

However, it looks as though the rooms may remain a ruin unless the concert hall is built within the existing façade. They are now the property of the National Trust, and money would be forthcoming from the War Damage Commission for their restoration if the Trust could find a tenant for them. But the city council refuse to become tenants; they regard the rooms, which were used on very few occasions during the years preceding their destruction, as something of a white elephant.

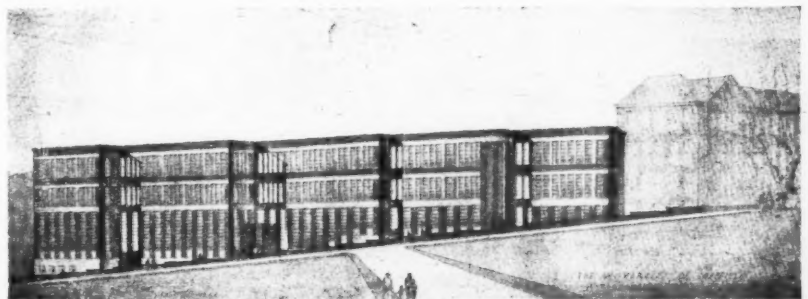
\*

Consider the questions involved. Is it better to site a new concert hall within a historic façade, where it will not conflict with the architectural appearance

of the city? Is it more shamefully bogus to reconstruct the Assembly Rooms than to instal a modern concert hall? Your answer is as good as mine. I can quite understand why an impasse has been reached on this matter. But it is clear that someone in Bath must throw in the sponge before long.

#### RESTORATION

I must point out that several Georgian Groupers I have met since their recent pilgrimage to Bath were most impressed by the lively efforts that are being made to preserve and restore the city. I am told that the city council intends to appeal as far afield as Nairobi for help in the restoration of The Circus. If the reports of a wandering architect are true, The Circus railings, which were uprooted during the war for use as



*Engineering extension to the University of Sheffield designed by John Beaumont. (See Astragal's note).*





## *British Industries Fair*

The 28th British Industries Fair opened on May 18 at Earls Court, Olympia and Castle Bromwich. One of the more noteworthy stands at the Earls Court Section is that of the Scottish Furniture Manufacturers Ltd. This company has been formed by a number of firms in Scotland who intend to produce furniture of a high standard. To this end the company has commissioned some of Britain's foremost

furniture designers to produce their designs. These include Basil Spence, Brian O'Rourke, R. D. Russell, R. Y. Gooden, Jacques Groag, Dennis Lennon, Neville Ward and Frank Austin. The stand takes the form of an interior of an American house. The photograph shows part of the lounge, designed by Jacques Groag. For further illustrations of BIF stands see pages 605-608.



cannon fodder, have turned up around a sports ground in the African city.

\*

In addition to occupying themselves with this restoration comedy, the council are repairing one side of Pulteney Bridge. And then there's the Palladian Bridge in Prior Park that I was grumbling about not so long ago. The reader may remember that I blamed the council for the untidy state of this bridge and of the lake and woodlands of the park. I have been persuaded to eat my words. In fact, the park belongs to the Roman Catholic authorities; and there's no need for me to complain about their negligence now because they intend to make amends very soon.

\*

One of my Georgian Group colleagues (who has become a little irritable after spending several days in an hotel room with a view of the rear of a pediment) insists that I should be annoyed with the Bath Preservation Trust. Apparently they are giving away acorns and urns made of reconstructed stone, with a cement slurry added, thus discouraging Bathonians from spending twenty-five pounds a time on the genuine article, which does not, like its imitation, show signs of wear after a short time. I share his distress over this.

\*

And that, I think, must be all about Bath for now. But I urge those who have not yet joined the Georgian Group for altruistic motives to make haste to do so for selfish ones. In the summer months the Group will visit houses not normally on show, as they did at Bath. The great curiosity among these is Ickworth, near Bury. St. Edmunds, which was begun in 1792 for that Earl of Bristol who was also Bishop of Derry, and has an extraordinary plan, comprising an oval centre (120 ft. by 106 ft. and domed), flanked by segmental wings. It was the Earl-Bishop who prevented young Soane from going to Greece by dangling before him the possibility of a big commission. But he finally employed an Irish architect, Francis Sandys, at Ickworth, and Soane had to be content with having designed a dog kennel for this noble and very reverend patron.

ASTRAGAL

## The Editors

### AN ACT OF LIBERATION

**D**R. DALTON'S first major decision over the 1947 Planning Act has taken the form of what he describes as "an act of liberation." In more sober language, it is a general development order which increases the range of developments permitted without formal planning consent, but does not, of course, affect the system of building licences controlled by the Ministry of Works. As from May 22, the owner of a dwelling house will be free to extend his house, or to erect an additional building within his curtilage, up to a limit of 10 per cent. of the contents of the existing building, or 4,000 cubic feet, whichever is the smaller. The owner of a factory will have a corresponding freedom, save that in his case the maximum is 5,000 cubic feet and the new structure must be one which does not substantially change the external appearance of the existing building.

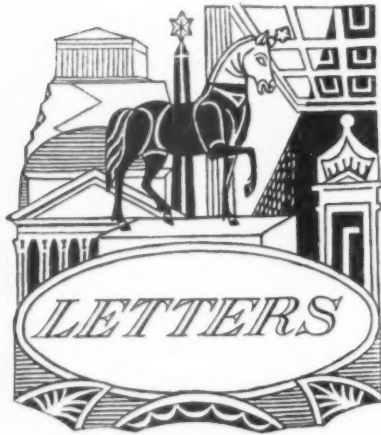
The owner of a farm is even better off. He may add as he wishes to his permanent farm buildings, unless he lives in areas which are likely to become national parks. Dr. Dalton suggested that, in such cases, the NFU might exercise some degree of planning influence over its members. (Few people can have imagined that the NFU would ever be asked to play such a role by a Labour Minister.)

In addition, there are minor relaxations of regulations, which free external painting from planning control and curtail the number of forms and plans which the landowner is required to submit to the planning authority.

An "act of liberation" is a fine, ringing phrase and Dr. Dalton did not fail to use the occasion to sound the trumpet of freedom, regardless of the fact that it was his Party predecessor who imposed the restrictions in the first place. But it is impossible to ignore the possibility that there is more in this decision than a desire to "diminish form filling and lessen excuse for frustration." The Minister said that the new order would reduce the paper work of local planning authorities by 40 per cent., enable them to press on with the full survey of their area and cut down the flow of appeals to the Minister, which, so reports have it, have now reached overwhelming dimensions. But that, perhaps, is only another way of saying that some local authorities have failed to develop a sense of proportion; that they have been shortsighted in the way they have handled many of the applications made to them.

As it has been decided that Britain should, in future, be physically planned, it seems unfortunate that exceptions should be made in the case of buildings of a limited size. One needs little imagination to visualise the cumulative effect of a large number of small badly-sited buildings of ugly appearance. It is said that some authorities have been too fussy over trifles.

But to define the trifles as anything under 4,000 cubic feet seems not only a desperate way out of a difficulty but looks suspiciously like an opening shot in an autumn political campaign.



*R. A. Jensen, F.R.I.B.A.*

*A. H. Shearing, A.R.I.B.A.*

*Jane B. Drew, F.R.I.B.A.*

*Peter J. Watkins*

*J. Berry-Clarke*

*G. Graham, D. Brown,*

*R. Savidge, D. P. Lakin*

*P. W. Abeles*

*J. H. S. Fildes*

*Wood, Goldstraw and Yorath,*  
*A./L.R.I.B.A.*

## More or Less of the "Lessor"?

SIR.—You have recently given publicity to the quality of the work which is being sanctioned in London, in order to provide Government departments with offices. One might inquire as to the necessity for these buildings at all when, somehow or other, we contrived to do without them prior to the war. Quite contrary to statements which have often been made that the erection of such blocks will relieve the housing situation, inasmuch as requisitioned buildings may be thereby released, they are, in fact, proving a serious challenge to all other building work. They are being afforded the highest priority of labour and materials, and their costs standards are far higher than is permitted in any other type of work. The repercussions on other building work are incalculable, but it is evident that, while extreme difficulty is still experienced in the supply of certain materials and most labour, in general these blocks have proceeded apace. All political considerations apart, and much as one is gratified to see the opportunities being offered to young adventurous architects,

this criticism applies to a great extent to the work going on in connection with the Festival of Britain on the South Bank site where, contrary to all promises, considerable quantities of permanent building materials are being used. In addition, labour is being permitted to work on extended overtime, and these factors have undoubtedly tended to influence other building operations in the London area.

Constructive and realistic practical steps are urgently necessary to deal with these problems and to bring to an end the present spirit of complacency, which reflects a complete failure to face up to the practical difficulties. It is this factor which is causing the feeling of utter frustration at present pervading so many of our activities.

Pinner.

R. A. JENSEN.

SIR.—One hesitates to criticize publicly a fellow architect on the standard of design of his buildings. This possibly explains the apparent lack of interest shown in your correspondence columns on the merits or demerits of the buildings put up under the Lessor Scheme.

Dog doesn't bite dog, and most architects are likely to be more than a little overawed at the magnitude of the commissions. This should not, however, prevent those of us who have a shred of civic pride left from joining with Mr. Richards in his condemnation of these monsters.

Is this the shape of things to come?

London.

A. H. SHEARING.

SIR.—I congratulate the ARCHITECTS' JOURNAL on drawing attention to the buildings which have been permitted under the Lessor Scheme. It is extraordinary to find that a Government which supports the Festival, the Arts Council and public enterprise should, at the same time, have been carrying on this hole-in-the-corner business with the city and permitting the perpetration of buildings of such poor architectural quality.

London.

JANE B. DREW.

SIR.—As a recent target for one of Astragal's comments, and how right he is, I feel very much with T. Forde in his wish for unpunishable but constructive criticism of architectural schemes (A.J. April 20).

Mr. Forde's point with regard to public bodies is true. The ridiculous sensitivity displayed by a few architects would be well pricked by noting on schemes published whether criticism is permitted or not. What about a system of categories?

London.

PETER J. WATKINS.

## The Architectural Review

SIR.—With regard to the adverse criticism of *The Architectural Review*, published in the JOURNAL last February, I should like to take this opportunity of pointing out to these apparently "china-shop" critics that the publication in question, apart from any single shortcoming of its editorial activity, has been and is consistently one of first-

class literary standard, needing an intellectual comprehension, and frequently shows upon its pages the works of brilliant writers and thinkers.

I suggest that those who, being less mentally active, reap their satisfaction from pictorial matter alone, are amply served by publications other than the *Review*.

J. BERRY-CLARKE.

Harrow.

## Standards of Competition Designs

SIR.—We are proud of our profession and of our competition system, which provides a young architect with the opportunity to prove his worth from the very earliest days of his career.

It would do no service to the profession, whose prestige we value, to question the report of the assessor in the recent Whitehaven competition or the merits of the prize-winning designs. But we do suggest that those taking part in competitions should have the right to expect that only really fine solutions should be awarded premiums, and that prize-winners should be artists of creative power and lively imagination. Less than this will not do. And if designs of such a high order of merit are not produced, the assessor should have the courage to say so.

Young men in our profession should be able to enter for competitions assured that they will be judged by the highest standards, and so be encouraged to develop their powers to design worthy modern buildings.

GORDON GRAHAM, DAVID BROWN,

REX SAVIDGE, D. P. LAKIN.

Nottingham School of Architecture.  
Nottingham.

## Prestressed Concrete

SIR.—In an issue of the JOURNAL, Mr. C. Worthington attacked the "glamour surrounding prestressed concrete," basing his view on a statement taken from the conclusions of a Paper by Mr. L. R. Creasy on "Steel Economy" published in the December number of "The Structural Engineer." In this it is said "that the proportions of a structure designed in this medium will approximate to one constructed in English oak, so that it must be expected that such structures, by normal standards, will be vastly heavy and ugly in appearance."

In the paper quoted by your correspondent, the advance by the introduction of prestressed concrete is appreciated by the author and it is correctly said that the multiple repetition of a standard unit of the precast pre-tensioned type is most suitable for use.

However, the alleged ugliness and approximation to oak construction are in the writer's view by no means established. In his view oak structures designed in accordance with the strength of the oak need not be ugly; but in any case there is no general common basis between oak and prestressed concrete. In fact, one of the main features of this new material is to allow the use of beams of reduced construction depth without excessive deflection by the provision of an initial counter-deflection.

The appearance of prestressed concrete constructions may vary to a great extent depending on the assumption upon which the design is based and on the suitability of the cross sectional shape selected. Thus, it is not impossible that beside slender and shallow constructions some structures may also be found which are heavier in appearance than would be expected by normal standards; but this would not give justification for a generalization as expressed in Mr. Creasy's conclusions.

It is quite true that the successful application of prestressed concrete to normal building construction is still relatively restricted at present, as Mr. Creasy says, but prestressed concrete is yet in a state of development and it may be expected that in the near future standard units in prestressed concrete will be available for use.

It is perhaps useful at this stage to summarize the main advantages of prestressed concrete as compared with some other materials.—

(1) Serviceability after loading up to nearly the failure load in view of complete flexibility and resilience; (2) Possibility of freedom from cracks; (3) No maintenance; (4) Reduced construction depth, if designed with temporary upward camber; (5) Saving of steel; (6) Increased economy when designed on economical principles.

P. W. ABILES.

London.

## Cold Beer

SIR.—A letter from Mr. Frank Higginson, published in the JOURNAL for April 27, contained a suggestion for ensuring that draught beer is served at the proper temperature. May we point out that equipment on the lines suggested was marketed years before the war. It proved a failure and its use has been abandoned on account of defects which are inherent in the system.

Putting it bluntly, all such appliances can do is to serve bad beer cold. The function of refrigeration on licensed premises is to keep the beer always at the proper temperature from the moment when it arrives on the premises until the moment it is drawn into the glass. This can only be achieved by keeping casks in a cellar cooled by refrigeration, or in a refrigerated cabinet in the bar. If the temperature of beer in cask is allowed to rise, it rapidly loses "condition" and becomes sour.

Another point apparently overlooked is that every pipe, pump or other piece of equipment through which beer passes on its way from cask to glass must be constructed so that it can easily and quickly be dismantled and re-assembled by very unskilled labour. It is very difficult to see how a "refrigerator" on the lines suggested by Mr. Higginson could possibly be designed to meet this essential requirement.

J. H. S. FILDES,  
Publicity Manager,  
J. & E. Hall, Ltd.

Dartford.

## Bye-Law Relaxation Needed

SIR.—We have a client who has a roof space already boarded which can be formed into an additional bedroom. This would serve the requirements of his family, who are now overcrowded, two growing children having to occupy a small bedroom.

We can satisfactorily obtain a staircase 2 ft. 4½ in. wide between the strings, but the local authority is insisting upon the BRS 585 specification being carried out, which requires the staircase to be not less than 2 ft. 11 in. over the strings.

We are applying for a relaxation of the bye-law in respect of this, and should be interested to know whether any of your readers have had a similar experience.

WOOD, GOLDSTRAW & YORATH.  
Stoke-on-Trent.

The EDITORS reserve the right to shorten letters from readers. Whenever possible, however, they are published in full.



## HAMPSTEAD

### Exhibition by Artists' Council

The Hampstead Artists' Council, which claims to be the largest local group of artists in England, is to hold an exhibition showing how the interiors of six public buildings in Hampstead could be embellished. This exhibition will take place daily from 12 noon to 7 p.m., between June 4 and July 2, at Studio House, 1, Hampstead Hill Gardens, N.W.3. An attempt will be made to show, by means of models, how artists could improve the appearance of the local tube station, school, hospital waiting room, welfare centre and food office, and the council chamber in the Hampstead Town Hall.

Artists taking part include John Hutton, Hans Feibusch, Mary Adshead, John Minton and Barbara Jones. Young and unknown members of the Hampstead Artists' Council will also submit schemes.

The organizers of the exhibition are receiving financial aid from the Hampstead Borough Council.

## RIBA

### Golfing Club's Results

A meeting of the RIBA Golfing Society was held at the Berkshire Golf Club on April 24. The results were as follows: The Sullivan Trophy was won by A. V. Farrier with a score of 92—16—76. Runners-up were W. R. C. Clarke 88—9—79, W. D. White 93—14—79, and E. H. Firmin 84—5—79. The four-ball Stapleford competition in the afternoon was won by Sir Giles G. Scott and W. R. F. Fisher with a score of 36½ points.

The Society's hon. secretary (Eric H. Firmin, 10, Manchester Square, W.1) will be glad to hear from architect golfers who are interested in becoming members.

### Holiday work wanted for students

With the approach of the summer vacation, the RIBA is beginning to receive enquiries from students at the schools of architecture for the names of architects who may be willing to take them into their offices for

the summer months to gain practical experience. The Institute is asking for the names of architects who are in a position to offer vocational work during the period June to September inclusive.

There is no fixed scale of remuneration for these student assistants, but it is suggested that a salary should be paid in all cases, adjusted individually to the stage of training reached by the student and his or her previous office experience. The Institute will be glad to advise employers and students in this matter.

For the past three years the number of architects helping to operate this scheme has been inadequate to the number of students seeking work in the holidays. It is hoped that this year the response from

[Continued on next page]

## DIARY

1951 Stock List Exhibition: Domestic Equipment. At Murray House Exhibition Hall, Vandon Passage, Petty France, S.W.1. (Sponsor, CID). Daily, 10 a.m. to 5 p.m. Saturdays, 10 a.m. to noon.

UNTIL MAY 24

Percy Smith Memorial Exhibition. At RSA, John Adam Street, W.C.2. (Sponsor, RSA). Daily, 10 a.m. to 5.30 p.m. Saturdays, 10 a.m. to 12.30 p.m.

UNTIL MAY 26

New Ideas in Furniture: Exhibition. At the Tea Centre, 22, Regent Street, S.W.1. (Sponsor, CID). Daily, 10.30 a.m. to 6.30 p.m. Saturdays, 10.30 a.m. to 12.30 p.m.

UNTIL MAY 27

Exhibition of Unidentified Drawings. At 66, Portland Place, W.1. (Sponsor, RIBA). Daily, 10 a.m. to 7 p.m. Saturdays, 10 a.m. to 5 p.m.

UNTIL WHITSUN

Picasso. (Series of lectures, admission free). Professor A. F. Blunt. At Courtauld Institute of Art, 20, Portman Square, W.1. 5.30 p.m.

MAY 23

Annual County Meeting of TPI. At Dublin.

MAY 19-21

The Work of Moholy-Nagy. Illustrated lecture by Sybil Moholy-Nagy. At 66, Portland Place, W.1. (Sponsor, RIBA and ICA). 6 p.m.

MAY 24

Exhibition of Drawings and Prototypes of the Day-Latimer Storage Units. At Messrs. Heal & Son Ltd., 196, Tottenham Court Road, W.1. Daily, 9 a.m. to 5.30 p.m.; Saturdays, 9 a.m. to 1 p.m.

UNTIL JUNE 17

The Garchez System of Refuse Disposal. H. L. Egerton. At Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherd's Bush, W.12. 3.15 p.m.

MAY 23

Tour of West Ham. Arranged by HC, 13, Suffolk Street, S.W.1.

MAY 23

Structural Engineering and the Position of the Structural Engineer in Building. L. Scott-White. At Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherd's Bush, W.12. 3.15 p.m.

MAY 24

A Quantity Surveyor's Views on the Relative Parts to be played by the various Components forming the Industry of Building. Col. H. A. Acland. At Hammersmith School of Building and Arts and Crafts, Lime Grove, Shepherd's Bush, W.12. 3.15 p.m.

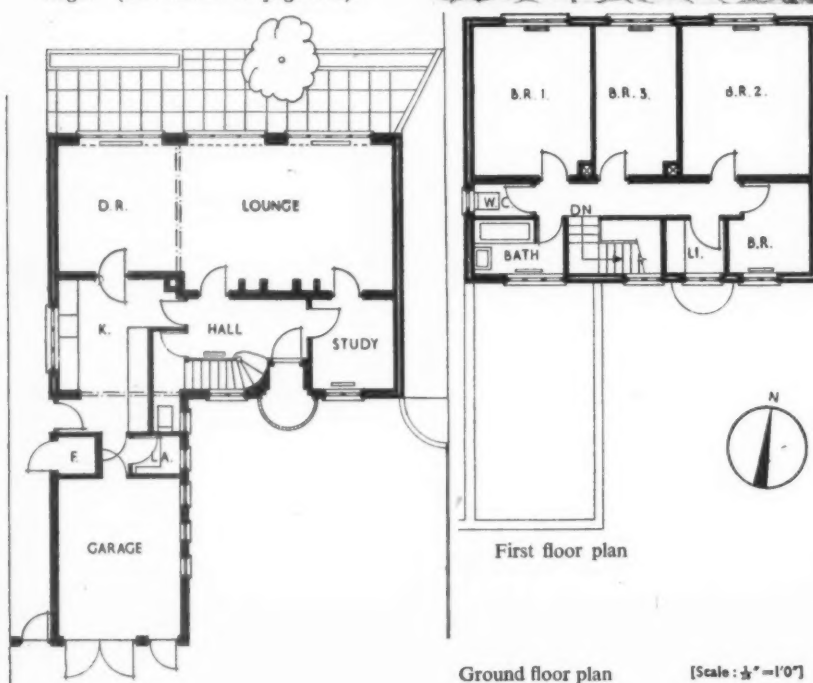
MAY 25



## HOUSE AT SOLIHULL, NEAR BIRMINGHAM



The first stage of this house by Ralph Lamprell, started in 1946, was limited to 1,000 sq. ft. in floor area. This was achieved by shortening the kitchen, and omitting the garage and three bedrooms originally planned. In 1948 the kitchen was extended and the garage built. To avoid re-introduction of scaffolding later, gable ends were taken up to their final height. The purlins over the projected bedrooms are supported on two rolled steel channels to free the floor area. The building of these bedrooms will constitute the third stage. (Contractors on page 662).



Ground floor plan

[Scale:  $\frac{1}{4}$ " = 1'0"]

members will be greater. All architects who are willing to employ students should write to the Secretary, RIBA, stating the number of students they can employ at any one time and the remuneration they are prepared to offer.

Students wanting work in the vacation should also send their names to the Secretary, stating what year in their course they have reached, the locality in which they are prepared to work, and the remuneration they expect.

## GLENROTHES

*Appointment of new Chief Architect*

The Glenrothes Development Corporation has appointed Peter Tinto, of Giffnock, as chief architect and planning officer for the new town of Glenrothes, Fife, in succession to E. A. Ferriby, now chief architect to Bracknell Development Corporation. Mr. Tinto, who was employed by the Glasgow Corporation Housing Department from 1922 to 1945, became senior architect of that department in 1940. In 1945 he entered the employment of Paisley Corporation where he holds the appointments of deputy master of works and chief architect.



This feature covers aspects of legislation, parliamentary news or statutory rules and regulations which are of special significance to the architectural profession.

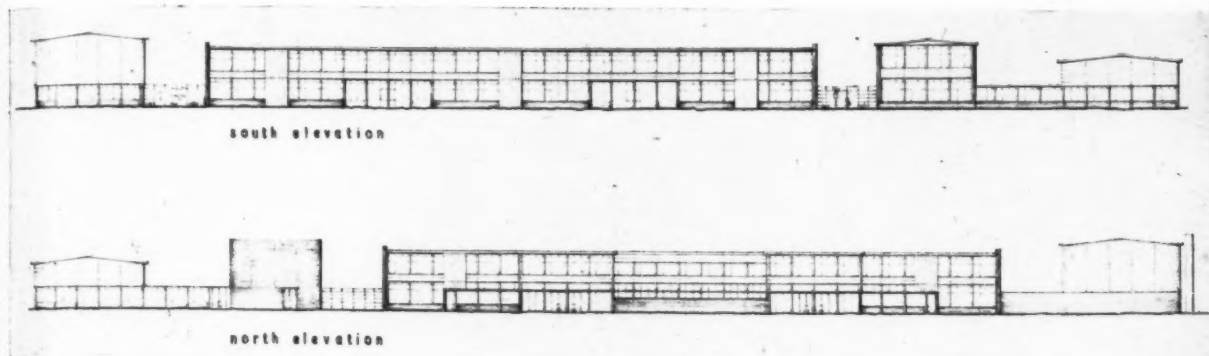
## ERNEST WATKINS

*The Architect and Current Affairs*

Two legal decisions seem worth mentioning this week. The facts of the first case, *Harlow v. Ministry of Transport and Another*, are as follows:—The Rugby Portland Cement Co. Ltd. works chalk quarries on the Chiltern Hills near Dunstable. That stretch of the Chilterns, which includes Ivinghoe Beacon, has long been recognized as an open space to which the public has, and should have, access. The Cement Company wished to close sections of three old grass tracks across the Downs, portions of the Drovers Way, the Wheelbarrow Green Way and the Quarry Green Way, and it applied to the Minister of Transport asking him to make orders stopping up sections of those tracks in exchange for new high-

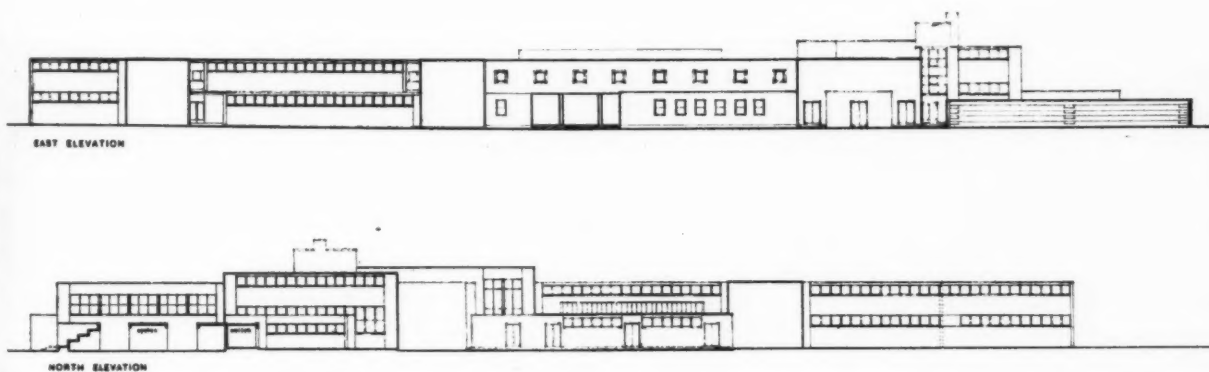


## HUNSTANTON SCHOOL COMPETITION: A CORRECTION



The second prize-winning design in the competition for a secondary modern school at Hunstanton, sponsored by the Norfolk Education Committee, was wrongly attributed in last week's JOURNAL to the winner of the third prize and vice versa.

Above, are elevations of the second winning design, by John B. Diamond, A.R.I.B.A., of London. Below, are elevations of the third winning design by G. Whitby, M.B.E., A.R.I.B.A., also of London.



ways to be dedicated by the Company. The Minister of Transport agreed and made the order. Mr. Harlow objected.

On the relevant authorities, the form was this. Section 49 of the 1947 Planning Act gives the Minister of Transport power to make closing orders over highways. But, so far as this area is concerned, there is in existence a local Act, passed in 1886, which provides that the "ancient roads and tracks" over the Downs, including Ickneild Way and the Drovers Way, should be preserved "in their present condition" and that the public should have the right to walk freely over all that part of the Downs. Finally, Section 118 of the 1947 Planning Act provides that this Act shall override any earlier Acts, local or otherwise, which authorize or regulate the development of land. The point at issue was whether the 1947 Act did override the 1886 Act and allow the Minister of Transport to make the order he had purported to make.

Mr. Justice Burkitt has said, "no, it does not." His argument was that the power to override earlier statutes given by Section 118 of the 1947 Act was limited to statutes which affected the "development" of land. The 1886 Act did nothing of the kind. On the contrary, it expressly forbade "development." It laid it down that this particular land should have its "present use" preserved for ever. The 1886 Act was, therefore, not one of those which could be over-

ridden, and the Minister of Transport had exceeded his powers.

I must say that, on balance, one does breathe a sigh of relief at this result. For one thing, Government departments do too readily assume that their officials today know better than Parliament did, even in 1886, and that it is for them to decide whether times have changed sufficiently for an 1886 Act to be treated as a scrap of paper. I have every sympathy with the Cement Company. We expect them to provide the cement we all use, but I still think there must be some chalk that does not lie under a section of the Ickneild Way. Finally, there is a certain ironic satisfaction in the fact that, in this case, MOTCP's mulled-over definition of what is, and what is not, "development" has contrived to torpedo one ship in their own convoy.

I hope to take an early opportunity of walking over Wheelbarrow Green Way, and will raise my hat to Mr. Harlow when doing so.

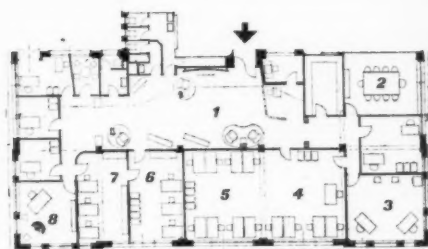
The other case, *Falmouth Boat Constructors Ltd. v. Howell*, concerns licences. The shipbuilding company did certain work on a vessel for the defendant. The defendant did not pay and claimed that the shipbuilders had not obtained the proper licence for the job and that therefore the work was illegally done. In fact the shipbuilders had obtained an oral licence, not a written one. The Court of Appeal found that, in this

case, for work done on a vessel, a written licence was not needed, for the Admiralty had made it clear by circular that speed in shipbuilding work was essential, and that their licensing officers were not to hold things up for the issue of a formal written confirmation.

I am not suggesting that this case covers licences for structural building, for the Courts, in the case of *Jackson Stansfield & Sons v. Butterworth*, have already laid it down that a building licence of this kind must be in writing to have full validity, and in the Falmouth case the Court drew a distinction between the two. But it does, I think, weaken the position of those reluctant clients who search about for defects in the formalities in aid of arguments why they should not pay the amount they have contracted to pay under their building agreement. As Lord Justice Denning said, the ordinary citizen does not know the rules and regulations that govern the actual authority possessed by the officials he deals with. If a responsible official says, in effect, "Go ahead—my word is good enough," is the citizen to reply, "Let me have that in writing?" (If he is prudent, he should).

But there seems little merit in the actions of a man who orders work to be done and then seeks to find flaws in departmental procedure to assist him in avoiding his liability to pay. At least the Falmouth case will be something of a deterrent to him.

SHOWROOMS IN KENT HOUSE, MARKET PLACE



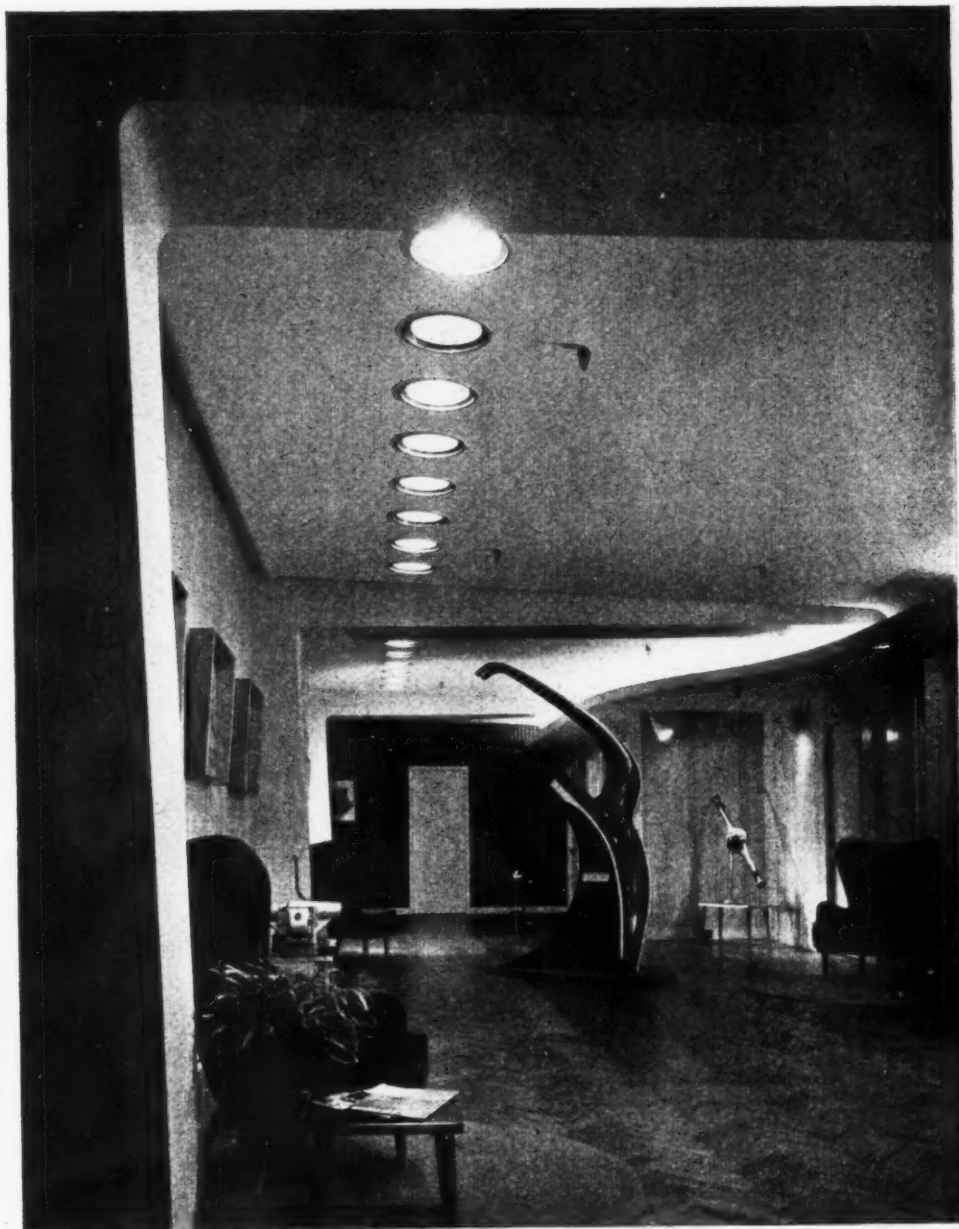
KEY :

- |                                |                         |
|--------------------------------|-------------------------|
| 1 Exhibition Foyer             | 5 Home General Office   |
| 2 Conference Room              | 6 Export General Office |
| 3 London Sales Manager         | 7 Export Assistants     |
| 4 Home Representative's Office | 8 Export Manager        |

The new showrooms for Messrs. Rubery Owen & Co., Ltd., at Kent House, Market Place, Oxford Circus, were originally used as workshops for light industry. The architects, C. H. Elsom and H. Peariman, were required to convert the second floor of Kent House into a suite of offices and a display foyer in an area with excellent daylight around three sides of the perimeter. The offices and conference room are grouped on these three sides, as shown in the plan above. The remaining unlighted area is used as the foyer, giving access to all other rooms and thereby eliminating corridors. In the foyer, where heavy and light engineering products are displayed by photo-

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## PLACE, OXFORD CIRCUS, W. 1.



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graphs and a few actual articles, as seen, bottom left, on this page, false ceilings at different levels have been used to give an illusion of height, as shown at the top of opposite page and above right. Existing beams and stanchions have been cased and their shape emphasized. One wall, seen top left, on this page, is covered with striped wallpaper, and the remaining walls are finished with a light veneer as a background for display. A free standing glass screen partitions off an inquiry office at one end of the foyer. Beneath this is a photograph of the sales manager's office. The conference room, bottom of opposite page, has curtains hung from recessed boxes to produce a contrasting effect with the remaining walls, which are veneered. The existing

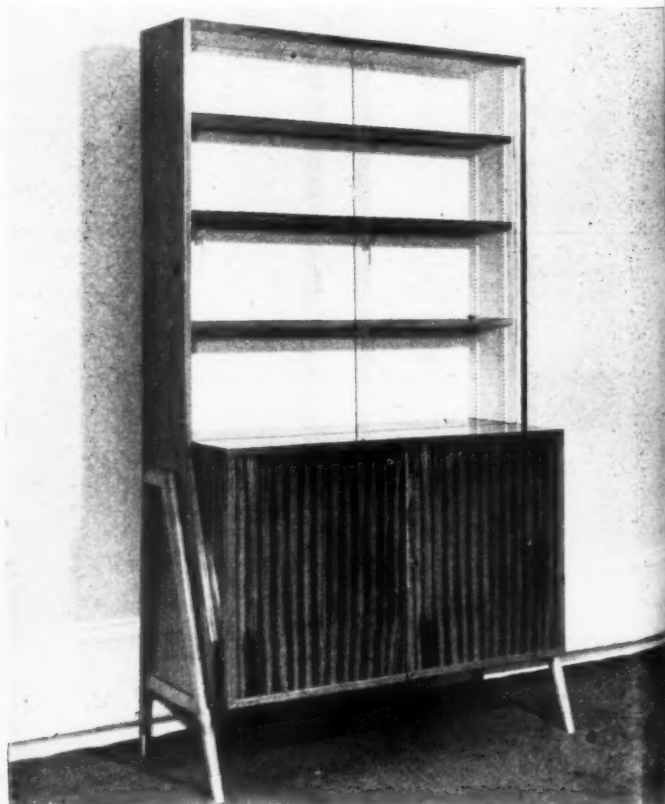
radiators are covered with strip metal grilles. In the general offices the internal partitions are breeze block, plastered and distempered with a different pastel shade in each room. The floors of the conference room and executive offices are carpeted and the remaining floors are of polished wood blocks. There is direct lighting over one of the display walls, as seen above right, with indirect lighting in a curved trough along the wall opposite. The offices are centrally heated from the main building system and the foyer is electrically heated and air conditioned. The general contractors were Robertson & Cameron (Building Contractors), Ltd. For list of sub-contractors, see page 622.



FURNITURE FOR AN OFFICE IN LONDON

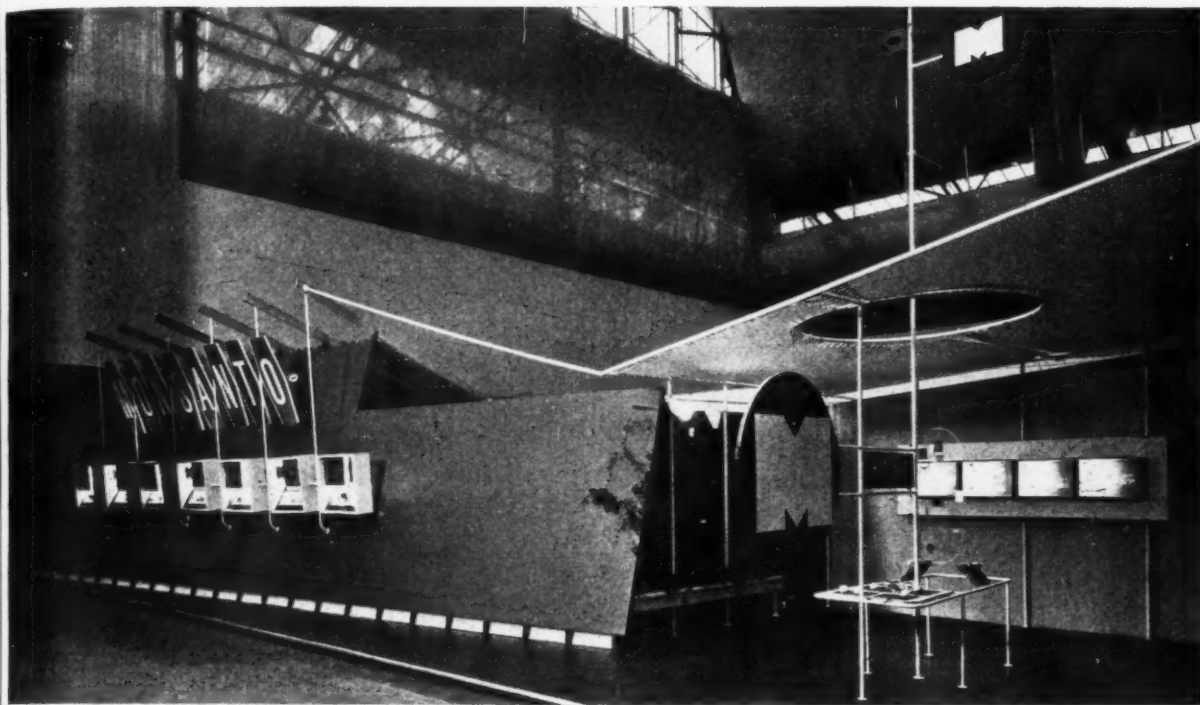


The furniture illustrated on this page is part of a set of nine pieces designed by Hulme Chadwick for the offices of the Federation of Curriers, Light Leather Tanners and Dressers, Incorporated. Rawli and sapelli wood has been used throughout. All pieces shown, except the armchair, have ferrules made of brass. Above, left, a general purpose chair upholstered with leather; left, centre, an armchair upholstered with leather and saddle stitched; below, left, a writing desk partly inlaid with leather; above, a set of tables; below, a bookcase. Mr. Chadwick has also designed a telephone table, a table unit for the boardroom, a director's desk, and a rack for periodicals.





STANDS AT THE BRITISH INDUSTRIES FAIR: OLYMPIA SECTION

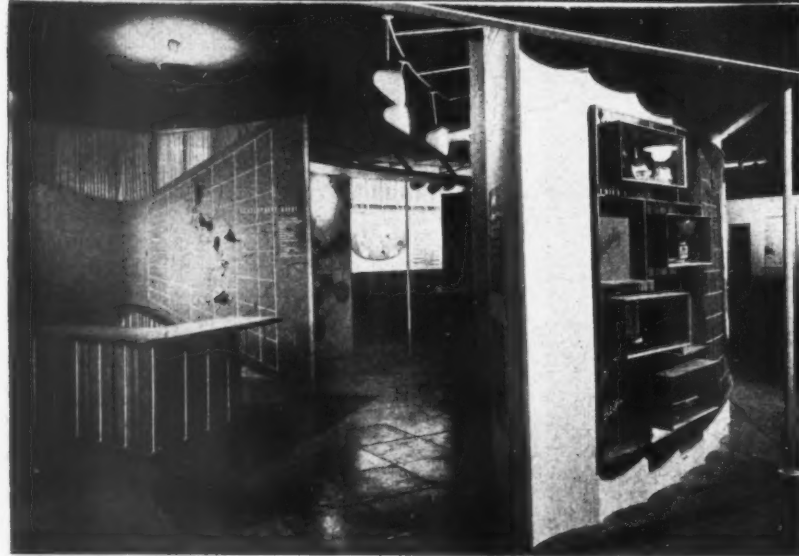


Above, the stand for Monsanto Chemicals, Ltd., at Olympia, was designed by Jock Kinneir. The consultant was Misha Black. The strongly contrasted slopes of the fawn facing wall, its supporting hardwood joists, and the V-sectioned yellow velarium are some of the more prominent features of the stand. The plan includes a reception area, four interview rooms,

a bar and service passage, 'phone kiosk, secretarial office and two storage spaces. Below, left and right, the stand for the Distillers Company, Ltd., at Olympia, designed by Ian Bradbery, is divided into three sections; the display area, a raised platform, and an office. The display frames of 1½-in. cedar, 12 ft. 6 in. high and 4 ft. 8 in. wide, carry painted panels.

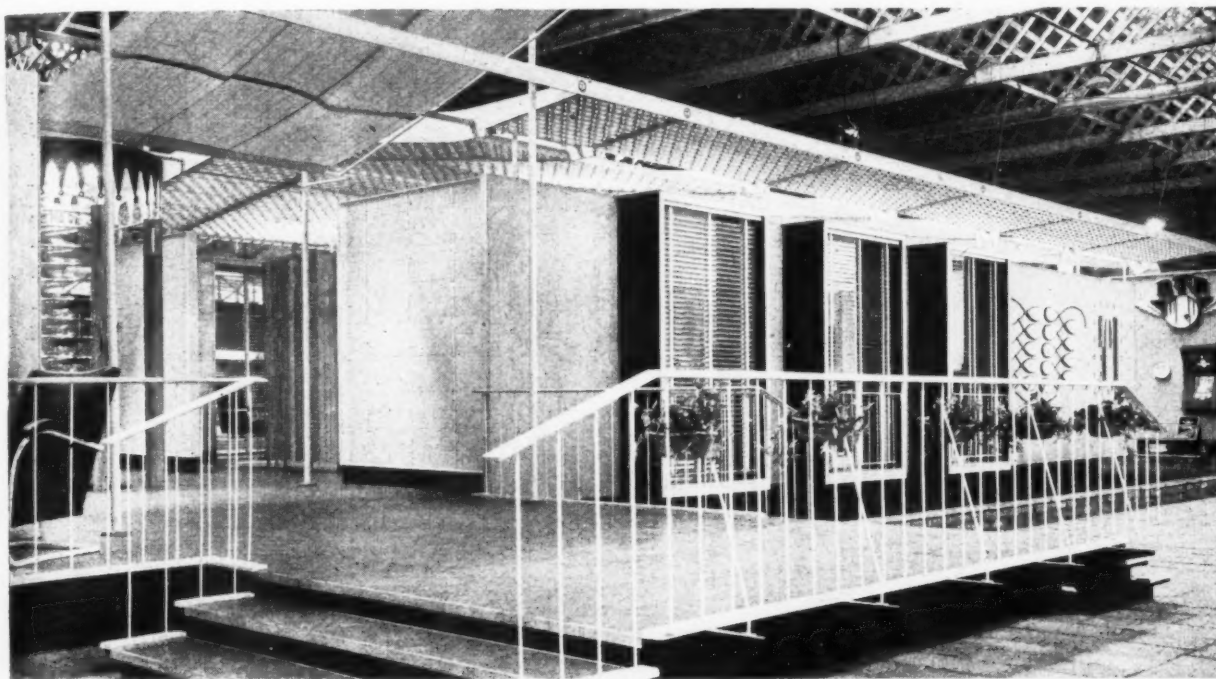


## STANDS ON VIEW AT THE BRITISH INDUSTRIES FAIR



The stand, top left, for Johnson, Matthey and Co., at Olympia, was designed by Ronald Dickens. The unit shown is constructed of wood, veneered externally in walnut and painted internally with a white egg-shell finish and is supported on 2-in. diameter tubular metal uprights. Part of a showcase illustrating industrial and decorative uses of rhodium plating is seen at the rear. The Board of Trade stand at Earls Court, bottom left, was designed by the Architects' Section of the BOT. The floor is constructed of interlocking units of compressed fibre-board. The main feature consists of a map flanked by showcases of wax-polished light oak containing representative samples of exports. Inquiry counters are of reeded birch plywood. The edges to the counters are of mahogany. Lights are fitted with spun aluminium shades. The ceiling is of purple case-ment. The central feature of the jewellery section, at Olympia, centre left, was designed by Hulme Chadwick. The walls are covered with wood grained paper threaded between structural uprights. The counter tops are of polished mahogany. The continuous capping member is of fibrous plaster. The decorative motifs are stencilled on frieze. External walls are grey. Stencilled designs are red on a white ground. The counter front and fibrous plaster flower boxes are covered in grey and yellow striped paper. The floor covering is a deep plum red.

## OLYMPIA, EARLS COURT AND CASTLE BROMWICH



Above and centre right, the stand for Tube Investments Ltd., at Castle Bromwich, designed by Hugh Casson and Pat Clifford. The floor area is paved with stone. The raised deck is surfaced with plastic tiles. The stand is divided into unequal parts. The exterior walls of the office are faced with mill finished aluminium, the showroom with polished ash. Handrails are also of ash. Screens are of polished laurel. Wallpaper in the offices and showroom is of a pale blue, yellow and white tartan design. Fittings are of polished brass. The curved roof is made up of metal panels of egg-box type construction, enamelled white. The canopy is of yellow wool bunting hung on a steel framework, which is cantilevered from dinghy masts. These and the chairs in the showroom are made by companies belonging to the Tube Investments group. Right, the stand for Lewis Berger (Great Britain) Ltd., at Castle Bromwich, was designed by Robert Gutmann and Gunther Hoffstead. The typography was by Ronald Braddick and the consultant was Misha Black. The colours used are mainly in shades of grey, to give prominence to the exhibits, which demonstrate various Berger industrial finishes. The flush ceiling, which is lit from underneath, is painted a bright red.





## STANDS AT THE BRITISH INDUSTRIES FAIR: CASTLE BROMWICH



The stand for Chloride Batteries, Ltd., at Castle Bromwich (left), was designed by War-nett Kennedy & Associates. The design was developed on a 1-ft. 4½-in. module, and is almost entirely prefabricated to permit re-erection elsewhere. The prefabricated units permit flexibility of planning and layout on new sites. The back wall is faced with figured walnut panels and the office wall is faced with sycamore panels. Below left, the British Iron and Steel Federation stand at Castle Bromwich was designed by V. Rotter, assisted by M. Straus. The focal point of the stand is a colour transparency of a modern cogging mill in action, 11 ft. 6 in. high by 7 ft. 6 in. wide, in nine sections set in a steel frame. The sapelli veneered information counter is supported on a winding stainless steel strip, and is lit by bulbs held in reflectors on flexible arms, fixed to a metal ball on top of a tubular column. Literature is displayed behind glass panels set in obechi frames. The General Chemicals Division stand of ICI (below) at Castle Bromwich, was designed by Robin Day. The floor is covered with natural and dark blue coconut matting. Veneers are of sapelli mahogany. The seats, which are part of the flower boxes, are covered with grey woven material.





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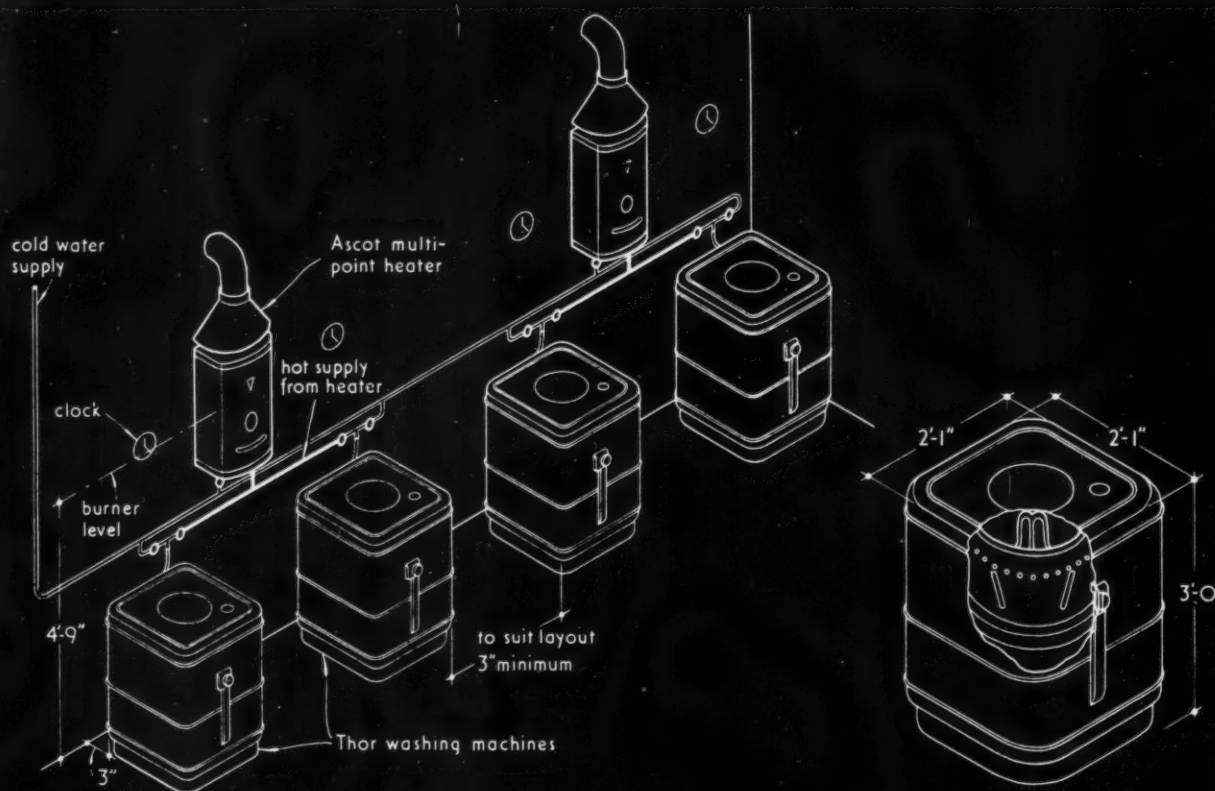
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# WATER HEATING UNITS GAS

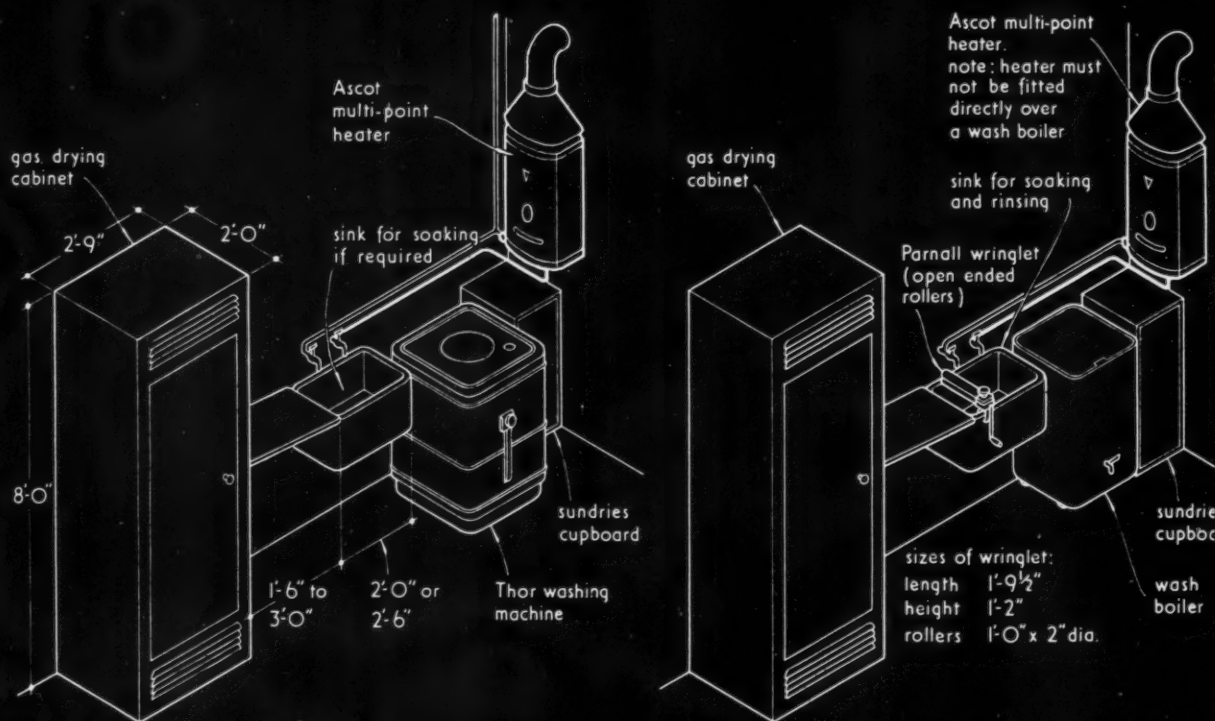
32.C29

The Architects' Journal Library of Information Sheets 275. Editor: Cotterell Butler, A.R.B.E.A.



COMMERCIAL LAUNDRETTE.

THOR WASHING MACHINE.



WITH THOR WASHING MACHINE

WITH WASH BOILER AND PARNALL WRINGLET

TYPICAL LAYOUTS FOR COMMUNAL LAUNDRY CUBICLES OR SINGLE FAMILY DWELLINGS.

ASCOT GAS WATER HEATERS: APPLICATIONS: COMMERCIAL LAUNDRETTES, COMMUNAL LAUNDRIES, AND SINGLE FAMILY DWELLINGS. Manufacturer: Ascot Gas Water Heaters Ltd.

### 32.C29 ASCOT GAS WATER HEATERS: APPLICATIONS: COMMERCIAL LAUNDRETTES, COMMUNAL LAUNDRIES AND SINGLE FAMILY DWELLINGS

This Sheet describes the application and installation of Ascot gas water heaters supplying hot water for laundering purposes in commercial laundrettes, communal laundries and single family dwellings.

#### General

Automatic electric washing machines incorporating devices controlling the hot water flow are not suited for supply from instantaneous water heaters.

An Ascot multi-point gas water heater and Thor washing machine combine to form the basis of an efficient labour- and time-saving automatic installation which is both economical in initial outlay and operation. The relevant general advantages of Ascot multi-point gas water heaters are :—

1. The use of localised sources of water heating is recommended by economic considerations, and additionally in large installations overcomes the deficiencies presented by a single appliance when it is necessary to put that appliance out of service.
2. An inexhaustible supply of hot water is automatically available at any time and, as there are no storage or standby heat losses, running costs are reduced to the minimum.
3. The range of temperatures and rate of delivery of hot water from the Ascot heater coincide with the requirements of the Thor washing machine.
4. Special maintenance facilities are offered by the Ascot Service Branch which operates throughout the country.

#### Thor Washing Machine

**Performance :** The machine washes, rinses and spin-dries automatically 8 lb. of clothing (dry weight) in less than 30 minutes. Spin-drying in the Thor obviates any requirement for mechanical wringing and thereby eliminates any possibility of crushing the clothes or damaging buttons and fasteners, etc.

#### Selection of Heater

Where tank supply is available, Ascot multi-point heater type NEA 32/6 (see Sheet 32.C20) may be specified: if main cold water supply must be used and is permitted, Ascot multi-point heater NEA 32T1 is suitable. This latter model, for mains connection only, has the same dimensions and thermal output as type NEA 32/6, but incorporates an integral water governor (which maintains constant water flows irrespective of water pressure variations) and an adjustable temperature selector.

#### Commercial Laundrettes

Since separate metering is not required, a single Ascot multi-point heater can serve two Thors (upper drawing), and, as rinsing and spin-drying are accomplished entirely in the Thor, sinks and drying facilities are not specified.

#### Communal Laundries

Where the gas and electricity supplies are metered in each cubicle, the cost of using the installation may be borne directly by the user, and in such instances one Ascot multi-point heater is required for each cubicle. If separate metering is not required, and there are not more than two draw-off points

in each cubicle, one Ascot multi-point heater can be used to supply hot water to two cubicles.

One washing cubicle is provided for every 20 single family dwellings. Additional equipment necessary is shown in the diagram. Sinks are not essential since the Thor washing machine eliminates soaking and hard rubbing. A gas heated drying cabinet may be specified in order that the clothes may be completely dried following their removal from the Thor in a semi-dried state.

Adequate space should be made available for clothes stacking, a sundries cupboard, and also for ease of movement of the user.

#### Single Family Dwellings

The full range of Ascot gas water heaters includes a model to suit the majority of the popular types of washing machine available, and heaters type NEA 32/6 and NEA 32T1 are most suitable. Type RS 52/1 (see Sheet 32.C21) may be specified for washing machines up to approximately 6 gallons capacity, when a gravity feed is required in the form of a suitably positioned funnel, so that the heater spout may be swung from the sink to the centre of the funnel when filling the washing machine.

If a washing machine or boiler does not incorporate a wringer or does not spin-dry, a Parnall wringlet, as shown in the lower right-hand drawing, is particularly suitable since it is fitted with open ended rollers, is capable of wringing the heaviest clothing and is normally provided with sink attachment so that valuable draining board space remains unobstructed.

#### Installation

Gas and water : See Sheets 32.C27 and 32.C28.

Heater type NEA 32T1 requires a minimum inlet water pressure (working) of 15 lb./sq. in.

Flues : See Sheets 32.C27 and 32.C28.

Where the provision of individual flues is not practicable, a trunk flue may be used in conjunction with an extractor fan. The size and material of a trunk flue are important factors in relation to flue gas velocities and subsequent deterioration, and either the local Gas Board or the manufacturers should be consulted in the planning stage. Adequate arrangements should also be made for the dispersal of steam.

#### Further Information

Further information regarding the Thor washing machine is available from Thor Appliances, Ltd., 55, Oxford Street, London, W.1, and for the Parnall wringlet from Ascot Gas Water Heaters, Ltd.

Compiled from information supplied by :

Ascot Gas Water Heaters, Ltd.

Head Office : 43, Park Street, London, W.1.

Telephone : Grosvenor 4491.

Works : Ascot Works, Neasden, London, N.W.10.

Telephone : Willesden 5121.

Telegrams : Gascot, Phone, London.

Branch Offices : Belfast, Birmingham, Bournemouth, Bristol, Cambridge, Glasgow and Manchester.







# CONCRETE PRESTRESSED GENERAL DATA

6.A1

The Architects' Journal Library of Information Sheets 276 Editor: Cotterell Butler, A.R.I.B.A.

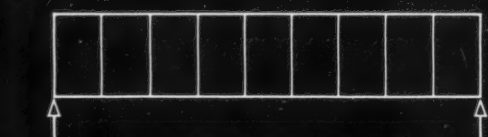


fig. 1



fig. 2

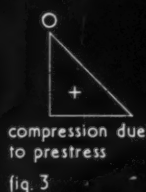


fig. 3

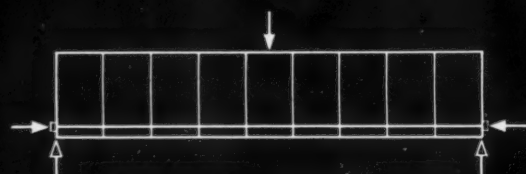


fig. 4

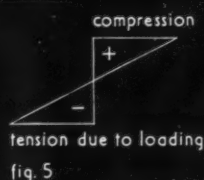
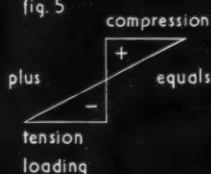


fig. 5



fig. 6



In order to appreciate the principles of prestressing visualise an imaginary beam, fig. 1, composed of simple blocks, there being no adhesion between the individual blocks. Such a beam therefore would have no resistance to tensile stresses. In point of fact it could not exist as a beam without some adhesion, giving tensile strength, between the blocks.

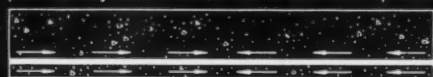
If the group of blocks is subjected to a compressive stress then the beam will be able to withstand a tensile stress of such magnitude as would overcome the previously applied compressive stress. This initial compressive stress could be applied by inserting an elastic element through a hole in the blocks, fig. 2, and stretching and securing it at each end of the blocks. If the elastic element is placed near the lower edge of the blocks, the stress induced throughout the beam will be as shown in fig. 3, i.e. varying from zero stress at the top of the beam to maximum compression at the lower edge. The beam has in fact been prestressed.

When a load is applied to this beam, fig. 4, it causes a bending moment which sets up additional stresses as shown in fig. 5, i.e. compression at the top edge and tension at the bottom edge. These stresses will combine with those initially induced by the elastic element and thus the final stresses become those as shown in fig. 6. Note that there is now zero stress at the lower edge of the beam and compression at the top. No tension exists anywhere in the beam therefore there is no tendency for the joints to open.

The use of concrete as a material in tension is avoided by prestressing. Prestressed concrete beams can be made by pre-casting the whole beam or by a series of pre-cast blocks assembled end to end with butting joints in the manner of the imaginary beam considered in the diagrams.

## PRINCIPLES OF PRESTRESSING.

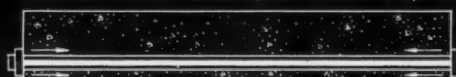
prestressing element tensioned before casting beam in mould.  
prestressing force transferred to concrete by bond



## PRE-TENSIONING.

## METHODS OF PRESTRESSING.

beam cast with prestressing element not tensioned or bonded to concrete. element tensioned and anchored after concrete has set



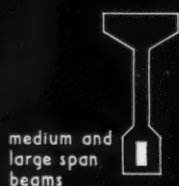
## POST-TENSIONING.



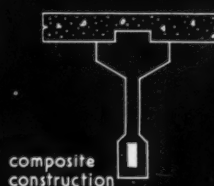
joists and purlins



short and medium span main beams



medium and large span beams



composite construction



composite construction

prestressing may be by post- or pre-tensioned method

## PRE-TENSIONED.

## POST-TENSIONED.

## TYPICAL BEAM SECTIONS.

## 6.A1 PRESTRESSED CONCRETE : PRINCIPLES

This Sheet is the first of a series designed to give an outline of the general principles of prestressing and an introduction to the wide possibilities that exist for its application to numerous types of structure.

### Prestressing

In practice the prestressing elements are high tensile cold drawn steel wires of over 100 tons per square inch ultimate tensile strength. These wires vary in size from 12 gauge to 2 gauge, the selection of size depending upon the system of prestressing employed. The highly elastic nature of this type of wire renders it eminently suited to the purpose. For example, a mild steel wire 70 ft. long, stressed to its working stress of 18,000 lb. per square inch, would stretch  $\frac{1}{2}$  in., but the same section, if of the quality used in prestressed concrete, would stretch 4 in. when stressed to its working value of 120,000 lb. per square inch. Now this state of affairs is favourable to the prestressing technique because certain losses in determining the size of the prestressing element required have to be allowed for. These losses are due to:—

- a. The shrinkage of the concrete.
- b. The "creep" of the concrete—a phenomenon present in concrete subject to continuous stress.
- c. The "relaxation" of the steel, which is a phenomenon in steel similar to creep in concrete.
- d. The elastic shortening of the concrete under compression.

If ordinary mild steel wires, with their small extension, were used these losses would, in a short time, completely eradicate all the initially applied prestress. The successive steps in the case of prestressing with high tensile wire are thus:—An elongation "e" of the steel due to the prestressing force, and a shortening in the concrete due to the creep and shrinking, and the loss due to the relaxation of the steel. But the elongation "e" is approximately eight times the losses resulting from a, b and c, and thus we only lose 12 per cent. of our prestressing force over a period of time due to these losses.

The losses due to d normally have to be allowed for only in pre-tensioned work.

### Methods of Prestressing

**Pre-tensioning:** In this case small diameter wires are used and the prestressing force is transferred to the concrete by the bond between it and the steel wire. Small diameter wires are used because the proportionally larger surface area in contact with the concrete for the same area of cross-section of wire keeps the bond stress to a minimum.

This method is most suitable for factory production of prestressed concrete units in that it requires heavy anchor blocks to hold the wires under stress while the concrete hardens. Transport problems frequently limit the suitability of this method to members of not more than 30-35 ft. in length.

**Post-tensioning:** 0.200 and 0.276 in. diameter high tensile wires are used for this method, the larger diameter being generally used for heavy structures of long span. This method lends itself readily to work "on the site" as beams or other units are cast in shutters as would be any other precast member, the prestressing elements being introduced after the con-

crete has hardened and then tensioned. After tensioning the wires are locked in anchorages which bear upon the extremities of the beam or unit, thus inducing the prestress in the concrete. After the wires have been stressed the duct through which they pass is cement-grouted under pressure. This protects the wire against corrosion and adds further security to the strength of the beam or unit.

The end anchorages referred to are, in the Magnel/Blaton system of post-tensioning, known as sandwich plates by virtue of their characteristic form of assembly. Each plate is  $4\frac{1}{2}$  in. long by 1 in. thick by  $2\frac{1}{2}$  in. wide, and anchors eight wires, two in each of four slots which are each tapered and equipped with a steel wedge. The assembly of sandwich plates is supported upon a distribution plate which distributes the prestressing force over the end of the beam or unit.

The post-tensioning system may be said to be more flexible than pre-tensioning in its application to building and engineering structures. It can be employed upon both precast or in-situ constructions; curved prestressing elements also may be introduced.

### Comparison between Prestressed and Normal Reinforced Concrete

The following advantages may be claimed in respect of prestressed concrete:

1. Freedom from hair cracking due to loads or shrinkage since the concrete is under compression at all stages of its working life. This makes it a particularly valuable material for use in liquid retaining structures and in atmospheres charged with injurious chemical fumes.
2. Great flexibility and resilience. A prestressed beam may be repeatedly deflected far beyond its working load and will, on release of the load, completely recover its initial position.
3. Up to 80 per cent. saving in the amount of steel required in certain cases.
4. Approximately 20 per cent. saving in the volume of concrete for any given structure.
5. More favourable span to depth ratios particularly for long span members.
6. High resistance to fatigue because between the condition of no live load and full live load the stress in the steel only increases by about 4 per cent.
7. Excellent fire-resisting properties, especially in the case of the Magnel/Blaton system of post-tensioning, as it is usual to provide 2 in. concrete cover to the prestressing cables in post-tensioned members.

### Further Information

Stressed Concrete Design Limited maintains a department which is available to answer questions and advise on technical and design problems dealing with this subject generally.

Compiled from information supplied by:

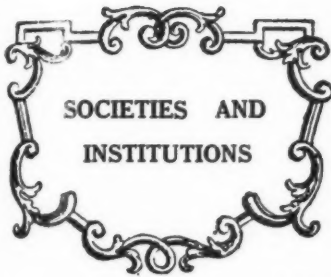
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*Speeches and lectures delivered before societies, as well as reports of their activities are dealt with under this title, which includes professional societies, trade associations and government departments. To save space they are represented by their initials—see front cover. Lectures cannot usually be reported in full, but the extracts given are in the speaker's own words.*

## RICS

### H. W. Wells

April 13. A paper on TOWN PLANNING AND ESTATE MANAGEMENT read at the RICS, 12, Great George Street, S.W.1.

**Henry W. Wells:** The planning or replanning of a town requires a finely balanced blending of art and science. The measure of a good artist is the extent to which his genius appeals to the human senses. The measure of a good scientist is the extent to which by reasoned and cogent argument or practical results he can convince the human mind of his theories. In these modern days the construction of a town or a component thereof will not be wholly satisfactory unless it appeals to the senses and also satisfies the mind. Therein lies the whole complexity of modern town planning.

It may appear theoretically illogical to draw too sharp a distinction between town planning and estate management. Historically, in days when life was simpler, no distinction was made. The only historical town planning in this country was the product of wise estate management at a time when pride in landowning encouraged a spirit of competition in architecture. Those days disappeared with the advent of 19th century materialism. Urban estate management became, with notable exceptions, degraded until relatively recent times to no more than the commercial exploitation of land values. At the time of Christopher Wren the words "architect" and "surveyor" had substantially the same meaning. By the beginning of the 20th century the architect was emerging primarily as a designer, while the surveyor was more concerned in obtaining the greatest financial return from his employer's property. The former regarded his profession as an art; the latter as a science, although not an exact one.

The gap which had steadily widened between the two professions received academic recognition when several universities recognized architecture as an art worthy of a degree. London University in the early 1920's recognized estate management as a

science justifying a degree, and more recently Cambridge followed suit. At the time when the distinction between the two professions appeared to be at its greatest, the gap between them was, however, narrowing in one important field of activity. The successful development, particularly from a financial point of view, of garden cities, necessitated close co-operation between the science of estate management and the art of architecture. This co-operation resulted in the first town planning in its modern understanding, and emerged as a technique in the form recognized by your Institute. It is important to note that your Institute holds to the general policy that town planning technique is an extension to a training and qualification in either architecture, engineering or estate management, all of which in practice are necessary for the production of a town plan.

I do not believe that it is possible in this complicated age for the powers of artistic design and economic or financial analysis to exist adequately in the same brain. Yet both these qualities are vitally necessary to satisfactory town planning. This paper is therefore devoted for the most part to considering how the architect, planner or designer, should co-operate with the estate officer or surveyor.

Although, like Disraeli, I hate definitions an attempt at two are, I am afraid, necessary. First, what—for the purpose of this paper—is meant by town planning, and secondly, by estate management? There are two distinct kinds of planning, each requiring a different approach. The preparation of a plan covering a large urban area such as greater London, Tyneside or Merseyside, or a county plan, is clearly a different matter from the planning of a new town of 50,000 persons or the planning of a neighbourhood unit. The first, although requiring considerable imagination and common sense, is mainly the redeployment of land use on a small scale plan, having regard to deficiencies and trends brought to light as the result of extensive surveys. The plan is a pictorial definition of what should be the proper economic functions of the area in relation to the whole country. Neither art nor estate management need be directly concerned in order to produce a satisfactory result.

#### PLANNING CONFLICTS INEVITABLE

In passing I should like to make this comment on town planning in general. There are some who believe that planning should begin at the village, and some who believe that a national plan is the first essential. Neither, in my view, is right or practicable. Planning should begin at the highest level and over the largest area at the same time as it begins at the lowest level over the smallest area. That there will be conflicts between the planners at the various levels is inevitable. That there should be compromises by all levels is necessary. One of the essentials of planning in a democracy is that it should, within obvious limits, be dirigible by all sections of the community.

Then there is the second kind of planning, which ranges from the planning of a rural village to a fair-sized provincial town. The planners are in closer touch with human emotions and habits. They are concerned with producing a plan which will be accepted by the individuals as distinct from the collective national community. The plan, when executed, must appeal to the senses as well as the minds of people who will live in the new town or village. It must be pleasing as well as functional. The 1947 Planning Act recognizes the difference between the two kinds of plan. It is this latter form of planning with which we are concerned in this paper.

What do we mean by estate management? Principally, of course, the phrase means precisely what its literal interpretation denotes, but a certain confusion arises because the profession of estate management is carried on by a surveyor. Local authorities,

Government departments and corporations have surmounted this difficulty of nomenclature by using the phrases "estates officer" and "estates surveyor." Such people are nearly always members of the Royal Institution of Chartered Surveyors, and were it not for their official labels, would refer to themselves as chartered surveyors. There is, however, a lack of understanding, indeed sometimes a misconception by the public of the surveyor's capabilities and functions in relation to present-day affairs.

#### A SURVEYOR'S TRAINING

The academic training of a surveyor in estate management includes a full knowledge of all laws affecting land and property, some economics, accountancy, building construction, and property valuation, but his practical training gives him a particular opportunity to appreciate the effect of economic and geographical factors on land values. Above all the surveyor learns to understand the effect of human actions on land values. He is, therefore, something of a land economist and a sociologist. In the same way that architect planners are now finding that they must apply their art to areas instead of buildings or groups of buildings, so the estate surveyor is adapting his science so that it can apply to towns as well as estates. An estate surveyor is better able to evaluate a town plan in financial terms than anybody else. His training enables him to say: "This proposed shopping centre is going to look fine, but experience shows that neither the shopper nor the shopkeeper will like its layout, and that means that it is not planned so as to get the most value out of the land." Or he may say: "It may be good community planning to mix the subsidised housing with houses you hope to sell or let at a profit, but on the other hand you will probably make a greater profit if you do not mix them." I think, therefore, that in relation to town planning we can define estate management as the science of determining, in terms of land values and economic implications, the effects of town planning proposals, and in the light of its findings suggesting amendments to the proposals.

Three attitudes of mind are essential to successful town planning of the sort we are discussing in this paper. They are those of the architect-artist, the engineer and the estate surveyor. My own experience leads me to believe that it is very rare for two, let alone three of these mental approaches to be combined in one person. I believe, therefore, that planning should be the work of a team. I consider that one of the most important functions of your Institute is to provide the captain of the team. The captain of any team is also a player. It does not seem to me to matter whether he plays as an architect, or an engineer, or as estate surveyor, but it is most important that as captain he should understand the place in the field of the other players. The captain is not the only one to have the ball at his feet, nor to kick goals. On the other hand he plans the tactics, and he should therefore make use of every member of the team. I have seen plans which are masterpieces of artistic imagination but financially or sociologically impracticable, and other plans which are an estate surveyor's dream but devoid of grace. Such plans, if produced by a team, are the result of bad captaincy.

The importance of the estate management element in planning has been recognized by the post-war planning legislation. Before the Minister can approve a new town or development plan, he and the Treasury have to be satisfied that the return from the proposed development has a sensible relation to the cost thereof. This economic test of plans necessitates that proper weight be given to sound estate management principles during all

stages of the plans' preparation. Neither the cost of, nor return from, development may be easy to estimate, but the expected return can only be sensibly measured in terms of estimated increases in land values. The surveyor alone is capable of this task. The science of estate management is therefore, statutorily, an essential ingredient to the making of a plan. This essentiality is underlined at the present time on account of the economic plight of the country, but that should not mean that a more commercial approach to planning should overrule artistic genius.

#### MARRIAGE OF SCIENCE AND ART

Science and art must be married to obtain the best results. Planning is a continuous process, and although planning authorities are statutorily bound to prepare development or master plans, the law demands that they are kept under continual review, thus recognizing that execution and preparation should not be regarded as separate stages. This continuous process of planning is put to the test every day when a planning decision has to be made by a planning authority on an application to develop. When these decisions are being made, the art of town planning and the science of estate management will sometimes conflict. On these occasions the right compromise is important in order to keep planning alive and in good repute. On the one hand, the architect planner who may be cherishing some laudable architectural composition feels that his ambition may be thwarted, or at least deferred beyond his lifetime, if the permission is such that it obstructs his ideas. On the other hand, estate management draws attention to the economic or financial effect of refusal on the people immediately concerned. Training in estate management enables a more ready interpretation of the effect of the decision to be made in terms of individual humans as distinct from the whole community. Sometimes the conflict between the two points of view takes the form of expediency versus long-term policy. Or it is simply a question of land value or compensation. The right answer can only be obtained by give and take on each side. If, in these differences of opinion, estate management were always to get its way, there would be little planning in the sense that development would follow land values. Equally, if the architect planner was always to win there would be little planning, for the frustration and expense caused would bring planning into such disrepute as to make it impossible in a democracy.

It may sound contradictory to say that planning should be empirical. Yet I believe that by the very nature of things town planning has to be largely empirical. Every adventure or enterprise worth undertaking is to a great extent an experiment based on conclusions arising out of past experiences. In the gradual redevelopment of a town or the quicker construction of a new one, the experiments, and the conclusions justifying them, will be for ever changing. The future is never predictable, and the past not always fathomable. No two towns, nor two moments in time, are the same. Therefore the problems in every town and of every moment are likely to require different solutions. It is the duty of the estate surveyor to watch for economic and land value variations, and warn the designers of the changes as they occur, so that adjustments in plans and policy can be made. He should, to a great extent, provide the empiricism without which town planning would not live.

I conceive that one of the most useful purposes of estate management is to provide a practical element in the application of economic industrial or town planning principles. Much more could be done at the present time to prevent the contemporary theories of either one or the other from being absurdly

applied. For example, I am all in favour of encouraging industry to establish itself in the development areas, and I agree with the principle that the growth of industry in the London area should be discouraged. But if the insistence by the use of planning or industrial control of either of these principles results in an increase in manufacturing costs, or a curtailment of production, or an undue charge on public funds, then the principles are, in relation to present circumstances, probably being misapplied. This does not mean that in different circumstances the end would not justify the means and the cost.

I have found that during recent times, at the lower levels, the current principles of town planning are applied blindly too often in cases where estate management, if listened to, might have convinced those responsible for the decision that it was to the national advantage to depart from the principles. We should be able to say of town planning, as Thomas Hardy remarked in another connection: "Like the British constitution, she owes her success in practice to her inconsistencies in principle." This is, as we all know at heart, a curious but successful British way of getting workable results.

The most interesting town planning that we are witnessing today in this country is in connection with the rebuilding of war-damaged areas and the construction of new towns. Here both the planning and development are the responsibility of a public authority. We have been able to watch, in several war-damaged and new towns, the compromise between architecture and estate management being laboriously worked out in the framing of master plans. In the early days there was unfortunate delay in the case of several reconstruction and new town proposals, because estate management was being insufficiently taken into account as the plans were being prepared. Development under the New Towns Act, or a reconstruction scheme under the 1947 Act, takes place on land acquired by the appropriate public authority. This involves a particularly careful approach to the execution of the plan, because the financial responsibility thereof falls squarely on the shoulders of the public authority. We generally refer to this form of planning as "positive planning" as distinct from "regulatory planning." Development under the former is secured either by the granting of building leases or the erection of buildings by the public authority, who thereby assumes the risks of profits or losses otherwise accepted by private enterprise. But the public authority is not in the same position as a private developer. Whereas private enterprise has complete freedom to choose only those developments which it believes are each in themselves likely to be profitable, a public authority must take the rough with the smooth. Furthermore, the greater social sensitiveness of a public authority as compared with private enterprise will probably operate to its financial disadvantage. Nevertheless, it is the duty of the authority to plan and time the development so as to secure the best financial return; always with due regard to its social responsibility.

#### LAND VALUES

It is as development is actually taking place that the estate surveyor's views become so important, particularly as regards the timing of the development. It is vital to the success of these schemes that land values should be exploited to the fullest advantage compatible with the broad principles as depicted in the agreed master plan. The estate surveyor is in a position to point out varying number of factors as the development proceeds, so that maximum land values can be built up contemporaneously with the progress of development. Examples of the sort of thing I have in mind are a small alteration in the siting of a bus station, the deliberate withholding from development of a shopping site until it is certain that the best rent can be

obtained, and the careful selection of occupiers of shops and factories generally. The estate surveyor should endeavour so to arrange the order of development that the demand for commercial or industrial sites is always slightly in excess of supply. He must also know when to buy to the best advantage, sometimes by buying ahead of requirements. Some of the new towns have found it wise to acquire compulsorily the existing shopping centres because it became apparent on the estate surveyor's advice that shop values were increasing as a result of the new town corporation's activities.

It is hoped, indeed intended, that a new town, when completed, should be a financial success. The estate management element, both in the initial planning and in its development becomes, therefore, indispensable if this is ever to be achieved. With a drawing board in front of you and a creative urge within you, it is easy to be irritated by the necessity to consider the financial effect of the plans you are preparing. There is a cynical Italian proverb:—"Public money is like holy water—everyone helps himself." Let us try and keep it Italian. Waste of public money is one of the dangers of the times, when so much is coming under public control, but it is particularly dangerous as regards town planning. To find the right balance between spending public money on the one hand to the best social and artistic advantage, and on the other in the most advantageous way from the point of view of financial return is, I am learning as a member of two new town corporations, one of the hardest things to do. The ability of the planning team to find this balance during the preparation of the master plan and during actual development is, I believe, the measure of its ability to plan.

#### PLANNING COSTS

A town plan can lose public money in such a way that its loss cannot be properly detected. A nationalized industry must produce accounts, and the loss can be watched year by year. The cost of a town plan may be incapable of accurate or unprejudiced calculation, even after its execution. Furthermore, the benefits of planning are to some extent intangible, and incapable of quantitative assessment. It follows that a sound financial approach to development is all the more important, particularly where it is incapable of being financially tested.

A town plan is built up on a statistical foundation based on extensive surveys. But I think that it is fair comment to say that in the early stages the engineers' outlook should predominate. The sewage and water possibilities and the main road structure form a skeleton which for topographical reasons and considerations of cost, and because of certain accepted standards, cannot have many varying shapes. The architect-planners' viewpoint has the greatest emphasis at the next stage, which is the dressing of the skeleton in suitable clothes, and fitting it as artistically as possible into the landscape. This may necessitate some alteration in the shape of the skeleton. At this point there must be a considerable degree of compromise between the engineer and the architect. The estate surveyor should be taking part in discussions on the plan from its inception, but his views become more important the nearer the plan gets to details, and to the siting of individual buildings. At this final stage I suggest that estate management considerations on siting should predominate unless they conflict with the architect's views, in which event a compromise should be reached. Considerable weight should also be given to the estate surveyor's views on the planning of individual buildings, for it is part of his responsibility to know what form the demand for accommodation is taking. The nature of the demand for a building is the most important factor in its planning. The three different outlooks should therefore be given varying degrees of weight as the plan evolves from its statistical genesis.

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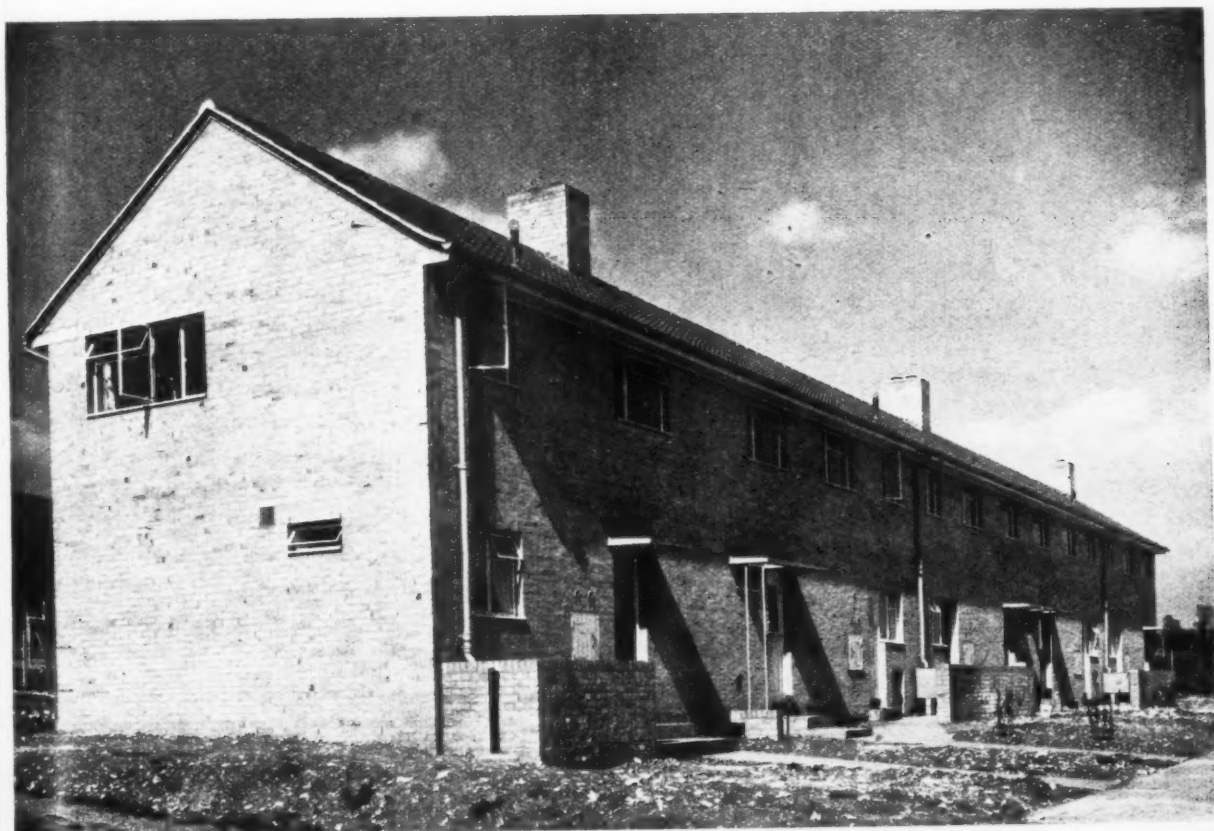
The Architects' Journal for May 18, 1950 1611

## HOUSES

at KINGS LANGLEY, HERTFORDSHIRE  
designed by F. R. S. YORKE, E. ROSENBERG and C. S. MARDALL

A housing estate between Barnes Lane and Coniston Road at Kings Langley is being built for the Hemel Hempstead Rural District Council. It consists of terrace blocks of four 3-bedroom houses and one 2-bedroom house, and of shorter blocks of 3-bedroom houses.

*Front elevation of the houses.*



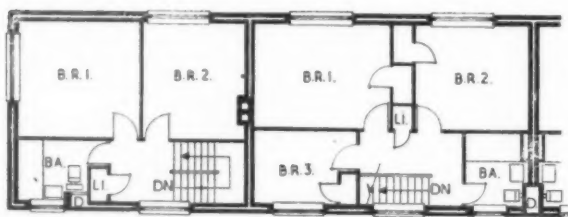




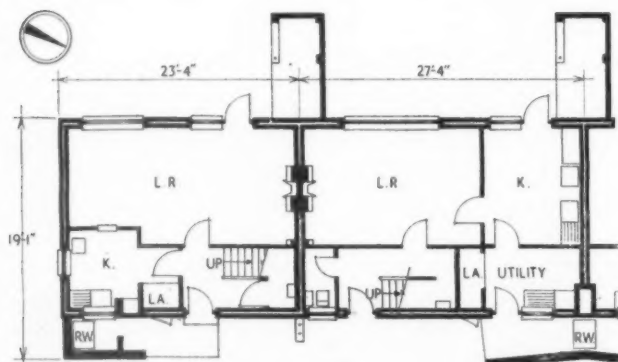
A view showing the treatment of the gable end of one of the houses.

## HOUSES

at KINGS LANGLEY, HERTFORDSHIRE  
designed by F. R. S. YORKE, E. ROSENBERG and C. S. MARDALL



First floor plan



Ground floor plan [Scale:  $\frac{1}{4}$ " = 1'-0"]

**SITE.**—The site slopes to the north at a gradient of 1 : 20. Blocks of houses are sited at right angles to the road which runs from north to south. Shorter blocks to the west of the road are to be built at an angle to the longer blocks to close the vista on that side.

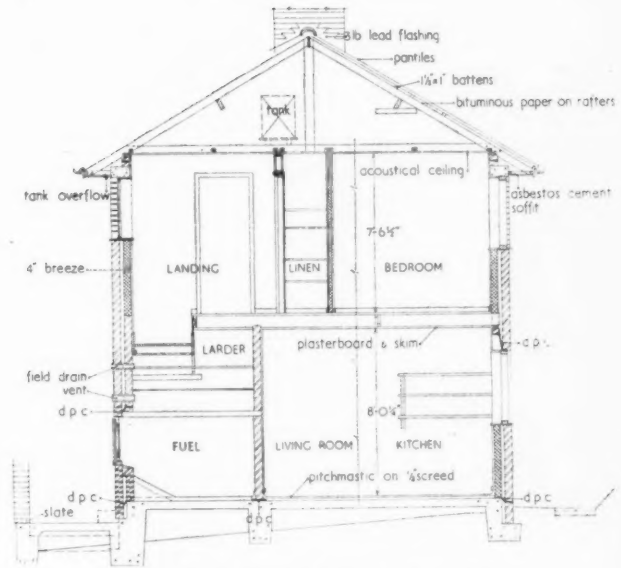
**PLAN.**—Access to houses is from the north. Living rooms and bedrooms, except for the third bedroom, face south. The hall, utility room, bathroom and wc face north. All houses have a shed on the garden side. Access to the garden is from the kitchen or from a wicket gate at the bottom of the garden.

**CONSTRUCTION.**—Walls: 11-in. cavity construction; inner skins of 4-in. breeze or fairface sandlime bricks. Party walls: two skins of 4-in. breeze with a 2-in. cavity. Ground floor: solid concrete. First floor: 1-in. tongued and grooved boarding on 7-in. by 2-in. or 6-in. by 2-in. joists. Roof: timber trusses at about 6-ft. 8-in. centres with common 5-in. by 2-in. rafters covered with felt and concrete Roman tiles.



**EXTERIOR FINISHES.**—Houses: mild yellow stock bricks set in lime mortar with bag wiped joints. Outhouses and garden walls: rough stocks. Windows, south side: sliding timber frames; reinforced brick lintels to the outer skin; timber sills. Windows, north side: standard steel frames; quarry tile sills. Paintwork: white, except for rain-water goods in metal grey and front doors in yellow, blue, red and grey.

**INTERIOR FINISHES.**—Ground floor: dark brown pitch-mastic. Walls: oil bound, washable, ivory distemper. Joinery: painted white, light metal-grey and dark green. Ceilings: ground floor, plasterboard and skim; first floor,  $\frac{1}{4}$ -in. fibre board, butt jointed and distempered, white. Fire-place hearths: 9-in. by 9-in. blue and buff quarry tiles in alternate houses. Fireplace surrounds: dark brown and dark blue facing bricks.



Section through a three-bedroom house [Scale:  $\frac{1}{4}$ " = 1'0"]

**SERVICES.**—Cooking: gas and electric points installed in kitchen. Hot water: 20 gallon electric immersion storage heater. Heating: slow combustion, openable fire in the living room with convection heating grilles. Drainage: internal duct for all pipes with an access door at ground floor level.

**PRICE.**—The contract price for the first 20 houses is £25,274.

The general contractors were E. J. Waterhouse and Sons and E. W. Rayment. A list of sub-contractors and nominated suppliers appears on page 622.

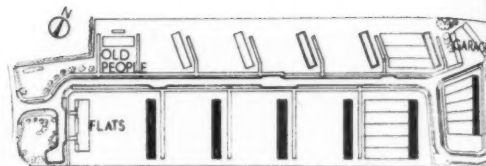
*A general view of the houses from the south overlooking the Gade Valley.*



## HOUSES

at KINGS LANGLEY, HERTFORDSHIRE

designed by F. R. S. YORKE, E. ROSENBERG and C. S. MARDALL



Site plan

KEY:  Blocks of five houses  
 Short blocks being built  
 Blocks to be built

*The main entrances to two three-bedroom houses.*



## SHOWROOMS

in HAY HILL, LONDON, W.1  
designed by SERGEI KADLEIGH

These showrooms and administrative offices at 16-17, Hay Hill, Berkeley Square, have been converted from two shops, each of which consisted of a basement, ground floor showroom and mezzanine room, with a small gallery at mezzanine level. They are occupied by the Crafts Centre, a non-profit making organization financed by public subscriptions and a temporary Government grant.

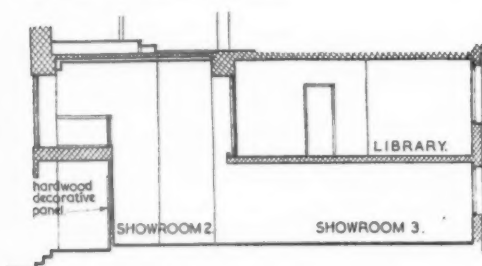
*The flexible showcase, number 4.*



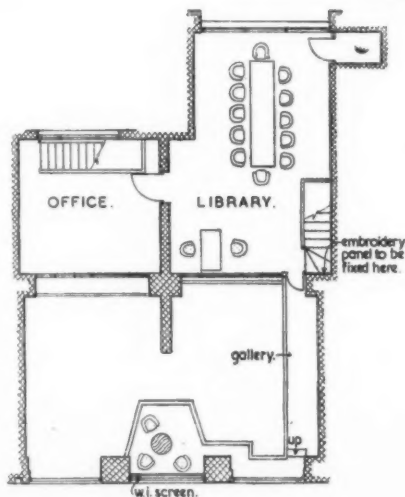


## SHOWROOMS

in HAY HILL, LONDON, W.1  
designed by SERGEI KADLEIGH



Section A-A



Ground floor and mezzanine plans

[Scale:  $\frac{1}{8}'' = 1'-0''$ ]

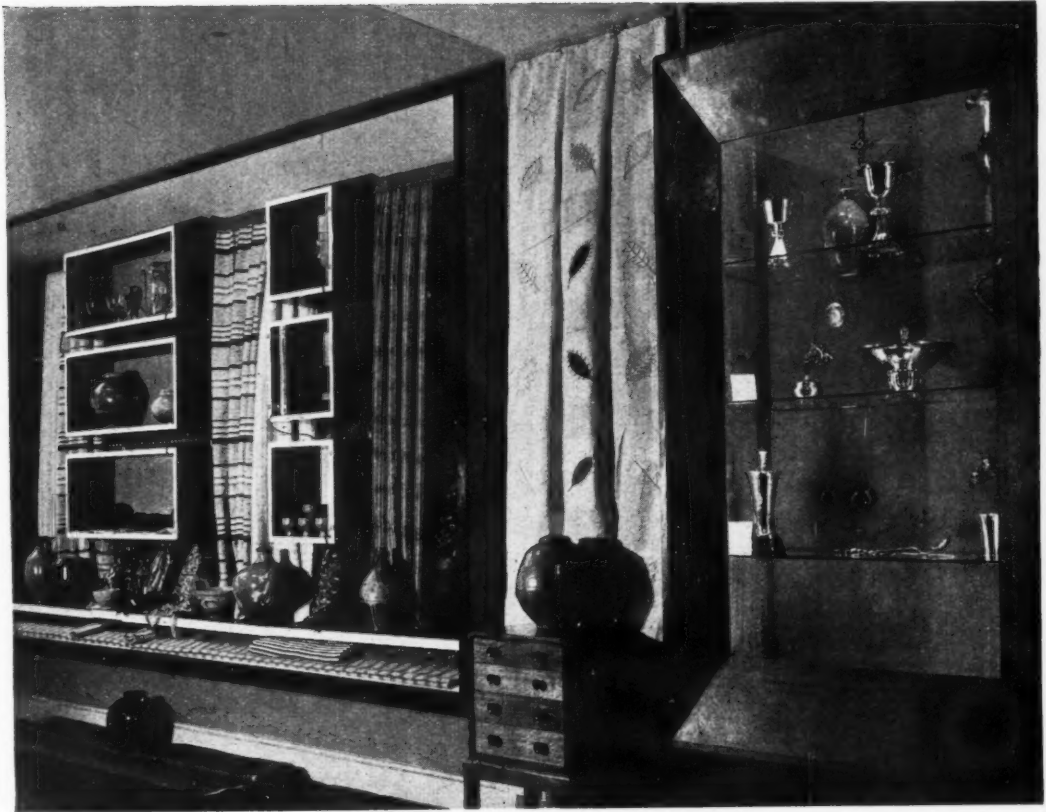
**PLAN.**—The basement was left in its original form to provide cloakroom accommodation and storage. On the ground floor an opening has been made in the dividing wall between the two original shops and a partition wall removed at the rear in order to make the whole of the ground floor into one large showroom. This opening had to be small as the wall is an important structural support to the building above. A doorway has been formed to provide access from one mezzanine room, used as a library, into the office. The existing gallery is used for the display of prints. It was essential to limit the constructional work to the minimum necessary to adapt the premises to their new use.

**FINISHES.**—The walls in showrooms 1 and 2 are painted two shades of grey with doors, architraves, skirtings and other details painted white; and in showroom 3 the walls are painted pink. Between the entrance doors leading into the showroom there is a large mirror taking up the whole width and height of the wall to alleviate the effect of the narrowness of the opening joining showrooms 1 and 2. The new screens at mezzanine level are divided into six vertical panels framed in 3-in. by 2-in. moulded



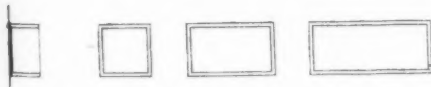
Above, a general view from mezzanine level showing the new opening between showrooms 1 and 2. Above left, showcase 2, which is constructed of mahogany with a single plate glass sheet top 12-ft. long and is used for the display of manuscripts and bookbinding.



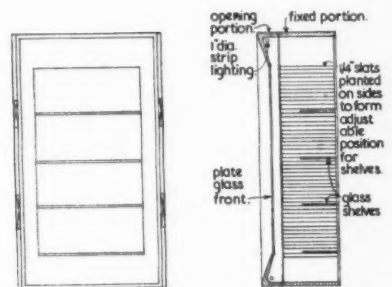


Above, flexible showcase 4, left, and showcase 5, right.

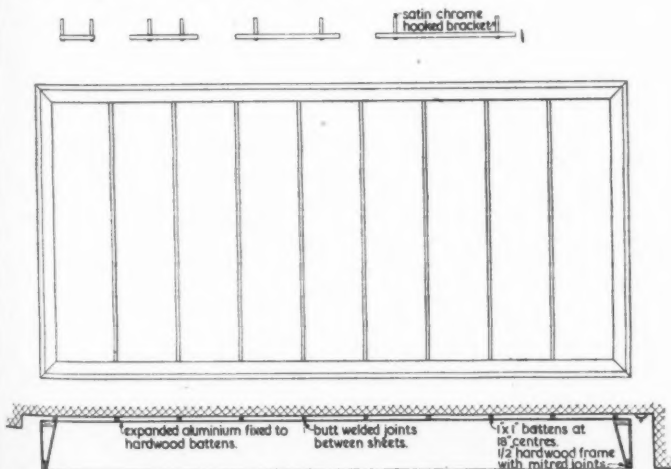
softwood, stretching from floor to ceiling. Each panel is subdivided into a solid skirting and dado panel of hardboard painted blue inside and lemon yellow outside. Above this there are panels of clear glass and expanded metal mesh for permanent ventilation. The gallery wall for the display of prints is faced with rafeeta. The ceilings in show-rooms 1, 2 and 3 are papered and distempered



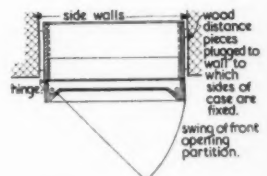
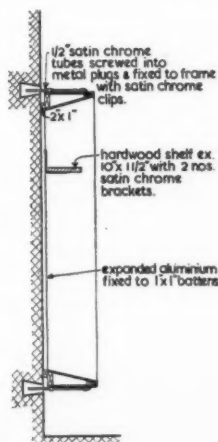
Section and elevations of movable boxes



Elevation and section of showcase 5



Plan, elevation and section of showcase 4 [Scale: 1/4"=1'0"]



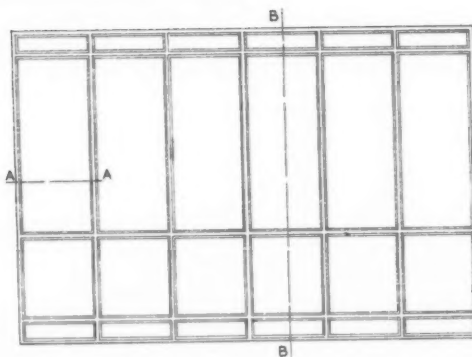
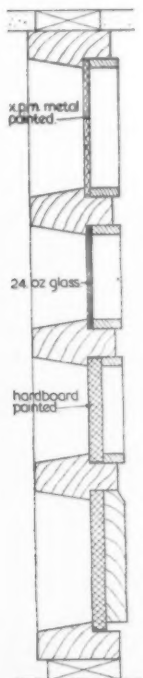
Plan of showcase 5 [Scale: 1/4"=1'0"]



## SHOWROOMS

in HAY HILL, LONDON, W.1  
designed by SERGEI KADLFIGH

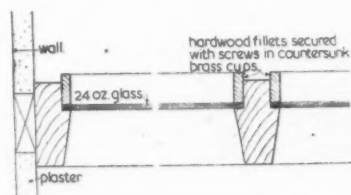
Section B-B



Elevation of office partition [Scale: 1/4" = 1'0"]

*Above, showroom 1 with the mezzanine office, above, behind a new glazed screen. Right, the showroom windows and entrance from Hay Hill.*

Section A-A [Scale: 2" = 1'0"]



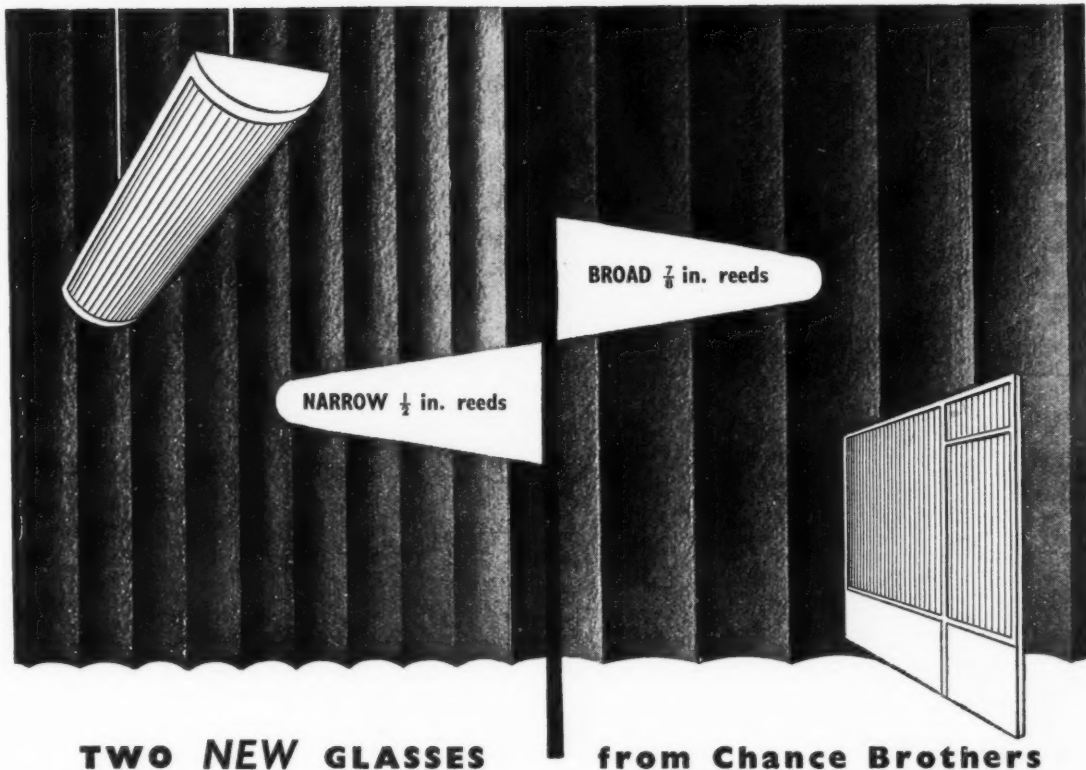
white. The ceilings of the mezzanine library and office are painted blue.

**EQUIPMENT.**—It was the wish of the clients that as many showcases as possible should be made by craftsmen members of the Centre. One exception was showcase 4, which was entirely designed by the architect and consists of a large frame 14 ft. long by 7 ft. high, enclosing a background of natural aluminium, expanded, diamond-shape mesh fastened to hardwood vertical bearers plugged to the wall. The remainder of the showcase consists of a set of display boxes of different shapes, and shelves on satin chrome hangers, which may be suspended within the frame in any position. It is possible therefore, to change the grouping of boxes and shelves frequently and easily.

**SERVICES.**—The general lighting for showrooms, office and library is by means of tungsten lights in white globe fittings. Each box in showcase 4 is supplied with a 1-ft. tungsten architectural strip light which clips to any side of the box and plugs into a grid of points incorporated in the pattern of supporting battens.

The general contractors were J. Garrett and Son, Ltd. For list of sub-contractors, see page 622.





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## TECHNICAL SECTION

*A digest of current information prepared by independent specialists; printed so that readers may cut out items for filing and paste them up in classified order. Headings below.*

### INFORMATION CENTRE

#### 3.23 regional planning

##### PLANNING IN SCOTLAND

*Clyde Valley Regional Plan, 1946.* Sir Patrick Abercrombie and Robert Matthew. (HMSO, 4 guineas.)

Outline plan for the development of the Clyde Valley Region. Chapter 8: Regional architecture and recovery of amenities of interest to all architects. 395-XV pp., 246 illustrations and maps. In pocket back of book: The Report of Clyde Valley Regional Planning Advisory Committee to its constituent local authorities.

This report was prepared for the Clyde Valley Regional Planning Committee. It is one of three reports published in 1949 on the planning of central and southern parts of Scotland. The other two reports were: A Regional Survey and Plan for Central and South-East Scotland by Sir Frank Mears; and the Tay Valley Plan by Gordon E. Payne (advance edition only). Work on the Clyde Valley Regional Plan began in February, 1944, and was completed by June, 1946. A preliminary issue of the consultants' final report was printed in 1946. The full report complete with maps and illustrations was not, however, published until August, 1949.

The Clyde Valley Region is an area of great contrasts, and contains within its boundaries parts of the three main divisions of Scotland, namely, the Highlands, the Midland Valley and the Southern Uplands.

The Highland area is an area of unsurpassed scenery but with a population that is sparse and which continues to diminish. It is an area for recreation. The principal approach to the area from Glasgow and the South is through the Vale of Leven, which the authors describe "as a compact and almost self-contained example of the problems of the Region in miniature." And they have prepared a redevelopment plan for the whole community to serve as a form of model plan. At the head of the Vale lies Loch Lomond. It is hoped that the area to the east of the Loch, which includes the Trossachs, will become the first National Park of Scotland.

The Southern Uplands are the lands of the sheep farmer and contain a number of small towns and villages. Particular attention is given to the study of movements and trends of population in the rural areas of the Region. Proposals to arrest the decline in population include a call for "a rapid improvement of agricultural housing and the development of the rural village," and a suggestion that there should be "the planned decentralisation of industry from the congestion in the central areas of the Region to the existing small towns and villages."

The Midland Valley contains two sub-regions, the Clyde Basin and surrounding lowlands and the Ayrshire Plain. The latter is mainly prosperous dairy farming country, but it contains also the international airport of Prestwick and the expanding Ayrshire Coalfield. The plea is made that other forms of industry should also be developed in the coalfield area and that new population should be distributed over existing villages or small towns.

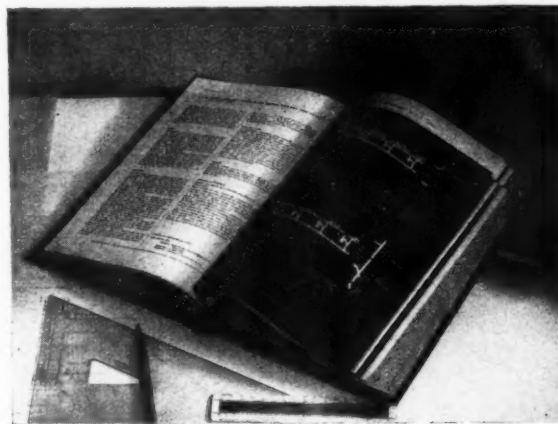
The Clyde Basin contains the "industrial and commercial heart of Scotland." The authors write that "Apart from the River, the most outstanding natural feature of the Midland Valley is the presence of the basins of carboniferous rocks containing the coal and iron measures. These great mineral deposits, extending eastwards to Fife and Lothians, and westwards to Ayrshire, together with the waterway of the Clyde, have in large measure determined the development of the modern conurbation of industrial towns at the centre of the Region, where all the problems of urban planning are concentrated and exaggerated."

The conurbation is made up of the city and port of Glasgow, a dozen towns large or small and a great area of undefined development. The total population of the conurbation is about 1½ million, of which 1 million are in the city of Glasgow, while in the dockside tenements of Glasgow 700,000 people live in an area less than

three square miles in extent. The authors point out that the growth of Glasgow in relation to the rest of Scotland has been even more unbalanced than that of London to the rest of the country. The proposals include the recommendation that from Glasgow alone 500,000 persons should be rehoused outside the city. They make clear that any new development must be most carefully considered in relation to the vitally important Green Belt. It is suggested that 250,000 persons could be rehoused on the outskirts of the built-up area. New towns at Cumbernauld-Condorrat, East Kilbride (for which a development corporation is now in being), Bishopton and Houston (discussions have taken place between interested authorities on the setting up of a new town at Houston, but so far no decision has been made) could also absorb part of the overspill. The balance of the overspill of population should be absorbed through: "(1) The progressive building up of a number of towns and villages in the Region, and (2) Decentralisation away from the Region, in accordance with a national plan for the repopulation of Scotland as a whole." Both these steps are urgently necessary, as it is not sufficient to rehouse population in the Clyde Valley Basin, which is grossly over-peopled.

On the western boundary of the city of Glasgow is the area of North Lanarkshire. It is an area of very rapid growth following the intensive working of ironstone and coal measures. The problem is that the ironstone working ceased years ago, ore is now entirely imported for conversion into steel; and the coalfield is being rapidly worked out. A vast scheme of rehabilitation is required in which the re-creation of amenity in this area of industrial blight is an important factor as any. And new employment will have to be found for those people who will not migrate.

On the east side of the conurbation is the



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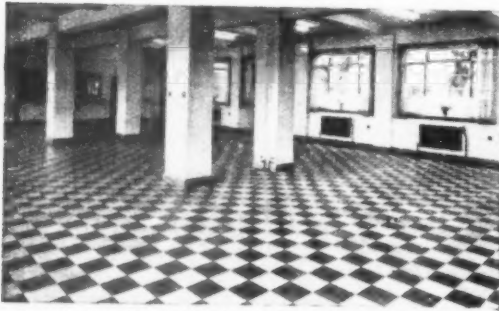
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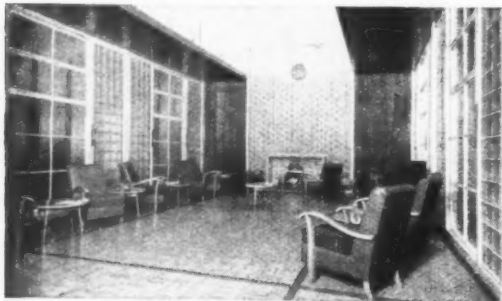
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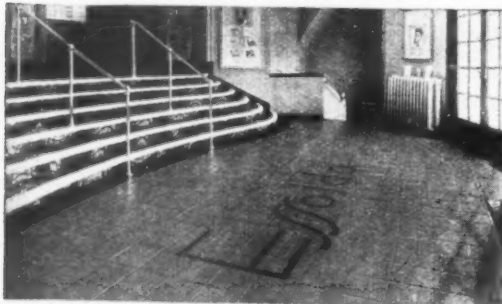
*Semastic decorative floor tile installation for the British Electricity Authority, Surrey.*



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Greenock-Port Glasgow area. A new town at Bishopston is proposed as a contribution to the relief of housing congestion and for new industry.

Toward the end of the report the authors, in discussing the organization of regional planning, write: "The preparation of the Regional plan and the problems that have emerged have brought into strong relief the inadequacy of the present law and practice relating to local government administration. A new approach to the question of local administration in the Clyde Valley conurbation is clearly necessary—nay, it is imperative." They propose that for the conurbation a Regional administration should be set up to deal with primary planning functions. As this is one of the major recommendations that appear in the report, it is unfortunate that so far no progress has been made into putting the recommendation into effect. But the problems to be encountered in the planning of the Clyde Valley are immensely complex, and it cannot be hoped that they will be solved in either a short time or without great effort and expense. The report was written in the first flush of post-war enthusiasm for planning, and it should not be imagined that it presents a blue-print for executive action on current problems. Its main value is as a forecast of some of the physical effects of social and industrial changes that are impending.

Anyone interested in regional planning should study this report. As this notice has tried to show, the Clyde Valley Region is one of the great regions of the country, and the report itself follows the best traditions of Sir Patrick Abercrombie's work on regional planning. In scope it covers the full range of subjects expected of a regional report, and holds a balance between physical, economic and social aspects of planning.

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## 18.52 construction: theory TIMBER STRUCTURES

*Developments in Timber Technique.* R. T. Walters. (The Architect and Building News, March 3, 1950, pp. 244-250, and other journals.)

Architectural Science Board lecture. Review of present-day technique here and abroad. Very useful.

In his paper the author gives convincing arguments why the practising architect should get interested in using timber and designing the simpler types of structure himself. During the last few years the assumptions to be made in the design have been codified. The relevant regulations and codes are listed and it should not overtax the average architect's office to work to given loading conditions, using timber of a certain structural grade and to assume the safe working stresses as laid down in BS 940. Although timber is probably one of the oldest building materials, it still requires a careful study of its behaviour and properties. However, so much has been done in recent years that the architect can have the required data on his table without being involved in research of his own. The draft BS code of practice CP112, The Structural Use of Timber in Buildings, is rightly given prominence in the list of fundamental publications, together with other sources of printed information. Mechanical devices to connect timber members are discussed in detail. The split ring connector and other types represent a remarkable development in the change-over from the orthodox heavy timber structure to lighter modern types of longer span. These split rings are covered by the BS Code, and so are claw plates and shear plates, with full design data. Extensive tests are discussed as carried out in collaboration between the Timber Development Association and the Forest Products Research Laboratory. The old problem of transmitting the full member force in a tension joint has been brought much nearer to its solution. Compression joints presented no such problem and the traditional types of timber structures rely mostly on joints in compression, thus severely limiting the clear span. A most interesting historical note refers to bolts, nails, screws, and the later dowel types of tension joint as the forerunners of the modern timber connectors. (It should be noted, however, that nailed timber structures had some remarkable success in recent bridge construction.) The basic idea of laminated timber construction is discussed in its many interesting aspects, also the technique of fabrication, using mechanical glue spreaders and pressure jigs with clamps producing up to 200 lb. per sq. in. compression. Laminated timber members may be tapered or curved, their depth and width may vary as required by structural or aesthetic considerations. Many impressive timber structures have been built, especially in the Scandinavian countries and in the USA, and an interesting pictorial comparison is drawn between timber structures and buildings of similar shape in reinforced concrete shell construction. There is hardly a type or shape of building frame which has not been fabricated in timber, and recent examples shown by the author include a 232 ft. span bowstring roof truss in USA, with a curved laminated top chord, the main tie and bracing members of solid timber. If for no other reason the architect will find this review very useful because it shows him at a glance what has already been achieved in modern timber construction.

## 20.179 construction: complete structures FESTIVAL BAILEY BRIDGE

*Festival of Britain, Erection of Bailey Bridge.* (The Builder, April 21, 1950, p. 525, and other journals.)

Erection work has already commenced. The 1,150 ft. long bridge across the Thames will connect a platform over Northumberland Avenue to the steel framework of the exhibition restaurant. At that end the bridge span will temporarily be suspended by steel wire ropes until the restaurant frame has been completed. There are seven spans, the longest is 180 ft. Each span will be assembled on the ground and launched forward over the river. The bridge will be of the well-known triple-triple construction, i.e., each of the two main girders has three panels side by side and is three panels deep (every panel is 10 ft. long and 4 ft. 9 in. high between pin centres). The bridge will weigh 600 tons and is being erected as a major training exercise by the Royal Engineers and other Army Units. Bailey bridge units will also be used in the construction of landing stages at the exhibition site and at Battersea Park.

*This feature answers any question connected with building confidentially and free of charge. Questions to the Technical Editor, The Architects' Journal, 9, 11 and 13, Queen Anne's Gate, S.W.1.*

## QUESTIONS AND ANSWERS

### 3022 WATERPROOFING DAMP BRICK WALLS

**Q** *I should be grateful if you could recommend a transparent, possibly penetrating substance which can be applied to external brickwork which has become porous without causing the colour to change subsequently, so that it need not be applied over the whole of the surface.*

**A** The problem of preventing the penetration of rain through brick walls by the application of simple colourless surface treatments is not an easy one and it is not possible to ensure that such treatments will be successful in every case.

In principle, the majority of colourless waterproofing treatments aim at imparting a surface water repellence by lining the pores with oily, fatty or saponaceous substances. They do not attempt to form a continuous film over the surface for, besides being difficult to achieve, this would impart a glazed appearance to the wall which would be distinctly unpleasant.

Since the most that can be hoped for is a measure of water-repellence and not complete impermeability, much depends on the extent of the damp penetration. A really bad case might not be curable in this way, whereas slight penetration with not very severe exposure conditions may yield to such treatment.

A word is necessary as to durability. A good surface treatment will often tide over initial porosity while the surface silts up but it will not itself operate indefinitely. The sort of substances normally used volatilize slowly under normal atmospheric exposure and gradually disappear. The frequency of renewal will depend on the extent of the penetration, and may vary from one or two years to ten years. There are various proprietary colourless waterproofers and I would suggest that you ascertain from the suppliers the nature of the waterproofing ingredient and the justification for its application in your particular case.



## Announcements

We regret to announce the death of Capt. A. H. Arnold, O.B.E., a member of the Limmer & Trinidad Lake Asphalt Co.

Mr. J. L. Lumsden, A.R.I.B.A., Government architect, Port Louis, Mauritius, would be glad to receive catalogues and trade literature.

For some time past the Building Boards Joint Committee has had under consideration the enlargement of its sphere of operation by extending its membership to embrace all branches of the Fibre Building Board Industry. The Joint Committee now comprises the following:—The Building Board Manufacturers' Association of Great Britain, Limited; The Fibre Building Board Agents' Association, Limited; The Insulation Building and Hard Board Association, Limited; The Wallboard Importers', Distributors' and Merchants' Association of the United Kingdom. All inquiries will be welcomed by the secretary at Melbourne House, Aldwych, W.C.2 (tel.: Temple Bar 6278).

Mr. J. M. Angus, L.R.I.B.A., chartered architect, has moved to 21, Lovaine Place, Newcastle-on-Tyne, 2 (tel.: Newcastle 26540).

Mr. Frank Scarlett, F.R.I.B.A., has changed his address from 11, Upper Grosvenor Street to 18, Mansfield Street, London, W.1.

Mr. W. Leslie Jones, L.R.I.B.A., chartered architect and surveyor, has moved to 21, High Street, Great Missenden, Bucks. (tel.: Great Missenden 306 and 375). His London office will remain at 99a, Charing Cross Road, W.C.2 (tel.: Gerrard 2137).

The address of the Society of British Paint Manufacturers, Ltd. is now Grosvenor Gar-

dens House, Grosvenor Gardens, London, S.W.1. (tel.: Victoria 2186-8).

Mr. R. Myerscough-Walker is to resume practice as a perspectivist at Newfarm, Bep-ton, near Midhurst, Sussex.

The National Federation of Roofing Contractors is now producing a new bi-monthly magazine, "The Roofing Contractor," which replaces "The Slate Trade Gazette."

## Buildings Illustrated


*House at Solihull.* (Page 601). Designer and general contractor: Ralph Lamprell. Sub-contractors: Bricks, London Brick Co.; brickwork, Ernest Abraham; tiles, Kingsbury Brick Co.; flat roofing, Andersons; glass, Boyce Glass Co.; woodblock flooring, R. W. Brook; fireplace interior, Bell; tile surround and hearth, Abbey Tiles; water heater, Creda; ventilating fan, Vent Axia; plumbing, J. Chandler; boilers and radiators, Ideal Boilers; door furniture, A. Brown & Son; casements and window furniture, Henry Hope & Sons, Ltd.

*Showroom at Kent House, Market Place, Oxford Circus, W.1.* (Pages 602-603.) Architects: Elsom & Pearlman. General Contractor: Robertson & Cameron (Building Contractors) Ltd. Sub-contractors: Central heating, Hope's Heating & Engineering Ltd.; electric wiring, Sandilands (Electric) Ltd.; electric light fixtures, Troughton & Young (Lighting) Ltd., Thorn Electrical Industries Ltd.; ventilation, Hope's Heating & Engineering Ltd.; door furniture, H. N. Barnes Ltd., Comyn Ching & Co. (London)


Ltd.; decorative plaster, G. Jacksons & Sons Ltd.; curtains, Story & Co. Ltd.; textiles, Druce & Co. Ltd.; wallpapers, John Line; furniture, Ernest Race Ltd.; clocks, Synchro-nome Co. Ltd.; signs, H. N. Barnes Ltd.

*Houses at Kings Langley.* (Pages 611-614). Architects: F. R. S. Yorke, F.R.I.B.A., E. Rosenberg, and C. S. Maddall, A.R.I.B.A. Quantity Surveyors: Davis Bel-field and Everest. General Contractors: E. J. Waterhouse & Sons, E. W. Rayment. Excavation, foundations, roofing felt, partitions, glass, gasfitting, plumbing, plaster, joinery, tiling, by general contractors. Nominated suppliers: dampcourses, Astos; bricks (facings), Cement Marketing Co.; bricks (commons), London Brick Co.; tiles, Marley Tiles; stoves, grates, A.I. Projector Unit; sanitary fittings, Standard Range and Foundry, Watford; door furniture, door numbers, Rennis; casements (timber) E. J. Waterhouse & Sons, Ltd., (steel) Williams & Williams; doors, Linden Doors, Ltd. Sub-contractors: Patent flooring, pitchmastic by Permanite Ltd.; electric wiring, Phoenix Electric; water supply, L.A. water supply.

*Showrooms in Hay Hill, Berkeley Square, W.1.* (Pages 615-618). Architect: Sergei Kadleigh, A.R.I.B.A. Electrical Consultant: Ralph B. Giles, M.I.E.E. General Contractors: J. Garrett & Son Limited. Sub-contractors: Electrical contractors, Armfield Electro Power Co.; flexible showcase No. 4, Cockade Ltd.; frames for prints, engravings, lithographs, etc., also metal rods to support frames and expanded metal aluminium frame between the two doors in showroom No. 1. F.E.W. Models & Displays; electric fan heaters, The General Electric Co. Ltd.; spot lights, The British Thomson-Houston Co. Ltd.; electrical ceiling fittings, Tucker & Edgar Ltd.



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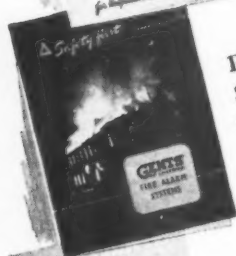
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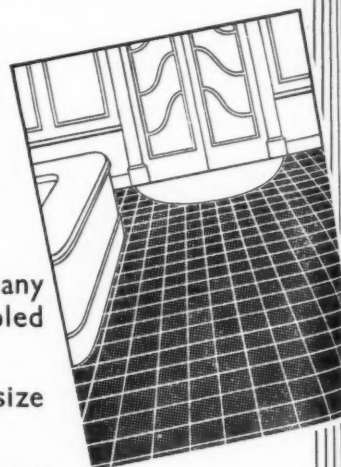
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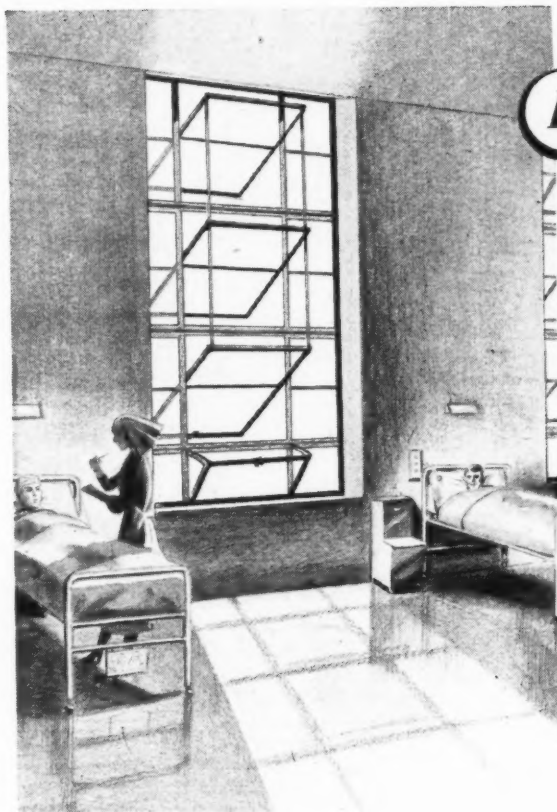


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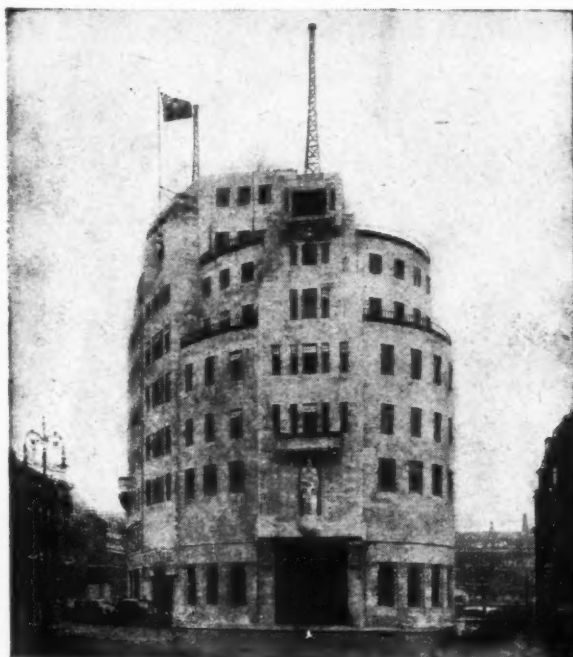
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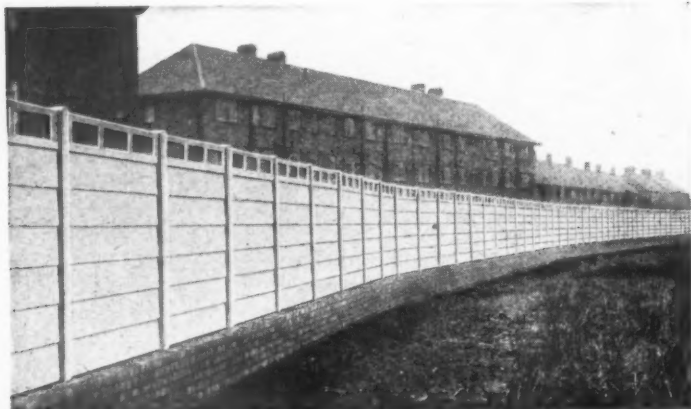
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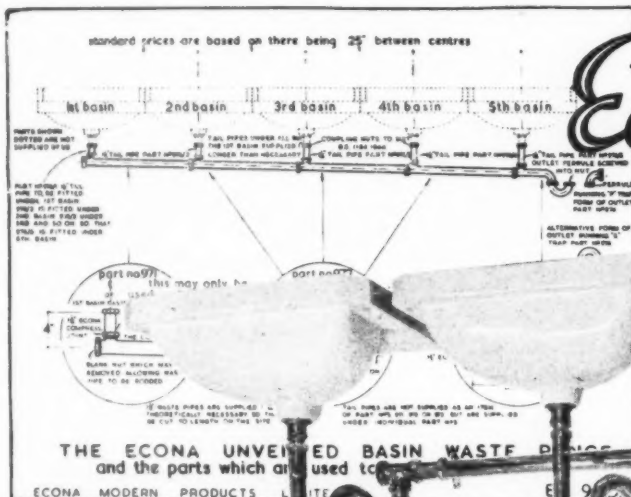
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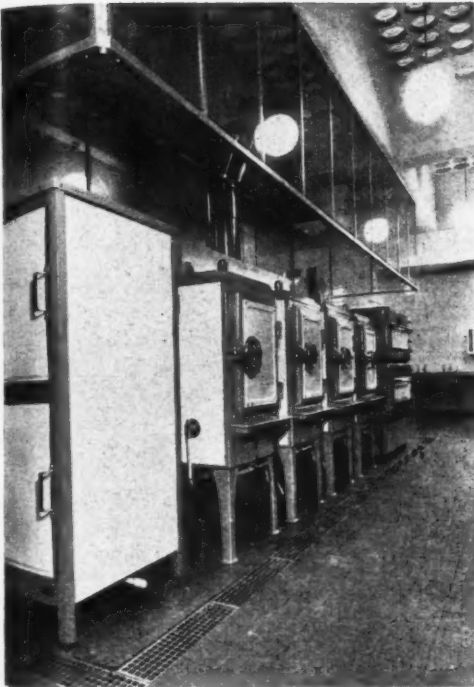
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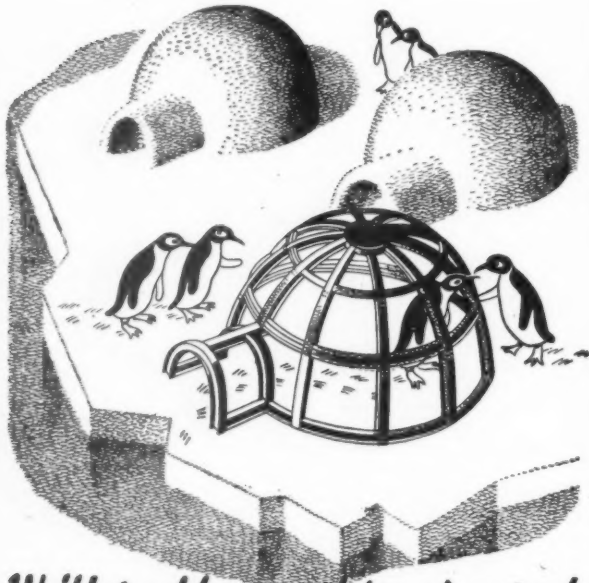


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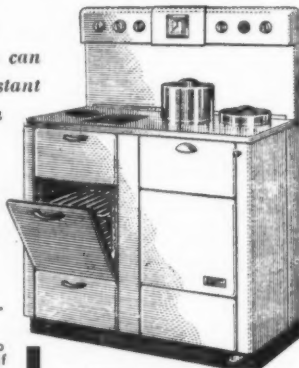
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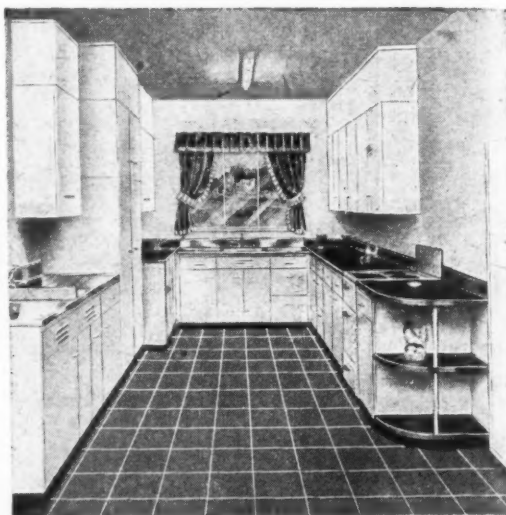
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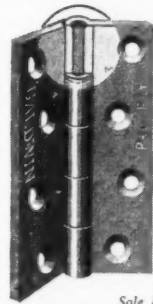
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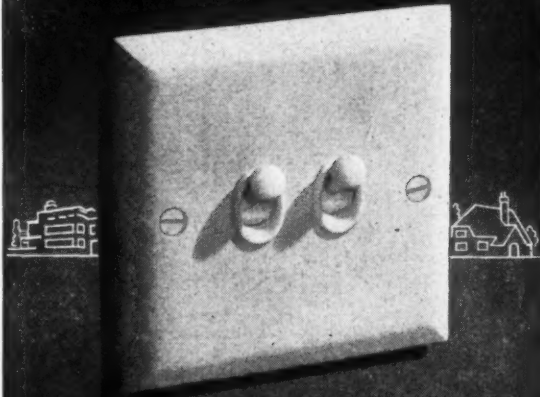
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Applications are invited for the appointment of a QUANTITY SURVEYOR, in the Architectural Section of the City Engineer and Surveyor's Department, at a salary in accordance with A.P.T. Grade V, £520-£570 per annum. Applicants must be capable of taking off and preparing bills of quantities, abstracting, billing, measuring up on site and agreeing final accounts, preparing estimates and writing specifications.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination. Applications, stating age, qualifications and experience, accompanied by copies of not more than three recent testimonials and suitably endorsed, must be delivered to the undersigned not later than Saturday, 27th May, 1950.

Housing accommodation is not immediately available, but the Council will, if necessary, assist so far as they are able the successful applicant to obtain accommodation, but it must be distinctly understood that the Council do not guarantee to find either a house or living accommodation.

Canvassing, directly or indirectly, will be a disqualification, and candidates must disclose whether they are related to any member or senior officer of the Council.

C. PETER CLARKE,

Town Clerk.

Town Hall, Peterborough.

May, 1950. 4228

### BOROUGH OF ASHTON-UNDER-LYNE.

#### BOROUGH SURVEYOR'S DEPARTMENT. APPOINTMENT OF SENIOR ARCHITECTURAL ASSISTANT.

Applications are invited for the appointment of Senior Architectural Assistant, at a salary in accordance with Grade V of the Administrative, Professional and Technical Division of the National Scales, commencing at £520 per annum and rising, subject to satisfactory service, to a maximum of £570 per annum.

Applicants must have had considerable experience with Housing and Public Buildings. The successful candidate will be required to pass satisfactorily a medical examination and to contribute to the Corporation's Superannuation Fund.

Housing accommodation will be available for the successful candidate if required. Applications, endorsed Senior Architectural Assistant, giving age, qualifications, experience, details of training, present and previous appointments, and the names and addresses of two persons to whom reference may be made, should be received by the undersigned not later than the 27th May, 1950.

Applicants should state in their applications whether or not they are, to their knowledge, related to any member of, or the holder of any senior office under the Council.

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

G. A. MALONE,

Town Clerk.

Town Hall, Ashton-under-Lyne.

6th May, 1950. 4261

### BRITISH ELECTRICITY AUTHORITY.

#### EASTERN DIVISION.

Applications are invited for the following post in the Generation Construction Department at Divisional Headquarters in North London:— ASSISTANT ARCHITECT.

Applicants should have had experience in the design and alteration of industrial buildings. The commencing salary will be within the range of £636-£734 per annum, depending upon experience and qualifications.

The salary is provisional and will be subject to negotiation through the medium of the appropriate negotiating body.

The appointment will be superannuable, in accordance with the British Electricity Authority and Area Boards' Superannuation Scheme.

Applications, stating age, experience, and present position, and endorsed "Assistant Architect," should be submitted to arrive not later than 26th May, 1950, to the Divisional Controller, British Electricity Authority, Eastern Division, Northmet House, Southgate, N.14.

W. N. C. CLINCH,

Controller.

Northmet House, Southgate, N.14. 4226

### COUNTY BOROUGH OF DERBY.

Applications are invited for the following appointment on the permanent staff, in accordance with the National Scale of Salaries:— ONE JUNIOR ARCHITECT, Grade I/II. Salary £390-£465.

Applicants should be not less than 21 years of age and should have passed the Preliminary Examination of the R.I.B.A., and have had experience in general architectural work.

The appointment will be subject to one month's notice in writing on either side, and to the terms of the National Joint Council's Scheme of Conditions of Service, and the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Forms of application may be obtained from Thos. W. East, F.R.I.B.A., Borough Architect, The Council House, Corporation Street, Derby, and should be returned when completed, together with a copy of one testimonial and the names of two persons to whom reference may be made, to arrive not later than Wednesday, 31st May, 1950.

Canvassing, directly or indirectly, will be a disqualification.

E. H. NICHOLS,

Town Clerk.

4220

### MIDDLESEX COUNTY COUNCIL.

#### COUNTY ARCHITECT'S DEPARTMENT.

COUNTY SURVEYORS required. A.P.T. IX (£780×£50-£930 p.a. inclusive). Established, subject to medical report. Should have considerable experience in taking-off and preparing Bills of Quantities, principally for educational buildings of various types. Application forms (stamped addressed foolscap envelope) from the County Architect, 10, Great George Street, S.W.1, to be returned not later than 27th May (quoting G.940 A.J.). Canvassing disqualifies.

C. W. RADCLIFFE,

Clerk of the County Council.

Guilddhall, Westminster, S.W.1. 4196

### BRITISH ELECTRICITY AUTHORITY.

#### EASTERN DIVISION.

Applications are invited for the following post in the Generation Construction Department (Civil Engineering Section) at Divisional Headquarters in North London:—

#### ARCHITECTURAL ASSISTANT.

Commencing salary range £518-£636 per annum, including 5 per cent. London allowance. Applicants should have had experience in the design and alteration of industrial buildings.

Initial salaries will be in accordance with previous experience and qualifications.

The salary is provisional, and will be subject to negotiation through the medium of the appropriate negotiating body.

The appointment will be superannuable, in accordance with the British Electricity Authority and Area Boards' Superannuation Scheme.

Applications, stating age, experience, present position, and salary required, and endorsed "Architectural Assistant," should be submitted to arrive not later than 26th May, 1950, to the Divisional Controller, British Electricity Authority, Eastern Division, Northmet House, Southgate, N.14.

W. N. C. CLINCH,

Controller.

Northmet House, Southgate, N.14. 4225

### SALOP COUNTY COUNCIL.

#### COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the appointment of a SENIOR ASSISTANT ARCHITECT, to act as a Senior Section Head, on A.P.T., Grades VII-VIII (£635 to £760 per annum). Applicants must be Registered Architects and Members of the R.I.B.A.

The appointment will be subject to one month's notice in writing on either side; to the terms of the National Joint Council's Scheme of Conditions of Service, and to the provisions of the Local Government Superannuation Act, 1937. The successful applicant will be required to pass a medical examination.

Application forms may be obtained from the County Architect, A. G. Chant, F.R.I.B.A., Column House, London Road, Shrewsbury, to whom they must be returned, accompanied by copies of not more than three recent testimonials, not later than Wednesday, 31st May, 1950.

G. C. GODBER,

Clerk of the Council.

Shrewsbury.

May, 1950. 4191



**BOROUGH OF BRENTFORD AND CHISWICK.**  
**APPOINTMENT OF (a) JUNIOR BUILDING**  
**INSPECTOR AND (b) TEMPORARY JUNIOR**  
**ARCHITECTURAL DRAUGHTSMAN.**  
**BOROUGH SURVEYOR'S DEPARTMENT.**

Applications are invited for the appointment of:

- (a) Junior Building Inspector and Town Planning Assistant on the permanent staff, at a consolidated salary according to Miscellaneous Division Grade I of the National Scheme of Conditions of Service (£315-£360 per annum, plus appropriate London weighting), commencing 1st year, the appointment being determinable by one month's notice on either side. Applicants must possess a good knowledge of building construction, and preferably have had experience in a Building Inspector's office, and also possess a general knowledge of Town Planning; and
- (b) Temporary Junior Architectural Draughtsman, at a consolidated salary according to the Miscellaneous Division Grade I of the National Scheme of Conditions of Service (£315-£360 per annum, plus appropriate London weighting), commencing 1st year, the appointment being determinable by one month's notice on either side. Applicants should be experienced in the tracing and colouring of architectural and engineering drawings, and a working knowledge of building construction and Municipal engineering being an advantage.

Applications for the above-mentioned appointments must be made on the prescribed forms (which contains particulars and conditions of appointment) obtainable from the undersigned, to whom applications should be sent not later than the 25th May, 1950.

W. F. J. CHURCH.

Town Clerk.

Town Hall, Chiswick. 4180

**BOTHWELL URBAN DISTRICT COUNCIL**  
**(YORKS).**  
**APPOINTMENT OF TEMPORARY**  
**ARCHITECTURAL ASSISTANT.**

Applications are invited for the appointment of temporary Architectural Assistant in A.P.T., Grade II, of the National Scale of Salaries (£420 × £15-£465). Preference will be given to applicants who have had practical experience in housing and general architectural work, and who are at present studying for the qualifying examinations of the Royal Institute of British Architects.

Applications, stating age, present and previous appointments, qualifications and experience, together with copies of three recent testimonials, must reach the undersigned not later than Thursday, 25th May, 1950.

ALLEN T. S. ROBERTSON.

Clerk of the Council.

Civic Buildings, Rothwell, Leeds. 4176

**LONDON COUNTY COUNCIL.**  
**ARCHITECT'S DEPARTMENT.**

Applications are invited for positions of ARCHITECT, Grade III (£550-£700) and TECHNICAL ASSISTANT (up to £580), for work on new schools and other public buildings. The positions are superannuable. Candidates for Grade III positions should possess professional qualifications. Application forms from the

Applications are invited for positions of Junior Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. 3914

**LONDON COUNTY COUNCIL.**  
**ARCHITECT'S DEPARTMENT.**

**PLANNING STAFF.**

Applications are invited for positions of PLANNING OFFICER, Grade I (£840-£960), Grade II (£700-£840), Grade III (£550-£700), and TECHNICAL ASSISTANT (up to £580). The positions are superannuable. Candidates for Grade I positions should have architectural and town planning qualifications, and will be engaged in Reconstruction Areas and Detailed Planning. Candidates for Grade II and III positions should have architectural or surveying qualifications with town planning qualifications in addition, and will be engaged on Development Plan, Development Applications and Detailed Planning. Technical Assistants are required for work on Development Applications and Detailed Planning. Particulars and application forms from the Architect (A.R.P./E). The County Hall, Westminster Bridge, S.E.1, enclosing stamped addressed foolscap envelope. Canvassing disqualifies. (385) 3915

**LONDON ELECTRICITY BOARD.**

Applications are invited for the following appointments in the Architect's Section of the Chief Engineer's Department in Central London:—

- (a) ARCHITECTURAL ASSISTANTS. Commencing salary will be from £500 per annum, dependent upon qualifications and experience.

Applicants should be studying for or have passed the Intermediate Examination of the R.I.B.A., be capable draughtsmen, and have had several years' experience in an Architect's office.

- (b) DRAUGHTSMEN. Commencing salary will be from £350 per annum, dependent upon ability and experience.

Applicants should be neat draughtsmen, and preferably have had several years' experience in an Architect's office.

The salaries for the above posts are provisional, pending grading of the posts under the National Agreement of the appropriate negotiating body.

Application forms obtainable from Establishment Officer, 46/47, New Broad Street, E.C.2, on receipt of an addressed foolscap envelope, to be returned duly completed not later than 3rd June, 1950. Please mark envelope EST/V/670/A. 4313

**CITY OF BRADFORD.**  
**CITY ENGINEER AND SURVEYOR'S**  
**DEPARTMENT.**  
**APPOINTMENT OF TECHNICAL STAFF**  
**(PLANNING).**

Applications are invited for the following appointments in accordance with the National Scale of Salaries, on the grades indicated:—

- (a) Post No. 14: SENIOR PLANNING ASSISTANT. A.P.T., VI, £635-£710.

- (b) Post No. 15: SENIOR PLANNING ASSISTANT. A.P.T., VI, £595-£660.

- (c) Post No. 16: SENIOR PLANNING ASSISTANT. A.P.T., VI, £595-£660.

- (d) Post No. 32: PLANNING ASSISTANT. A.P.T., III-V, £450-£570.

- (e) Post No. 55: JUNIOR PLANNING ASSISTANT. A.P.T., I-IV, £390-£525.

- (f) Post No. 56: DRAUGHTSMAN. A.P.T., I, £390-£435.

- (g) Post No. 57: JUNIOR PLANNING ASSISTANT. A.P.T., I-IV, £390-£525.

Where more than one grade is shown for any post, successful candidates will be appointed on the appropriate grade, depending on their qualifications and experience, and strictly in accordance with the National Scheme of Conditions of Service.

In addition to general planning, engineering or architectural experience, applicants for the various posts should preferably have had particular experience as shown below, should preferably hold a recognised engineering, architectural or surveying qualification, and must hold the qualifications indicated.

- (a) Applicants for this post must be Associate Members of the Town Planning Institute, should preferably hold an Engineering Degree, and in addition to Survey and Research experience should have taken a responsible part in the preparation of Development Plans.

- (b) and (c) Preparation of Development Plans, A.M.T.P.I. (preferably A.R.I.B.A. in addition).

- (d) Preparation of Development Plans. Inter. T.P.I. or A.M.T.P.I.

- (e) Control of Development. Inter. T.P.I. (Grades III and IV).

- (f) Planning Charts, Diagrams and Maps.

- (g) Preparation of Development Plans. Inter. T.P.I. (Grades III and IV).

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Intending applicants must inform the City Engineer and Surveyor of the number of the post in which they are interested and the appropriate form of application will then be forwarded; which form, together with details of experience, and accompanied by not more than three testimonials, should be received by the undersigned not later than the 6th June, 1950.

Canvassing will disqualify, and an applicant who is related to a member of, or a senior officer of, the Council must disclose the fact in his application. No assistance can be given to the provision of housing accommodation.

W. H. LEATHAM, Town Clerk. 4251

**SURREY COUNTY COUNCIL.**  
**COUNTY ARCHITECT'S DEPARTMENT.**

Applications are invited for the following appointments:—

- (a) ASSISTANT QUANTITY SURVEYOR (Grade VIII), at a commencing salary of £685 rising by annual increments of £25 to a maximum of £760 per annum, plus London allowance of £30 per annum.

Applicants should possess approved qualifications and experience, and preference will be given to those who are Members of the Royal Institution of Chartered Surveyors (Quantities Sub-Division). They should be capable of undertaking all stages of the work for the preparation of Bills of Quantities including preliminary estimates, the preparation and settlement of final accounts, site measurement, and preparation of interim certificates.

- (b) ARCHITECTURAL ASSISTANT (Grade II) at a commencing salary of £420 per annum, rising by annual increments of £15 to a maximum of £465 per annum, plus London allowance of up to £30 per annum, according to age.

Applicants must be of good general training and give full details in their applications.

- (c) ASSISTANT ARCHITECT (Grade VI), at a commencing salary of £595 per annum, rising by annual increments of £20/£25 to a maximum of £660 per annum, plus London allowance of £30 per annum.

Applicants must be Associate Members of the Royal Institute of British Architects, and should have had a good training and an adequate experience in the design and construction of modern buildings.

The appointments will be subject to the provisions of the Local Government Act, 1937, and the successful applicants will be required to pass a medical examination.

Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the County Architect, Surrey County Council, County Hall, Kingston-upon-Thames, not later than the 27th May, 1950.

Canvassing, either directly or indirectly, will disqualify a candidate from consideration.

The Council will be unable to provide any housing accommodation, and the successful applicants will be expected to make their own arrangements in this direction.

DUDLEY AUKLAND,

Clerk of the Council.

County Hall, Kingston-upon-Thames. 4245

**GOVERNMENT OF NORTHERN IRELAND.**  
**MINISTRY OF HEALTH AND LOCAL**  
**GOVERNMENT.**  
**TECHNICAL STAFF-HOUSING AND**  
**PLANNING.**

Applications are invited for unestablished posts of:—

- (a) ASSISTANT ARCHITECT, Grade A (Planning). £700-£900 per annum.

- (b) ASSISTANT ARCHITECT, Grade B (Housing). £650-£750 per annum.

- (c) PLANNING ASSISTANT. £500-£750 per annum.

Commencing salary within the above ranges will be fixed according to qualifications and experience; a salary lower than £500 may be paid to a candidate under 26 years of age.

Qualifications: Candidates for (a) and (b) posts must be Registered Architects by examination. In addition, candidates for the Housing vacancy should have experience in up-to-date house design and layout.

Candidates for the Planning Assistant post must be either Registered Architects by examination, Corporate Members of the Institution of Civil Engineers or Associates of the Royal Institution of Chartered Surveyors.

In addition, applicants for Planning appointments must possess a recognised qualification in town planning or have good experience in town planning work.

Preference will be given to candidates who served with H.M. Forces during wartime, providing the Ministry is satisfied that such candidates can, or within a reasonable time will be able to, discharge the duties efficiently.

Applications, giving date of birth, full particulars of qualifications and experience, stating the post applied for, with copies of two recent testimonials, should be sent without delay, to the Director of Establishments, Ministry of Finance, Stormont, Belfast. 4276

**CITY OF BRADFORD.**  
**CITY ENGINEER AND SURVEYOR'S**  
**DEPARTMENT.**  
**APPOINTMENT OF ARCHITECTURAL**  
**ASSISTANTS.**

Applications are invited for the following appointments in accordance with the National Scale of Salaries on the grades indicated:—

- (a) Post No. 122: ARCHITECTURAL ASSISTANT. A.P.T., VI, £595-£660.

- (b) Post No. 123: ARCHITECTURAL ASSISTANT. A.P.T., IV, £480-£525.

Candidates for appointment (a) should be Associates of the R.I.B.A., and should have had experience in the design of houses, flats and shops and the layout of housing estates. Candidates for appointment (b) should have passed the Intermediate Examination of the R.I.B.A., and experience of house design and estate layout will be an advantage.

The appointments are subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination.

Intending applicants must inform the City Engineer and Surveyor of the number of the post in which they are interested and the appropriate form of application will then be forwarded; which form, together with details of experience, and accompanied by not more than three testimonials, should be received by the undersigned not later than the 6th June, 1950.

Canvassing will disqualify, and an applicant who is related to a member of, or a senior officer of, the Council must disclose the fact in his application. No assistance can be given in the provision of housing accommodation.

W. H. LEATHAM, Town Clerk. 4282

**Town Hall, Bradford.**

**COUNTY COUNCIL OF DURHAM.**  
**COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following permanent appointments in the County Planning Department:—

- (a) TWO PLANNING ASSISTANTS, Grade VI, of the National Scheme of Conditions of Service (£595-£660), for work in connection with the preparation of County Development Plans.

- (b) TWO PLANNING ASSISTANTS, Grade Va, A.P.T. (£550-£610).

Applicants for (a) and (b) must have passed the Final Examination of the Town Planning Institute or some other recognised professional institute, and in the case of (a) preference will be given to candidates with architectural experience.

The appointments are subject to the National Scheme of Conditions of Service as adopted by the County Council; to the provisions of the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination by the Council's Medical Officer; to termination by one month's notice in writing on either side. Canvassing, either directly or indirectly, will disqualify, and applicants must disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

Applications, stating age, married or single, and giving full particulars of qualifications, experience and present salary, and the names of three persons to whom reference may be made, must be delivered to the County Planning Officer, 10, Church Street, Durham, by the 27th May, 1950.

J. K. HOPE,

Clerk of the County Council.

Shire Hall, Durham. 4262

8th May, 1950.

# COUNTY BOROUGH OF CROYDON. SCHOOL ARCHITECT'S SECTION. ASSISTANT ARCHITECT.

Applications are invited for this appointment from qualified Architects, preferably experienced in school works.

Salary Grade A.P.T., V, £520 to £570 p.a., plus London weighting.

The appointment is established, and pensionable, subject to medical examination.

Forms of application may be obtained from the Chief Education Officer, Katharine Street, Croydon (by sending stamped foolscap envelope), and must be returned to him within 14 days from the publication of this advertisement.

Living accommodation is not offered.

Canvassing will disqualify.

E. TABERNER,

Town Clerk.

May, 1950.

# HIS MAJESTY'S COLONIAL SERVICE.

ARCHITECTS are required by the Government of Nigeria. The appointments are on contract and salary (inclusive of expatriation pay) £800 to £1,450 per annum, according to qualifications, experience, and war service. Candidates must possess the qualification of A.R.I.B.A., and preference will be given to those having experience in the design of modern school and hospital buildings. A diploma in Town Planning would be an advantage.

The terms of service include an outfit allowance of £60 on first appointment, free first-class passages once each way each tour for the officer and, if married, for his wife, free medical attention and home leave on full pay at the rate of 7 days for each month of resident service. Rent of Government quarters ranges from £75 to £90 per annum, according to salary. Income tax is payable at low West African rates only. A gratuity of £25 for each period of three months' service is payable on satisfactory completion of the contract.

Applicants should write at once to the Director of Recruitment, Sanctuary Buildings, Great Smith Street, S.W.1, stating age, professional qualifications and experience, and quoting the reference No. 27301/38.

# NATIONAL COAL BOARD—SOUTH-WESTERN DIVISION.

Applications are invited for the following posts in the Divisional Architect's Department, National Coal Board, South-Western Division, Cambrian Buildings, Mount Stuart Square, Cardiff:—

(a) SENIOR QUANTITY SURVEYORS. Salary £850-£1,150 per annum.

Applicants should be Fellow or Associate Members of the Royal Institute of Chartered Surveyors (Quantities Section), and with considerable experience in the preparation of estimates, bills of quantities, measuring up, and adjustment of final accounts.

(b) QUANTITY SURVEYORS, Grade I.

Salaries: Grade I, £700-£725-£875 per annum; Grade II, £450-£525-£700 per annum.

Applicants should be Associate Members of the Royal Institute of Chartered Surveyors (Quantities Section), with experience in the preparation of estimates, bills of quantities, measuring up, and adjustment of final accounts.

(c) QUANTITY SURVEYING ASSISTANTS, Grade I.

Salaries: Grade I, £410-£420-£550 per annum; Grade II, £300-£20-£440 per annum.

Applicants should have passed the Intermediate Examination of the Royal Institute of Chartered Surveyors, and those applying for Grade I vacancies should have had at least 5 years' office experience.

The appointments are subject to the provisions of the Board's Superannuation Scheme.

Applications in writing, stating age, education, qualifications, experience, previous and present appointments, and present salary, and submitting the names of two referees, should be delivered to the Divisional Establishment Officer, National Coal Board, South-Western Division, Cambrian Buildings, Mount Stuart Square, Cardiff, not later than the 19th June, 1950.

Applicants should state clearly the appointment for which application is made.

# HERTFORDSHIRE COUNTY COUNCIL. COUNTY ARCHITECT'S DEPARTMENT.

Applications are invited for the following appointments:—

(a) SENIOR ASSISTANT ARCHITECTS.

Grade VII, £635-£710.

(b) ASSISTANT ARCHITECTS, Grade V.

£420-£465.

(c) ASSISTANT QUANTITY SURVEYORS.

Grade VII, £635-£710.

(d) ASSISTANT QUANTITY SURVEYORS.

Grade VI, £595-£660.

(e) ASSISTANT QUANTITY SURVEYORS.

Grade V, £520-£570.

(f) ASSISTANT QUANTITY SURVEYORS.

Grade IV, £480-£525.

Applicants need not have had previous Local Government experience, and any still engaged on a full-time course of study at a recognised School of Architecture who will not be free until the end of the summer should apply now.

Applications, stating which post is applied for, together with three references, should be addressed to the County Architect, County Hall, Hertford, Herts., to be received not later than the first post on Friday, 26th May, 1950.

# BOROUGH OF SOUTHALL. APPOINTMENT OF ARCHITECTURAL ASSISTANT.

Applications are invited for the above appointment on the permanent staff of the Corporation. Salary in accordance with Grades A.P.T., IV and V, of the National Scheme (£480-£570), plus appropriate London weighting, the commencing salary being dependent upon qualifications and experience.

Candidates should have passed the Intermediate Examination of the R.I.B.A. and have had previous Local Government experience.

Housing accommodation will be made available for the successful candidate if married.

The appointment is subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination.

Applications, on forms to be obtained from the Borough Engineer, Town Hall, Southall, must be returned to him not later than 5th June, 1950.

J. S. SYRETT,

Town Clerk.

Town Clerk's Offices, Southall, Middx.

May, 1950.

# COUNTY BOROUGH OF BELFAST. EDUCATION COMMITTEE.

## CHIEF ASSISTANT ARCHITECT.

Applications are invited for the position of Chief Assistant Architect in the Education Architect's Department.

Applicants should be highly qualified architects, who have passed the Final R.I.B.A. Examination or its equivalent, and have a sound knowledge and experience in the design and planning of modern school buildings.

As Senior Officer in charge of the Drawing Office Staff, he should be a capable and efficient Administrator.

The position offers prospects of further advancement to the successful candidate.

The salary for this appointment, which is on the permanent staff, is on the scale £650-£725-£750, plus cost-of-living bonus, at present £90, the commencing salary to be determined in the light of the qualifications, ability and experience of the person appointed.

Preference will be given to suitably qualified ex-Service candidates, provided the Committee is satisfied that such candidate can fill, or within a reasonable time will be able to fill, the post efficiently.

Forms of application and conditions of appointment may be obtained at the Education Office, Academy Street, Belfast.

Application, endorsed "Chief Assistant Architect," and accompanied by copies of three recent testimonials, must be lodged with the undersigned not later than 4 o'clock p.m. on Thursday, 1st June, 1950.

Canvassing in any form, direct or indirect, oral or written, will, if proved to the satisfaction of the Committee, disqualify a candidate for appointment.

JOHN DUNLOP,

Town Clerk.

City Hall, Belfast.

# URBAN DISTRICT COUNCIL OF ENFIELD. APPOINTMENT OF ARCHITECTURAL ASSISTANT (GRADE V).

Applications are invited for the appointment of Architectural Assistant. Candidates should have good general experience, of which Housing will be an advantage.

The salary will be in accordance with Grade V (£520 to £570) of the A.P.T. Division, and will be plus the London weighting of £30.

The appointment will be subject to:—

(1) The Conditions of Service adopted by the National Joint Council for Local Authorities Administrative, Professional, Technical, and Clerical Services, and the Council's General Conditions of Service relating to permanent staff as made from time to time.

(2) The provision of the Local Government Superannuation Act, 1937.

(3) The passing of a medical examination.

(4) Determination by one month's notice on either side.

If necessary the Council will assist the person appointed to obtain housing accommodation.

Forms of application may be obtained from Mr. Frank Lee, Assoc. M.Inst.C.E., F.S.I., Engineer and Surveyor, "Percy House," 7, Little Park Gardens, Enfield, and should be returned to the undersigned on or before the 2nd June, 1950, in an envelope endorsed "Architectural Assistant, Grade V."

Candidates must state whether they are related to any member or officer of the Council.

Canvassing will disqualify.

CYRIL E. C. R. PLATTEN,

Clerk of the Council.

Public Offices, Enfield.

10th May, 1950.

# MINISTRY OF WORKS—DIRECTORATE GENERAL OF WORKS.

Applications are invited for filling vacancies in the South-Eastern Regional Office at Tunbridge Wells.

ARCHITECTURAL ASSISTANTS, having had a full period of recognised training and experience in the preparation of drawings for good class building work. The work is varied and not confined to standard schemes. Starting pay will be assessed according to age, qualifications, and experience within a scale rising to £495 per annum.

Applications, stating age, present and previous appointments, training qualifications, etc., should be sent to the Assistant Regional Director (Administration), Ministry of Works, Government Buildings, Hawkenbury, Tunbridge Wells.

4241

# CITY OF LIVERPOOL. ARCHITECTURAL AND HOUSING DEPARTMENT.

Applications are invited for the under-mentioned appointments:—

(a) TWO ASSISTANT ARCHITECTS (Housing, A.P.T., Grade VI, Salary £595-£660).

(b) ONE ARCHITECTURAL ASSISTANT (Housing), A.P.T., Grade IV, Salary £480-£525.

(c) TWO ASSISTANT ARCHITECTS (General, A.P.T., Grade VI, Salary £595-£660).

(d) ONE ARCHITECTURAL ASSISTANT (General), A.P.T., Grade IV, Salary £480-£525.

(e) ONE SENIOR ASSISTANT ARCHITECT (Redevelopment), A.P.T., Grade VII, Salary £635-£710.

(f) TWO ASSISTANT ARCHITECTS (Re-development), A.P.T., Grade VI, Salary £595-£660.

(g) ONE ASSISTANT SURVEYOR, A.P.T., Grade VI, Salary £595-£660.

(h) TWO ASSISTANT SURVEYORS, A.P.T., Grade V, Salary £520-£570.

(i) ONE ASSISTANT QUANTITY SURVEYOR, A.P.T., Grade VI, Salary £595-£660.

(j) ONE JUNIOR ASSISTANT QUANTITY SURVEYOR, A.P.T., Grade III, Salary £465-£495.

Candidates for:—

(a) should be experienced in large scale housing development, preferably in Local or Central Government service, and must be Registered Architects, preferably qualified A.R.I.B.A.;

(b) should have good experience in housing design and layout and have passed the Intermediate Examination of the R.I.B.A. or equivalent;

(c) must be Registered Architects, preferably qualified A.R.I.B.A., should have good experience in general architectural practice, and possess a knowledge of the design and construction of modern public buildings, including schools;

(d) should preferably have passed the R.I.B.A. Intermediate Examination and possess similar experience to (c);

(e) and (f) must be Registered Architects, preferably qualified A.R.I.B.A. and/or A.M.T.P.I. and should possess planning experience and have an aptitude for the detailed redevelopment of central areas;

(g) and (h) should possess wide experience in surveying and site development of housing estates and schemes of flats, and have passed the Final Examination of the R.I.C.S. or equivalent;

(i) should possess experience in site measurement of Road and Sewer works and "taking off" minor building works, valuations for interior certificates and the settlement of final accounts, and preferably have passed the Final Examination of the R.I.C.S. (Quantity Surveying Division);

(j) should possess experience in site measurement of Road and Sewer works and "taking off" minor building work, and preferably have passed the Intermediate Examination of the R.I.C.S. (Quantity Surveying Section).

Application forms may be obtained from, and should be returned to, the City Architect and Director of Housing, Blackburn Chambers, Dale Street, Kingsway, Liverpool, 2, by 30th May, 1950, endorsed "Application for..." adding the title of the post applied for, and accompanied by copies of three recent testimonials.

The appointments are subject to the Standing Orders of the City Council. Canvassing disqualifies.

THOMAS ALKER,

Town Clerk.

Municipal Buildings, Liverpool, 2.

May, 1950.

# CRAWLEY DEVELOPMENT CORPORATION. Requirements for fully qualified Architects as:—(a) ARCHITECT, within the range £750-£1,000 per annum. First-class experience in design of housing, industrial buildings, public buildings, etc., is needed. (b) ASSISTANT ARCHITECT, Grade IV, £550-£630-£750. A good general architectural experience in design and planning is needed.

In both appointments a knowledge of town planning is desirable, but not essential. Confidential applications, accompanied by testimonials, should be obtained from the Chief Architect, A. G. Sheppard Fidler, M.A., B.Arch., F.R.I.B.A., A.M.T.P.I., Broadfield, Crawley, Sussex, and returned to him by 24th May, 1950.

G. A. C. TURNER, Chief Executive.

4242

# BOROUGH OF SWINDON. APPOINTMENT OF ASSISTANT ARCHITECT.

Applications are invited for the above appointment in the Borough Architect and Planning Officer's Department, at a salary in accordance with A.P.T., Grade V (£520-£570) of the National Scale of Salaries.

Applicants should have had experience in Housing and the general architectural work of a Local Authority, and must be Associate Members of the Royal Institute of British Architects.

The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination, if required, and is terminable on month's notice on either side.

Applications, on forms obtainable from me, must be returned not later than 3rd June, 1950. Canvassing in any form will be deemed a disqualification.

D. MURRAY JOHN,

Town Clerk.

Civic Offices, Swindon, Wilts.

9th May, 1950.



**METROPOLITAN BOROUGH OF POPLAR.  
SENIOR ARCHITECTURAL ASSISTANT  
FOR RECONSTRUCTION PLANNING.  
(b) SENIOR ARCHITECTURAL ASSISTANT  
(THREE).**

Applications are invited from suitably qualified persons for the above temporary posts in the Borough Engineer and Surveyor's Department.

Salary scale: £635 per annum, rising by annual increments of £25 to a maximum of £760 per annum, plus £30 if 26 years of age and over. The commencing salary will be fixed according to experience and qualifications.

The Council has a large programme of development embracing the planning of large areas, site planning and the design of dwellings and amenities to provide mixed development. The scope of the work is varied and interesting.

Full details of the appointments and forms of application may be obtained from the Borough Engineer and Surveyor, Poplar Town Hall, Bow Road, E.S. to whom completed forms should be returned not later than first post on Monday, 5th June, 1950.

Requests for application forms should state clearly for which post the form is required.

3rd May, 1950. 4254

**BOROUGH OF ILFORD.  
BOROUGH ENGINEER AND SURVEYOR'S  
DEPARTMENT.  
APPOINTMENT OF ARCHITECTURAL  
ASSISTANT (GRADE VII).**

Applications are invited for the appointment of an Architectural Assistant on the permanent staff of the Borough Engineer and Surveyor's Department in accordance with Grade VII of the A.P.T. Division of the National Scale of Salaries, £635-£710 per annum, plus London weighting.

Candidates should be Chartered Architects and Corporate Members of the Royal Institute of British Architects, and have a thorough knowledge of architectural works, with practical experience in design and development of public buildings of all types, housing schemes, etc., the preparation of specifications, and be capable of supervising and controlling contracts.

The Council is prepared to consider, if necessary, the question of housing accommodation in connection with this appointment.

The appointment is a whole-time one (private practice being prohibited), and will be subject to one month's notice on either side, to the provisions of the Local Government Superannuation Act, 1937, and the National Scheme of Conditions of Service, and to medical examination.

Form of application may be obtained from the Borough Engineer and Surveyor, Town Hall, Ilford, and should be returned to the undersigned not later than the 3rd June, 1950.

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

K. F. B. NICHOLLS, Town Clerk. 4243

**RURAL DISTRICT COUNCIL OF HATFIELD.  
APPOINTMENT OF JUNIOR ARCHITECTURAL ASSISTANT.**

Applications are invited for the above appointment on the Staff of the Council's Architect. Salary Grade II of the Miscellaneous Division (£375-£420).

Candidates must have attained a reasonable standard of draughtsmanship, and should be undergoing a course of study for a recognised architectural qualification.

Applications, accompanied by copies of two recent testimonials, to be sent to Mr. J. H. Parker, A.R.I.B.A., Architect to the Council, Great North Road, Hatfield, Herts., not later than 24th May, 1950.

EDGAR F. CULL, Clerk to the Council. 4231

**BURGH OF HAMILTON.**

Applications are invited for the following appointments:—

(a) CHIEF ASSISTANT PLANNING OFFICER. Applicants should be Chartered Architects, Civil Engineers or Surveyors, and must have a sound knowledge of Town Planning Law and Practice.

If the successful applicant is a Member of the Town Planning Institute he will be placed in A.P.T. Grade VII (£635-£710), otherwise placing will be within Grade VI (£595-£660).

A house will be made available if required.

(b) SENIOR ARCHITECTURAL ASSISTANT. Applicants should have a sound knowledge of contemporary design and be experienced in the preparation of layout plans and working drawings. The salary will be in accordance with A.P.T. Grade V-Va (£520-£610). Placing within the Grade will be in accordance with the experience of the successful applicant.

(c) ARCHITECTURAL DRAUGHTSMAN (Town Planning). Applicants should give full particulars of their experience. The salary will be in accordance with Grade H.D.1 (£395-£440).

Applications for the above posts, stating age, and with full particulars of qualifications and experience, together with copies of recent testimonials, should be lodged with the undersigned not later than Thursday, 1st June, 1950. The appointments are subject to the Local Government Superannuation (Scotland) Act, 1937, and canvassing, either directly or indirectly, will be a disqualification.

JOHN R. McLEAN, Town Clerk. 4274

The Town House, Hamilton. 10th May, 1950.

**COUNTY BOROUGH OF GREAT YARMOUTH.  
BOROUGH ENGINEER'S DEPARTMENT.**

Applications are invited for the following appointments for Housing and General work:—

(a) ONE SENIOR ASSISTANT ARCHITECT. Salary A.P.T. Grade VI (£595-£660). Candidates should be Associates of the Royal Institute of British Architects.

(b) ONE ARCHITECTURAL ASSISTANT. Salary A.P.T. Grade V (£520-£570). Candidates should have sound knowledge of design, construction and specification, and in this appointment a general knowledge of quantity surveying is required to include site measuring, taking off, abstracting and billing of housing and general minor works.

Candidates need not have had previous Local Government experience.

The appointments will be terminable by one month's notice on either side, and will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. Applications, stating age, qualifications and experience, together with the names of three persons to whom reference can be made, should be enclosed in an envelope endorsed with the title of the appropriate appointment, and must reach me not later than Friday, 2nd June, 1950.

Canvassing will be deemed a disqualification, and candidates must disclose in writing any relationship to any member of or holder of any senior office under the Council. Candidates who fail to do so will be disqualified, and if appointed will be liable to dismissal without notice.

FARRA CONWAY, Town Clerk. 4283

**SOMERSET COUNTY COUNCIL.  
COUNTY PLANNING DEPARTMENT.**

Applications are invited for the following permanent appointments:—

(a) PLANNING ASSISTANT. A.P.T. IV. £480-£515 to £525, and

(b) JUNIOR SURVEYING ASSISTANT. A.P.T. I. £390-£515 to £435.

Applicants for (a) must have had good general experience in Town and Country Planning, and should possess a recognised professional qualification. (b) Should have had extensive experience in the revision of Ordnance Survey maps and surveying generally, and should be able to drive a car.

All appointments are subject to the provisions of the Local Government Superannuation Act, 1937. Forms of application obtainable from the undersigned must be completed and returned not later than 6th June, 1950.

R. W. DALE, County Planning Officer. 4292

**CUMBERLAND COUNTY COUNCIL.  
APPOINTMENT OF PLANNING ASSISTANT.**

Applications are invited for the above appointment within A.P.T. Grade VI, of the National Scales, at a salary of £595-£660, with a car allowance and a subsistence allowance in accordance with the County Council's Scale. The appointment, which is subject to the Local Government Superannuation Act, 1937, and to a medical examination, will be terminable by one month's notice in writing on either side. Applicants should be Members or Associate Members of the Town Planning Institute, and a qualification in Architecture or in Civil Engineering will be an advantage. The duties of the post will involve the collation of survey material, the preparation of development plans, and control of development. Applications, stating age, qualifications, experience and previous appointments held, accompanied by names and addresses of two referees and a copy of one recent testimonial, should be sent to the County Planning Officer, Citadel Chambers, Carlisle, to arrive not later than the first post on Thursday, the 25th May, 1950.

G. N. C. SWIFT, Clerk of the County Council. 4260

**Architectural Appointments Vacant**

4 lines or under, 7s. 6d.; each additional line, 2s.

ASSISTANT to Technical Editor of "The Architects' Journal"; qualifications required: Interested in building construction, R.I.B.A. Inter. standard, or equivalent qualifications; experience in architect's or builder's office an advantage. Replies to Cottrell Butler, 9-13, Queen Anne's Gate, S.W.1. 492

**STUDENT or JUNIOR ARCHITECT**

editorial work; applicants to have a bias towards building technology and the science of building; salary according to qualifications and experience. Box 493.

**YOUNG ASSISTANT**, interested in Ecclesiastical work required in private East Midlands office; student considered. Full particulars to Box 4167.

SENIOR fully qualified ASSISTANT required by East Midland office with post-war experience in School or Hospital work; responsible position—familiar with latest constructional methods; in reply please state age, salary and experience; small flat available. Box 4166.

**EDITORIAL ASSISTANT** required for

architectural journal. Applicants should be interested in current building problems, capable of understanding working drawings, and with a good command of English. Box 510.

**THE CO-OPERATIVE WHOLESALE**

SOCIETY, LTD., invite applications for the following appointments on the staff of the Manchester Architect's Department:—

THREE ASSISTANT ARCHITECTS. Salary £510-£625 per annum. Applicants, suitably qualified, are required to have a sound knowledge of construction and architectural design, and be able to produce sketch plans, working drawings and details from rough sketches with the minimum of supervision.

ONE LAND AND BUILDING SURVEYOR.

Salary £400-£465 per annum. Applicants should be experienced in surveying sites and buildings, possess a sound knowledge of building construction, and be capable of preparing survey drawings.

The appointments are permanent and offer prospects of up-grading to competent Assistants. Successful candidates will be required to undergo a medical examination for entry into compulsory superannuation scheme.

Applications, stating age, experience and qualifications, to be addressed to:—The Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 4123

**A CAPABLE ARCHITECTURAL ASSISTANT**

(A.R.I.B.A.) is sought by firm of Chartered Surveyors with well established building practice, with a view to Partnership in a few years; sound knowledge of L.B.A. and good personality essential. Write details of age, experience, and initial salary required, to Box 4178.

**QUALIFIED ASSISTANT, A.R.I.B.A.**

preferred, required for general practice, Isle of Wight; capable of taking complete charge of office; Partnership considered for suitable applicant; salary £500-£700, according to experience, etc. Write full particulars of qualifications and experience to V. Aldridge, F.R.I.B.A., 35a, St. James Street, Newport, I.W. 4195

**ARCHITECTURAL ASSISTANT** required,

with general experience of industrial buildings; Intermediate-Final standard; salary about £400 per annum, according to qualifications. Please write, stating experience and full particulars, to Leonard J. Multon, F.R.I.B.A., 147, Corporation Street, Birmingham, 4. 4199

**A CAPABLE ASSISTANT** required; super-

vision of staff; specifications and good draughtsmanship essential; salary according to experience. Full particulars to H. S. W. Stone & Partners, F.R.I.B.A., 20, The Crescent, Taunton. 4206

**CHANNEL ISLANDS—Qualified ARCHITECTURAL ASSISTANT** required, to take

control of Office at Jersey; knowledge of the Channel Islands an advantage; ultimate partnership for suitable applicant. Applications, giving full particulars, to Box 4275.

**ARCHITECTS' ASSISTANT** required for

private practice, S.W. England; working drawings, details, surveying and levelling; living accommodation available. Write, stating age, experience, salary required, Box 4279

**SENIOR ASSISTANT** required, to work under

Principal, small London office with general practice; must be practical and a good draughtsman; experienced in industrial building and contemporary architecture; opportunity for a man with initiative, with prospect of profit sharing; salary £650 to £700 p.a. Write, giving particulars of age and experience, to Box 4284.

**SIR JOHN BURNET, TAIT & PARTNERS**

require ASSISTANT ARCHITECTS, with sound experience in design and construction; applicants must be capable of the preparation of working drawings and specifications, and be able to assume responsibility for all stages of the work; salary from £750 to £850, with special terms for men of outstanding ability. Address: 10, Bedford Square, London, W.C.1. 4285

**ARCHITECTURAL ASSISTANT** required by

Major Industrial Organisation, with head office in the West End of London; applicants should be A.R.I.B.A., aged under 35, and experienced in the preparation of surveys, sketch plans, working drawings, in connection with industrial buildings; also able to supervise work in progress and prepare reports; this post carries a good salary. Apply in writing, stating age, qualifications and experience, to Dept. M.56, Box No. A4872, A.K. Advtg., 212a, Shaftesbury Avenue, W.C.2. 4288

**ARCHITECTURAL ASSISTANT** seeking

practical experience required urgently in General Practice; Final standard; work interesting and varied. Reply, with Particulars, to Ward, Porteus & Ruddick, F./L./R.I.B.A., 9, Museum Street, York. 4290

**ARCHITECT'S ASSISTANT** required, with

general experience and sound knowledge of building construction, and able to prepare working drawings and details; qualified man preferred, able to take responsibility. Write, stating age, experience, when free and salary required, to F. Trower, L.R.I.B.A., 43, Teville Road, Worthing, Sussex. 4291

**ARCHITECT'S ASSISTANT** required im-

mediately. Write, stating age, experience and salary, to W. L. Jones, L.R.I.B.A., 21, High Street, Great Missenden, Bucks. Tel.: Great Missenden 306 or 375. 4242

**ARCHITECTURAL ASSISTANT** required, up

to Inter. standard, by Chartered Architect; good opportunity in small progressive office. Tel.: Putney 6081/2. 4246

**ARCHITECTURAL ASSISTANTS (TWO)** required for the design and detail of Industrial Buildings in connection with the coal, gas, iron and steel industries; 3 years' minimum office experience essential. Apply, stating age and experience, to Personnel Manager, Simon-Carves Ltd., Stockport. 4289

**HARRY W. WEEDON, F.R.I.B.A.**, & Partners, require **SENIOR** and **Inter.** R.I.B.A. standard men for their new offices at 45, Calthorpe Road, Edgbaston, Birmingham offices; work includes Flats, Housing, Industrial Buildings, Cinemas, Hotels, etc.; assistance can be given with housing accommodation to suitable applicants. 4233

**ARCHITECTURAL ASSISTANT** required in general Country Practice; about Intermediate standard. Reply, with full particulars and salary required, to Jackson & Jackson, F./A./L.R.I.B.A., 13, North Street, Ashford, Kent. 4234

**QUALIFIED ARCHITECTURAL ASSISTANTS**, with office experience, required immediately for urgent School Projects. H. & H. M. Liddetter, F.A.R.I.B.A., Chartered Architects, 2, Verulam Buildings, Grays Inn, W.C.1. Telephone: CHAncery 8029. 4236

**TWO ARCHITECTURAL ASSISTANTS** required for large London practice in W.2 area; applicants must be capable of preparing working drawings, full size details and surveys under supervision, and should have passed the Inter. R.I.B.A. examination; office experience preferable; salary approximately £500 p.a. Apply, stating age, qualifications, and experience, to Box 4237.

**ARCHITECTURAL ASSISTANT** required in Architect's Department of large South London Building Company, for housing details, prefabricated and otherwise; salary £350-£500, according to experience and qualifications. Box AC 51687, Samson Clarke, 57/61, Mortimer Street, W.1. 4238

**ARCHITECTURAL ASSISTANTS** required, of Intermediate standard, for private Architect's offices in Norwich and Yarmouth; all classes of work in progress; applicants should state their age and give full particulars of their qualifications and experience. A. D. Cooke, A.R.I.B.A., 78, Prince of Wales Road, Norwich. 4240

**ARCHITECTURAL ASSISTANT** required in London for General Practice; contemporary design; R.I.B.A. Inter. standard; full details of experience and salary. Box 4247.

**FORWERTH M. WILLIAMS, A.R.I.B.A.**, of Lismore House, 98, Bath Road, Cheltenham, requires a keen **SENIOR** and **JUNIOR ASSISTANT**; A.R.I.B.A. and Student R.I.B.A.; progressive town and rural practice; local authority housing, private houses, factories, farm reconstructions, etc.; Senior preferably car driver. 4258

**ARCHITECTURAL ASSISTANT** required, North Riding of Yorkshire; extensive general country practice; young married man, with wife capable of undertaking part-time employment in Secretarial capacity; free cottage with all conveniences available. Reply, stating age, training, experience, and salary required, to Box 4250.

**ARCHITECTURAL ASSISTANT**, with experience in design of industrial buildings, and capable of preparing surveys, working drawings and details, required by a large industrial firm in the Midlands; a house is available. Write, stating age, education, experience, salary required. Box 4251.

**THE Railway Executive** invite applications from Associates of the R.I.B.A. for the following appointment in the Office of the Civil Engineer, North-Eastern Region, at York: Post No. N.342: **ASSISTANT ARCHITECT**.

The work dealt with in the office is of great variety, comprising station buildings, canteens, welfare buildings, offices, workshops, store buildings, etc., and offers wide scope for Architects of ability and a keen interest in contemporary design developments.

Applicants should have considerable practical experience in the design and construction of buildings, and be capable of stimulating and maintaining a high standard of architectural design and efficiency among the staff they control.

The commencing salary will be in the region of £800 per annum, according to the qualifications of the successful candidate, who will be eligible for membership of a Superannuation scheme subject to the requirements of the Rules.

Applications, which should quote the post number and give full particulars of education, experience and age, should be sent within 14 days to the Secretary, Railway Executive, 222, Marylebone Road, London, N.W.1. It is emphasised that any approach except in the form of a direct and written application from candidates themselves will disqualify an applicant. 4264

**ARCHITECTURAL ASSISTANT** required, with good general experience; salary according to ability. Apply to Westmore & Sanders, 134, Cheapside, E.C.2. MONarch 3337. 4266

**SENIOR ASSISTANT** required by Architect with a busy, established practice, Westminster area; permanent position, with good prospects; general all-round knowledge and experience essential; commencing salary £600-£200 a year, according to qualifications. Write, in confidence, stating age and experience, to Box 4255.

**WANTED—JUNIOR ARCHITECT'S ASSISTANT**, interested in modern construction. Edgar Hoernig, L.R.I.B.A., 79/80, Petty France S.W.1. Tel.: WHITEhall 2561/2/3. 408

## Architectural Appointments Wanted

**ASSISTANT**, of Intermediate standard, 4 years' experience, age 22, requires position in progressive office, preferably in London. Box 506.

**A.R.I.B.A.**, 20 years' continuous experience—mainly commercial and factory—desires a position of responsibility, preferably in the London area; salary £800 p.a. Box 514.

**ASSISTANT**, taking Inter. in May, seeks post, preferably South Devon, but not essential, 4 years' office experience. Box 515.

**SENIOR ARCHITECTURAL ASSISTANT** (Final standard), with 14 years' experience in all branches of the profession, seeks position of responsibility; housing accommodation essential or information regarding the possibility of obtaining same within the vicinity of the appointment. Box 523.

**YOUNG Irishman, R.I.B.A.**, Intermediate standard, with 3 years' experience in Dublin Architect's office, seeks position as **ASSISTANT** in Southern Counties or Midlands. Box 522.

**EXPERIENCED ARCHITECTURAL ASSISTANT**, at present with Ministry of Works, requires appointment offering scope for initiative; about £600 p.a.; Scotland preferred. Box 519.

**ARCHITECTURAL ASSISTANT**, young woman, at present employed in London, seeks post in Provinces; very keen on obtaining experience on site and in the preparation of working drawings; studying for Final A.R.I.B.A. Box 520.

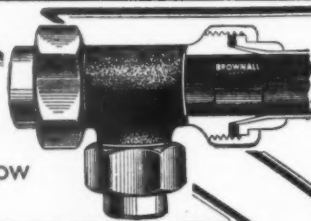
**ARCHITECTURAL ASSISTANT**, Intermediate standard, requires position in progressive office in London area. Box 506.

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London Office: Ilex House, Minorities, E.C.3.

L.G.B.



**REQUIRED** position as CHIEF ASSISTANT. preferably in busy country office; good general experience includes design, supervision, etc., of L.A. and private housing, layouts, survey work, conversions, farm and church work, specifications, etc.; aged 32; used to taking charge. Salary and details to Box 521.

#### Other Appointments Vacant

**4 lines or under, 7s. 6d.; each additional line, 2s.**  
**INTELLIGENT** and enthusiastic, young man, with some knowledge of building construction and materials, wanted for unusually interesting selling job, mainly in London (full-time). Write, with full particulars of age, training, experience, salary required, to Box 366.

**ARCHITECTURAL Metalworkers** require a **DESIGNER-DRAUGHTSMAN** of considerable merit; top salaried position for skilled man. Apply The Morris Singer Company, Hope House, 64, Peter Street, Westminster, S.W.1. 3564

**BETTER-OUT** wanted for Architectural Metalwork; good wages and ideal working conditions. Apply: The Morris Singer Co., Ltd., Ferry Lane, Forest Road, Walthamstow, E.17. 3524

**TECHNICAL ASSISTANT** required by Architectural Publishers; must have first-hand practical knowledge of the building industry; salary according to qualifications and experience. Box 494.

**BUILDING ASSISTANT AND DRAUGHTSMAN** required for factory maintenance staff. Huntley & Palmers, Ltd., Reading; applicant should be a good draughtsman, with some knowledge of quantities and estimating; five-day week; commencing salary up to £468, according to age and experience. Apply to the Clerical Manager. 4222

**BUILDING SURVEYOR**, under 45 years of age, required on Architect's Staff of a London Brewery for general maintenance and supervision of building work in connection with licensed premises; 5-day week; superannuation scheme. Reply, stating age, experience, and salary required. Box 4189.

**DRAUGHTSMAN** required (age over 25) for Central London office, Buildings and Services Division, controlling building work for large group of factories; experience essential in general building and structural work, surveying for site layouts, obtaining site details for modifications to existing buildings; preference to men with knowledge of industrial engineering services; staff superannuation scheme; salary in accordance with experience. Write, giving age and full particulars, to Staff Division, The Metal Box Co., Ltd., The Langham, Portland Place, W.1, quoting reference BS/9. 4277

**COMPACTUM, LTD.**, Oxgate Lane, Cricklewood, N.W.2, have vacancy for a practical **DESIGNER**, to learn specialised fitting designing; some knowledge of ironwork and cabinet construction essential. Write, stating experience and salary required. 4268

**EXPERIENCED** and enthusiastic **DRAUGHTSMAN** urgently required by Architects in Maidenhead, with an extensive practice. Reply, stating salary desired, and giving an outline of relevant experience, to Box 4267.

**SENIOR PLANNING ASSISTANTS** and **PLANNING ASSISTANTS** required for work in connection with new towns—Newton Aycliffe and Peterlee; architectural qualifications an advantage; superannuation scheme in operation. Apply, stating qualifications, experience, and salary required, to The Grenfell Baines Group, Planning Office, Newton Aycliffe, near Darlington. 4235

**QUANTITY SURVEYORS** require **ASSISTANT** for Branch office, Harrow, with experience in taking off, measuring, and working up. Reply in writing, stating age, experience and salary required, George Lewis & Son, 49, Sheepcote Road, Harrow, Middlesex. 4265

**AN Associated Company of Richard Costain, Ltd.**, specializing in Structural Engineering, require immediately **ONE STRUCTURAL STEEL DESIGNER** and **ONE REINFORCED CONCRETE DESIGNER**; the work involved is of a varied and interesting character. Apply in writing, giving full details of age, experience, and salary required, etc., to Personnel Director, Richard Costain, Ltd., Dolphin Square, London, S.W.1. 4249

#### Services Offered

**4 lines or under, 7s. 6d.; each additional line, 2s.**  
**MANUFACTURERS** of exclusive hand-made Lampshades; architects' contracts carried out. J. & M. Beagley, 51, Great Ormond Street, London, W.C.1. CHANCERY 9599. 2397

**ARCHITECTURAL MODELS** and Dioramas. Edward J. Ashenden, A.R.C.A., 15, Chenil Studios, 183, Kings Road, S.W.3. Tel.: Flax 6103. 2566

**FRENCH Polishing Contractor**; specialists in all branches of French polishing; estimates free. W. C. Read, 107, Highbury Quadrant, London, N.5. Tel.: CAN. 5655. 3995

**SECRETARIAL SERVICES**, daily or hourly; expert shorthand-Typist; own typewriter. Write Box 4253.

**FREE LANCE**, with long professional experience, offers services to Architects in London area; working drawings, details, perspectives, sketches, etc., and interiors. Box 4273.

**DESIGNER (36)**, present Advertising Manager, experienced in exhibition, furniture, shop and architectural design, desires London situation, with opportunity for expressing contemporary taste. Box 4232.

**CRAFTSMEN** in Marble and Stone desirous of small contracts for restoration of church or memorial work, also shopfitting and general masonry. F. R. Baker, 81a, Putney Bridge Road, S.W.15. 4252

#### For Sale or Wanted

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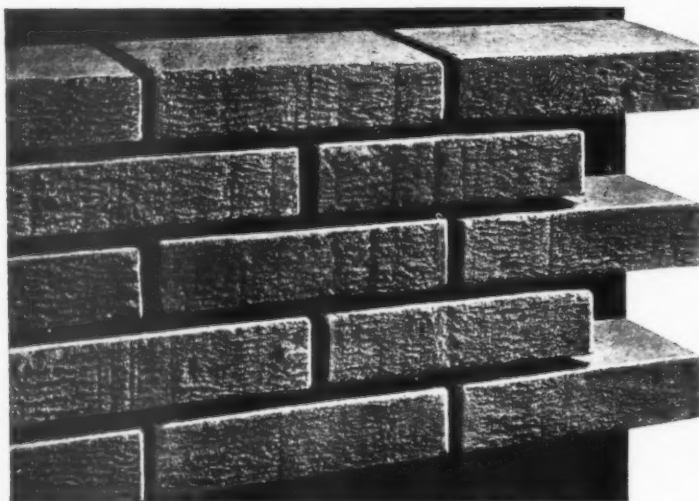
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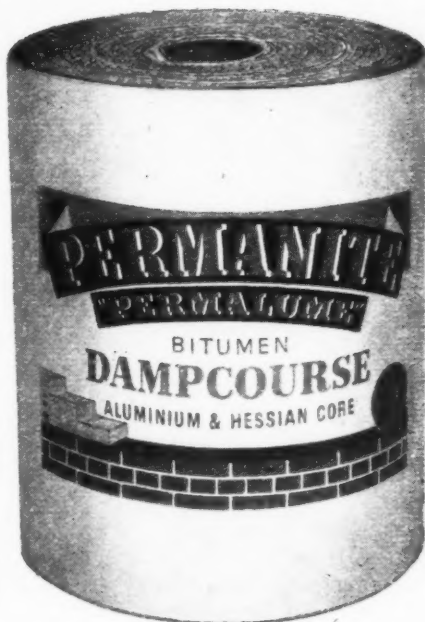
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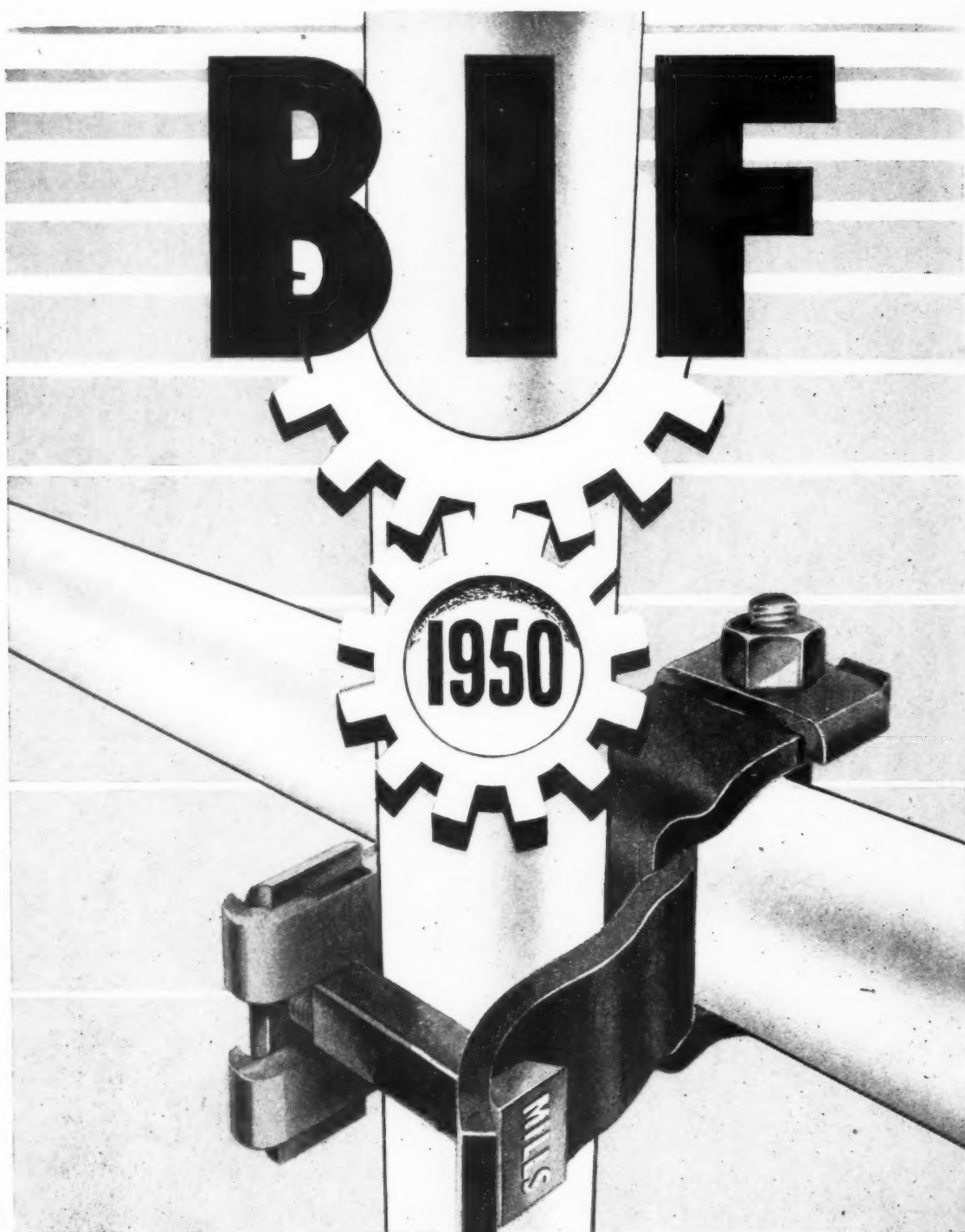
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